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), Dana Austin, and Kihyun Cho.

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

October 31, 2024

Mr. Joshua Rhoades
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 2024

Roxana, Illinois

1191150002 – Madison County

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

Log No. B-43R-CA-21

Dear Mr. Rhoades:

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. Dana Austin, Mr. Kihyun Cho, 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 2024 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form

cc: Leroy (Buddy) Bealer, Shell
Megan Lipscomb, Phillips 66
Dana Austin, IEPA, Springfield
Kihyun Cho, IEPA, Springfield
IEPA Collinsville FOS (Ali Al-Janabi), IEPA, Collinsville
Michelle Knapp, Atlantic Richfield Company
Ryan Mohr, Fox Smith LLC
Repositories - Roxana Public Library, website

AECOM

3rd Quarter 2024 Report

Roxana Interim Groundwater Monitoring Program

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

Project number: 60721927

October 2024

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Quality information

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		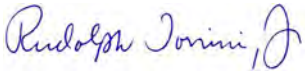	
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Revision History

Revision	Revision date	Details	Authorized	Name	Position

Distribution List

# Hard Copies	PDF Required	Association / Company Name
1 – original	No	Mr. Joshua Rhoades IEPA, Springfield
None	Yes	Ms. Megan Lipscomb Phillips 66
None	Yes	Ms. Dana Austin IEPA, Springfield
None	Yes	Mr. Kihyun Cho IEPA, Springfield
None	Yes	IEPA Collinsville FOS IEPA, Collinsville
None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
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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 2024 (3Q24) 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."

There was no regulatory-related correspondence between AECOM, on behalf of Shell, and the IEPA during this reporting period (July 2024 through September 2024); prior regulatory-related correspondence which has not yet been addressed by IEPA can be found in **Appendix A**.

Groundwater samples were collected and analyzed during 3Q24 to meet the requirements of the Interim Groundwater Monitoring Program, as specified in the guidance presented in **Appendix A**. **Figure 2** shows the groundwater monitoring wells that are part of the interim monitoring well network.

2 Groundwater Sampling and Analytical Procedures

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

2.1 Health & Safety

The quarterly sampling activities were performed in general accordance with the project-specific Health and Safety Plan (HASP), dated January 16, 2024 (AECOM, 2024).

2.2 Additional Activities or Modifications

No additional work activities were conducted during 3Q24.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between July 1st and 3rd, 2024. The gauging activities were conducted in conjunction with the 3Q24 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 5th through 15th and July 17th, 2024. Groundwater samples were collected using the most current low-flow groundwater purging and sampling related SOPs, which have previously been provided to IEPA. Data are included in this report and discussed in **Section 3**.

Groundwater monitoring wells MW-1 through MW-7, MW-9 through MW-14; MW-16; MW-22 through MW-28; P-54; P-56 through P-59; P-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.

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.

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

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 8260D and 8011, for SVOCs via USEPA Method 8270E, and for Polycyclic Aromatic Hydrocarbons (PAHs) via USEPA Method 8270E Selected Ion Monitoring (SIM). 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 3Q24 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 3Q24 event was conducted between July 1st and July 3rd, 2024. This groundwater monitoring well gauging was conducted in accordance with the Interim Groundwater Monitoring Program, and the results can be found in **Table 1**. Groundwater levels in wells in the vicinity of the West Fenceline have fallen approximately 0.7 foot since the 2Q24 gauging event. Groundwater levels in wells in the central and eastern portions of the WRR have risen approximately 1.0 foot since the 2Q24 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 3Q24 event. The potentiometric surface observed during the 3Q24 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 3Q24 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 0.05 to 0.55 foot. 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 3Q24 gauging event. Measured LNAPL thickness and the number of locations where it was observed during the 3Q24 quarterly gauging events was generally comparable to that observed in 2Q24.

The Illinois Emergency Management Agency (IEMA) was notified on November 22, 2020 of a release of gasoline from a Buckeye Partners (Wood River Pipeline, LLC) pipeline located to the south of well P-58 along the WRR West Fenceline, and to the north of well P-66 on WRR Main Property as indicated on **Figures 2, 3b, 4a,** and **5**. The release is associated with IEPA Violation Notice L-2021-00084, LPC #1190905036 – Madison County. Groundwater monitoring wells P-58 and P-66 have yielded some anomalous observations/detections since the reported release; LNAPL has been detected in P-66 since 2Q22, however LNAPL was previously last detected in P-66 during 4Q12. These wells will be gauged, and sampled in the absence of LNAPL, during the quarterly Roxana Interim Groundwater Monitoring program.

During 3Q24, LNAPL was observed in groundwater monitoring wells P-66 and P-68, 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 9 sample delivery groups (SDGs) were prepared and sent to EETA Southeast for the 3Q24 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 3Q24 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 16 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

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

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

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 2Q24 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 11 groundwater monitoring wells in the Interim Groundwater Monitoring Program (three in the Village, eight in the WRR along the West Fenceline) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethlybenzene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 3Q24. 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 3Q24, 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 3Q24 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 3Q24, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in most wells in the vicinity of the West Fenceline have fallen approximately 0.7 foot since the 2Q24 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 1.0 foot since the 2Q24 gauging event.
- Measured LNAPL thickness and the number of locations where it was observed during the 3Q24 quarterly gauging events was generally comparable to that observed in 2Q24. LNAPL has been detected in P-66 since 2Q22, LNAPL was previously last detected in P-66 during 4Q12. WRB/P66 notified IEMA on November 22, 2020 of a release of gasoline from a Buckeye Partners (Wood River Pipeline, LLC) pipeline located to the south of well P-58 along the WRR West Fenceline, and to the north of well P-66 on WRR Main Property. Wells P-58 and P-66 will be gauged and sampled in the absence of LNAPL during the 4Q24 Roxana Interim Groundwater Monitoring program.
- The analytical results from 3Q24 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, 2016 (AECOM, 2016b); *Proposed Groundwater Management Zone*. Prepared for Shell Oil Products US (Shell), dated May 19, 2016.

AECOM, 2024 (AECOM, 2024); *Shell GESS Health and Safety Plan: Rand Avenue, Roxana / Route 111, and WRR Investigation and Remediation, and Site 15 Inspection*. Prepared for Shell Oil Products US (Shell), dated January 16, 2024.

Illinois Environmental Protection Agency, 2007 (IEPA, 2007); 35 Illinois Administrative Code 742, Tiered Approach to Corrective Action Objectives. Appendix B. *Table E – Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route*. Effective February 23, 2007; accessed on October 3, 2024.

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

Illinois Environmental Protection Agency, 2012 (IEPA, 2012c); 35 Illinois Administrative Code 620, Subpart D, Section 410. *Groundwater Quality Standards for Class 1: Potable Resource Groundwater (Part 620)*. Effective October 5, 2012; accessed on October 3, 2024.

Illinois Environmental Protection Agency Toxicity Assessment Unit; *Chemicals Not in TACO, Tier 1 Tables*, January 2023 (IEPA, 2023). http://www.epa.state.il.us/land/taco/chemicals-not-in-taco-tier-1-tables.html. Accessed on October 3, 2024.

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

Tables

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID & EVENT	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											
4Q23	442.83	10/2/2023	NE	41.06	NA	NA	NA	401.77	394.03 - 384.03 (48.80 - 58.80)	0.0	*
1Q24		1/3/2024	NE	42.11	NA	NA	NA	400.72		0.0	*
2Q24		4/1/2024	NE	42.63	NA	NA	NA	400.20		0.0	*
3Q24		7/1/2024	NE	43.01	NA	NA	NA	399.82		0.0	*
MW-02											
4Q23	443.93	10/2/2023	NE	42.27	NA	NA	NA	401.66	394.06 - 384.06 (49.87 - 59.87)	28.6	*
1Q24		1/2/2024	NE	43.38	NA	NA	NA	400.55		66.0	*
2Q24		4/1/2024	NE	43.83	NA	NA	NA	400.10		149.6	*
3Q24		7/1/2024	NE	44.44	NA	NA	NA	399.49		220.8	*
MW-03											
4Q23	430.23	10/2/2023	NE	28.48	NA	NA	NA	401.75	395.56 - 385.56 (34.67 - 44.67)	0.0	*
1Q24		1/3/2024	NE	29.46	NA	NA	NA	400.77		0.0	*
2Q24		4/1/2024	NE	29.97	NA	NA	NA	400.26		0.0	*
3Q24		7/1/2024	NE	29.74	NA	NA	NA	400.49		0.0	*
MW-04											
4Q23	441.31	10/2/2023	NE	39.57	NA	NA	NA	401.74	396.25 - 386.25 (45.06 - 55.06)	0.0	*
1Q24		1/3/2024	NE	40.55	NA	NA	NA	400.76		0.0	*
2Q24		4/1/2024	NE	41.08	NA	NA	NA	400.23		0.0	*
3Q24		7/1/2024	NE	41.26	NA	NA	NA	400.05		0.0	*
MW-05											
4Q23	429.98	10/2/2023	NE	28.16	NA	NA	NA	401.82	396.01 - 386.01 (33.97 - 43.97)	0.0	*
1Q24		1/3/2024	NE	29.11	NA	NA	NA	400.87		0.0	*
2Q24		4/1/2024	NE	29.60	NA	NA	NA	400.38		0.0	*
3Q24		7/1/2024	NE	29.42	NA	NA	NA	400.56		0.0	*
MW-06A											
4Q23	432.33	10/2/2023	NE	30.39	NA	NA	NA	401.94	398.48 - 388.48 (33.85 - 43.85)	0.0	*
1Q24		1/3/2024	NE	31.36	NA	NA	NA	400.97		0.0	*
2Q24		4/1/2024	NE	31.73	NA	NA	NA	400.60		0.0	*
3Q24		7/1/2024	NE	31.52	NA	NA	NA	400.81		0.0	*
MW-06B											
4Q23	432.37	10/2/2023	NE	30.41	NA	NA	NA	401.96	368.32 - 363.32 (64.05 - 69.05)	0.0	*
1Q24		1/3/2024	NE	31.30	NA	NA	NA	401.07		0.0	*
2Q24		4/1/2024	NE	31.76	NA	NA	NA	400.61		0.0	*
3Q24		7/1/2024	NE	31.58	NA	NA	NA	400.79		0.0	*
MW-06C											
4Q23	432.18	10/2/2023	NE	30.20	NA	NA	NA	401.98	347.23 - 342.23 (84.95 - 89.95)	0.0	*
1Q24		1/3/2024	NE	31.10	NA	NA	NA	401.08		0.0	*
2Q24		4/1/2024	NE	31.55	NA	NA	NA	400.63		0.0	*
3Q24		7/1/2024	NE	31.37	NA	NA	NA	400.81		0.0	*
MW-06D											
4Q23	432.06	10/2/2023	NE	30.07	NA	NA	NA	401.99	327.34 - 322.34 (104.72 - 109.72)	0.0	*
1Q24		1/3/2024	NE	30.30	NA	NA	NA	401.76		0.0	*
2Q24		4/1/2024	NE	31.43	NA	NA	NA	400.63		0.0	*
3Q24		7/1/2024	NE	31.21	NA	NA	NA	400.85		0.0	*
MW-07											
4Q23	443.31	10/2/2023	NE	41.63	NA	NA	NA	401.68	400.39 - 390.39 (42.92 - 52.92)	0.0	*
1Q24		1/2/2024	NE	42.58	NA	NA	NA	400.73		0.0	*
2Q24		4/1/2024	NE	43.03	NA	NA	NA	400.28		0.0	
3Q24		7/1/2024	NE	43.20	NA	NA	NA	400.11		0.0	
MW-09											
4Q23	445.28	10/2/2023	NE	43.11	NA	NA	NA	402.17	399.24 - 389.24 (46.04 - 56.04)	0.0	*
1Q24		1/2/2024	NE	44.07	NA	NA	NA	401.21		0.0	*
2Q24		4/1/2024	NE	44.77	NA	NA	NA	400.51		0.0	*
3Q24		7/1/2024	NE	44.91	NA	NA	NA	400.37		0.0	*
MW-10											
4Q23	445.06	10/2/2023	NE	42.98	NA	NA	NA	402.08	400.63 - 390.63 (44.43 - 54.43)	0.0	*
1Q24		1/2/2024	NE	43.93	NA	NA	NA	401.13		0.0	*
2Q24		4/1/2024	NE	44.68	NA	NA	NA	400.38		0.0	
3Q24		7/1/2024	NE	45.08	NA	NA	NA	399.98		0.0	

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WELL ID & EVENT	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-11											
4Q23	442.38	10/2/2023	NE	40.67	NA	NA	NA	401.71	400.72 - 390.72 (41.66 - 51.66)	0.0	*
1Q24		1/2/2024	NE	41.73	NA	NA	NA	400.65		0.0	
2Q24		4/2/2024	NE	42.33	NA	NA	NA	400.05		0.0	
3Q24		7/1/2024	NE	42.78	NA	NA	NA	399.60		0.0	
MW-12											
4Q23	442.64	10/2/2023	NE	40.81	NA	NA	NA	401.83	400.72 - 390.72 (41.92 - 51.92)	0.0	*
1Q24		1/3/2024	NE	41.88	NA	NA	NA	400.76		0.0	*
2Q24		4/1/2024	NE	42.41	NA	NA	NA	400.23		0.0	
3Q24		7/1/2024	NE	42.71	NA	NA	NA	399.93		0.0	
MW-13											
4Q23	430.30	10/3/2023	NE	28.36	NA	NA	NA	401.94	405.5 - 395.5 (24.8 - 34.8)	0.0	
1Q24		1/3/2024	NE	29.21	NA	NA	NA	401.09		0.0	
2Q24		4/2/2024	NE	29.53	NA	NA	NA	400.77		0.0	
3Q24		7/2/2024	NE	28.92	NA	NA	NA	401.38		0.0	
MW-14											
4Q23	434.61	10/4/2023	NE	32.52	NA	NA	NA	402.09	401.19 - 391.19 (33.42 - 43.42)	28.8	*
1Q24		1/4/2024	NE	33.47	NA	NA	NA	401.14		26.9	
2Q24		4/3/2024	NE	33.85	NA	NA	NA	400.76		19.0	
3Q24		7/2/2024	NE	33.64	NA	NA	NA	400.97		14.5	
MW-16											
4Q23	443.60	10/2/2023	NE	41.76	NA	NA	NA	401.84	406.10 - 396.10 (37.50 - 47.50)	0.0	
1Q24		1/3/2024	NE	42.88	NA	NA	NA	400.72		0.0	
2Q24		4/1/2024	NE	43.42	NA	NA	NA	400.18		0.0	
3Q24		7/1/2024	NE	44.22	NA	NA	NA	399.38		0.0	
MW-17											
4Q23	441.78	10/2/2023	NE	39.91	NA	NA	NA	401.87	407.49 - 392.49 (34.29 - 49.29)	0.0	
1Q24		1/2/2024	NE	41.07	NA	NA	NA	400.71		0.0	
2Q24		4/1/2024	NE	41.65	NA	NA	NA	400.13		0.0	
3Q24		7/1/2024	NE	43.04	NA	NA	NA	398.74		0.0	
MW-18											
4Q23	442.24	10/2/2023	NE	40.43	NA	NA	NA	401.81	407.32 - 392.32 (34.92 - 49.92)	0.0	
1Q24		1/2/2024	NE	41.63	NA	NA	NA	400.61		0.0	
2Q24		4/1/2024	NE	42.18	NA	NA	NA	400.06		0.0	
3Q24		7/1/2024	NE	43.68	NA	NA	NA	398.56		0.0	
MW-19											
4Q23	442.98	10/2/2023	NE	41.20	NA	NA	NA	401.78	406.64 - 391.64 (36.34 - 51.34)	0.0	
1Q24		1/2/2024	NE	42.43	NA	NA	NA	400.55		0.0	
2Q24		4/1/2024	NE	42.93	NA	NA	NA	400.05		0.0	
3Q24		7/1/2024	NE	44.18	NA	NA	NA	398.80		0.0	
MW-20											
4Q23	443.86	10/2/2023	NE	42.15	NA	NA	NA	401.71	407.98 - 392.98 (35.88 - 50.88)	0.0	
1Q24		1/2/2024	NE	43.34	NA	NA	NA	400.52		0.0	
2Q24		4/1/2024	NE	43.83	NA	NA	NA	400.03		0.0	
3Q24		7/1/2024	NE	44.75	NA	NA	NA	399.11		0.0	
MW-21											
4Q23	444.01	10/2/2023	NE	42.37	NA	NA	NA	401.64	409.00 - 394.00 (35.01 - 50.01)	0.0	
1Q24		1/2/2024	NE	43.39	NA	NA	NA	400.62		0.0	
2Q24		4/1/2024	NE	43.85	NA	NA	NA	400.16		0.0	
3Q24		7/1/2024	NE	44.37	NA	NA	NA	399.64		0.0	
MW-22											
4Q23	442.38	10/2/2023	NE	40.53	NA	NA	NA	401.85	403.95 - 393.95 (38.43 - 48.43)	0.0	
1Q24		1/11/2024	NE	41.71	NA	NA	NA	400.67		0.0	
2Q24		4/1/2024	NE	42.15	NA	NA	NA	400.23		0.0	
3Q24		7/1/2024	NE	43.01	NA	NA	NA	399.37		0.0	
MW-23											
4Q23	431.57	10/3/2023	NE	29.81	NA	NA	NA	401.76	402.55 - 392.55 (29.02 - 39.02)	0.0	
1Q24		1/3/2024	NE	30.71	NA	NA	NA	400.86		0.0	
2Q24		4/1/2024	NE	31.17	NA	NA	NA	400.40		0.0	
3Q24		7/1/2024	NE	30.40	NA	NA	NA	401.17		0.0	

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WELL ID & EVENT	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-24											
4Q23	443.65	10/2/2023	NE	41.76	NA	NA	NA	401.89	404.04 - 394.04 (39.61 - 49.61)	0.0	
1Q24		1/2/2024	NE	42.77	NA	NA	NA	400.88		0.0	
2Q24		4/1/2024	NE	43.38	NA	NA	NA	400.27		0.0	
3Q24		7/1/2024	NE	43.70	NA	NA	NA	399.95		0.0	
MW-25											
4Q23	438.53	10/2/2023	NE	36.74	NA	NA	NA	401.79	402.94 - 392.94 (35.59 - 45.59)	82.3	
1Q24		1/3/2024	NE	37.71	NA	NA	NA	400.82		88.4	
2Q24		4/1/2024	NE	38.22	NA	NA	NA	400.31		0.0	
3Q24		7/1/2024	NE	38.35	NA	NA	NA	400.18		0.0	
MW-26											
4Q23	441.23	10/2/2023	NE	39.45	NA	NA	NA	401.78	403.08 - 393.08 (38.15 - 48.15)	0.0	
1Q24		1/3/2024	NE	40.47	NA	NA	NA	400.76		0.0	
2Q24		4/1/2024	NE	40.98	NA	NA	NA	400.25		0.0	
3Q24		7/1/2024	NE	41.30	NA	NA	NA	399.93		0.0	
MW-27											
4Q23	443.60	10/2/2023	NE	40.70	NA	NA	NA	402.90	403.81 - 393.81 (39.79 - 49.79)	0.0	
1Q24		1/2/2024	NE	41.70	NA	NA	NA	401.90		0.0	
2Q24		4/1/2024	NE	42.55	NA	NA	NA	401.05		0.0	
3Q24		7/1/2024	NE	43.26	NA	NA	NA	400.34		0.0	
MW-28											
4Q23	443.55	10/2/2023	NE	39.98	NA	NA	NA	403.57	409.94 - 399.94 (33.61 - 43.61)	0.0	
1Q24		1/2/2024	NE	40.72	NA	NA	NA	402.83		0.0	
2Q24		4/1/2024	NE	41.57	NA	NA	NA	401.98		0.0	
3Q24		7/1/2024	NE	42.31	NA	NA	NA	401.24		0.0	
P-01											
4Q23	442.98	10/3/2023	NE	35.76	NA	NA	NA	407.22	380.76 - 375.76 (62.22 - 67.22)	0.0	*
1Q24		1/4/2024	NE	37.34	NA	NA	NA	405.64		0.0	*
2Q24		4/10/2024	NE	37.92	NA	NA	NA	405.06		0.0	*
3Q24		7/2/2024	NE	36.93	NA	NA	NA	406.05		0.0	*
P-4U											
4Q23	442.74	10/3/2023	NE	36.88	NA	NA	NA	405.86	361.59 - 359.59 (81.15 - 83.15)	0.0	*
1Q24		1/4/2024	NE	38.46	NA	NA	NA	404.28		0.0	*
2Q24		4/3/2024	NE	39.30	NA	NA	NA	403.44		0.0	*
3Q24		7/2/2024	NE	38.20	NA	NA	NA	404.54		0.0	*
P-5L											
4Q23	444.01	10/3/2023	NE	37.12	NA	NA	NA	406.89	303.61 - 301.61 (140.40 - 142.40)	0.0	*
1Q24		1/4/2024	NE	38.57	NA	NA	NA	405.44		0.0	*
2Q24		4/3/2024	NE	39.15	NA	NA	NA	404.86		0.0	*
3Q24		7/2/2024	NE	38.10	NA	NA	NA	405.91		0.0	*
P-5U											
4Q23	444.42	10/3/2023	NE	38.22	NA	NA	NA	406.20	313.79 - 311.79 (130.63 - 132.63)	0.0	*
1Q24		1/4/2024	NE	39.94	NA	NA	NA	404.48		0.0	*
2Q24		4/3/2024	NE	40.32	NA	NA	NA	404.10		0.0	*
3Q24		7/2/2024	NE	39.38	NA	NA	NA	405.04		0.0	*
P-6U											
4Q23	443.63	10/3/2023	NE	37.56	NA	NA	NA	406.07	363.13 - 361.13 (80.50 - 82.50)	0.0	*
1Q24		1/4/2024	NE	39.11	NA	NA	NA	404.52		0.0	*
2Q24		4/3/2024	NE	39.95	NA	NA	NA	403.68		0.0	*
3Q24		7/2/2024	NE	38.88	NA	NA	NA	404.75		0.0	*
P-7U											
4Q23	444.08	10/3/2023	NE	37.83	NA	NA	NA	406.25	383.00 - 381.00 (61.08 - 63.08)	0.0	*
1Q24		1/4/2024	NE	39.32	NA	NA	NA	404.76		0.0	*
2Q24		4/3/2024	NE	40.18	NA	NA	NA	403.90		0.0	*
3Q24		7/2/2024	NE	39.10	NA	NA	NA	404.98		0.0	*
P-8U											
4Q23	442.07	10/3/2023	NE	37.71	NA	NA	NA	404.36	382.72 - 380.72 (59.35 - 61.35)	0.0	*
1Q24		1/2/2024	NE	39.04	NA	NA	NA	403.03		0.0	*
2Q24		4/3/2024	NE	40.18	NA	NA	NA	401.89		0.0	*
3Q24		7/2/2024	NE	39.20	NA	NA	NA	402.87		0.0	*

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P-9U											
4Q23	445.20	10/3/2023	NE	42.19	NA	NA	NA	403.01	344.61 - 342.61 (100.59 - 102.59)	0.0	*
1Q24		1/2/2024	NE	43.68	NA	NA	NA	401.52		0.0	*
2Q24		4/2/2024	NE	44.61	NA	NA	NA	400.59		0.0	*
3Q24		7/2/2024	NE	43.75	NA	NA	NA	401.45		0.0	*
P-11L											
4Q23	442.76	10/3/2023	NE	38.56	NA	NA	NA	404.20	332.55 - 330.55 (110.21 - 112.21)	0.0	*
1Q24		1/4/2024	NE	40.10	NA	NA	NA	402.66		0.0	*
2Q24		4/3/2024	NE	41.08	NA	NA	NA	401.68		0.0	*
3Q24		7/2/2024	NE	40.05	NA	NA	NA	402.71		0.0	*
P-11U											
4Q23	443.38	10/3/2023	NE	39.17	NA	NA	NA	404.21	343.46 - 341.46 (99.92 - 101.92)	0.0	*
1Q24		1/4/2024	NE	40.74	NA	NA	NA	402.64		0.0	*
2Q24		4/3/2024	NE	41.68	NA	NA	NA	401.70		0.0	*
3Q24		7/2/2024	NE	40.63	NA	NA	NA	402.75		0.0	*
P-14											
4Q23	443.01	10/3/2023	NE	35.85	NA	NA	NA	407.16	395.54 - 385.54 (47.47 - 57.47)	4.1	*
1Q24		1/4/2024	NE	37.39	NA	NA	NA	405.62		0.0	*
2Q24		4/10/2024	NE	38.02	NA	NA	NA	404.99		0.0	*
3Q24		7/2/2024	NE	37.05	NA	NA	NA	405.96		0.0	*
P-15											
4Q23	443.88	10/3/2023	NE	37.52	NA	NA	NA	406.36	398.43 - 388.43 (45.45 - 55.45)	0.0	*
1Q24		1/4/2024	NE	39.04	NA	NA	NA	404.84		0.0	*
2Q24		4/3/2024	NE	39.88	NA	NA	NA	404.00		0.0	*
3Q24		7/2/2024	NE	38.80	NA	NA	NA	405.08		0.0	*
P-16											
4Q23	442.84	10/3/2023	NE	36.50	NA	NA	NA	406.34	397.10 - 387.10 (45.74 - 55.74)	0.0	*
1Q24		1/4/2024	NE	38.03	NA	NA	NA	404.81		0.0	*
2Q24		4/3/2024	NE	38.85	NA	NA	NA	403.99		0.0	*
3Q24		7/2/2024	NE	37.55	NA	NA	NA	405.29		0.0	*
P-43											
4Q23	444.62	10/3/2023	NE	40.73	NA	NA	NA	403.89	381.06 - 371.06 (63.56 - 73.56)	0.0	*
1Q24		1/4/2024	NE	41.60	NA	NA	NA	403.02		0.0	*
2Q24		4/3/2024	NE	42.55	NA	NA	NA	402.07		0.0	*
3Q24		7/2/2024	NE	41.50	NA	NA	NA	403.12		0.0	*
P-53											
4Q23	446.57	10/3/2023	NE	43.10	NA	NA	NA	403.47	406.26 - 381.26 (40.31 - 65.31)	0.0	
1Q24		1/2/2024	NE	43.97	NA	NA	NA	402.60		0.0	
2Q24		4/1/2024	NE	44.83	NA	NA	NA	401.74		0.0	
3Q24		7/1/2024	NE	44.84	NA	NA	NA	401.73		0.0	
P-54											
4Q23	442.52	10/2/2023	NE	40.60	NA	NA	NA	401.92	404.52 - 379.52 (38.00 - 63.00)	0.0	
1Q24		1/5/2024	NE	41.60	NA	NA	NA	400.92		0.0	
2Q24		4/1/2024	NE	42.22	NA	NA	NA	400.30		0.0	
3Q24		7/1/2024	NE	42.29	NA	NA	NA	400.23		0.0	
P-55R											
4Q23	444.01	10/2/2023	40.35	40.37	403.64	403.66	0.02	403.66	403.58 - 393.58 (40.43 - 50.43)	119.6	*
1Q24		1/2/2024	41.11	41.13	402.88	402.90	0.02	402.90		114.7	
2Q24		4/1/2024	41.74	41.96	402.05	402.27	0.22	402.23		58.4	
3Q24		7/1/2024	42.10	42.15	401.86	401.91	0.05	401.90		91.0	
P-56											
4Q23	446.32	10/2/2023	NE	44.54	NA	NA	NA	401.78	405.50 - 380.50 (40.82 - 65.82)	13.8	
1Q24		1/2/2024	NE	45.87	NA	NA	NA	400.45		5.2	
2Q24		4/1/2024	NE	46.26	NA	NA	NA	400.06		0.4	
3Q24		7/1/2024	NE	47.30	NA	NA	NA	399.02		0.0	
P-57											
4Q23	447.15	10/2/2023	NE	45.43	NA	NA	NA	401.72	402.96 - 392.96 (44.19 - 54.19)	0.5	
1Q24		1/2/2024	NE	46.53	NA	NA	NA	400.62		0.0	
2Q24		4/1/2024	NE	46.96	NA	NA	NA	400.19		0.2	
3Q24		7/1/2024	NE	47.60	NA	NA	NA	399.55		0.0	

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P-58											
4Q23	445.16	10/2/2023	NE	43.42	NA	NA	NA	401.74	404.95 - 379.95 (40.21 - 65.21)	0.0	
1Q24		1/2/2024	NE	44.42	NA	NA	NA	400.74		0.0	
2Q24		4/1/2024	NE	44.83	NA	NA	NA	400.33		0.0	
3Q24		7/1/2024	NE	45.31	NA	NA	NA	399.85		0.0	
P-59											
4Q23	447.07	10/2/2023	NE	45.22	NA	NA	NA	401.85	399.16 - 374.16 (47.91 - 72.91)	205.6	*
1Q24		1/2/2024	NE	46.53	NA	NA	NA	400.54		302.5	*
2Q24		4/1/2024	NE	47.04	NA	NA	NA	400.03		82.1	*
3Q24		7/1/2024	NE	48.38	NA	NA	NA	398.69		0.0	
P-60											
4Q23	446.88	10/2/2023	NE	44.97	NA	NA	NA	401.91	402.23 - 382.23 (44.65 - 64.65)	0.4	
1Q24		1/2/2024	NE	46.13	NA	NA	NA	400.75		20.8	
2Q24		4/1/2024	NE	46.75	NA	NA	NA	400.13		31.4	
3Q24		7/1/2024	NE	48.03	NA	NA	NA	398.85		3.1	
P-61											
4Q23	444.66	10/3/2023	NE	43.22	NA	NA	NA	401.44	398.99 - 373.99 (45.68 - 70.68)	24.5	*
1Q24		1/3/2024	44.25	46.50	398.16	400.41	2.25	399.96		392.8	*
2Q24		4/2/2024	44.64	47.06	397.60	400.02	2.42	399.54		13.2	*
3Q24		7/1/2024	45.75	48.10	396.56	398.91	2.35	398.44		60.9	
P-62											
4Q23	442.60	10/2/2023	40.95	42.01	400.59	401.65	1.06	401.44	401.13 - 376.13 (41.47 - 66.47)	0.0	*
1Q24		1/3/2024	42.06	43.34	399.26	400.54	1.28	400.28		3.8	
2Q24		4/2/2024	42.56	43.74	398.86	400.04	1.18	399.80		132.6	
3Q24		7/1/2024	43.45	44.48	398.12	399.15	1.03	398.94		31.9	
P-63											
4Q23	446.06	10/2/2023	45.41	45.56	400.50	400.65	0.15	400.62	398.77 - 373.77 (47.29 - 72.29)	0.0	*
1Q24		1/3/2024	NE	46.19	NA	NA	NA	399.87		45.2	*
2Q24		4/2/2024	NE	46.70	NA	NA	NA	399.36		36.3	*
3Q24		7/12/2024	46.77	46.78	399.28	399.29	0.01	399.29		5.3	*
P-64											
4Q23	446.78	10/3/2023	46.71	46.85	399.93	400.07	0.14	400.04	399.55 - 374.55 (47.23 - 72.23)	264.4	*
1Q24		1/3/2024	47.34	47.45	399.33	399.44	0.11	399.42		420.5	
2Q24		4/3/2024	47.96	49.33	397.45	398.82	1.37	398.55		20.1	
3Q24		7/1/2024	47.68	48.15	398.63	399.10	0.47	399.01		72.4	
P-65											
4Q23	444.77	10/2/2023	44.00	44.06	400.71	400.77	0.06	400.76	397.75 - 372.75 (47.02 - 72.02)	0.0	*
1Q24		1/3/2024	NE	44.82	NA	NA	NA	399.95		38.2	*
2Q24		4/1/2024	NE	45.45	NA	NA	NA	399.32		3.2	*
3Q24		7/1/2024	NE	45.40	NA	NA	NA	399.37		30.1	*
P-66											
4Q23	437.00	10/4/2023	34.91	36.35	400.65	402.09	1.44	401.80	402.28 - 377.28 (34.72 - 59.72)	0.0	
1Q24		1/4/2024	35.97	37.00	400.00	401.03	1.03	400.82		197.7	
2Q24		4/3/2024	36.50	37.07	399.93	400.50	0.57	400.39		2.5	
3Q24		7/2/2024	36.59	37.14	399.86	400.41	0.55	400.30		0.7	
P-67											
4Q23	444.30	10/4/2023	41.75	41.76	402.54	402.55	0.01	402.55	402.33 - 377.33 (41.98 - 66.98)	0.0	*
1Q24		1/4/2024	NE	42.73	NA	NA	NA	401.57		0.9	
2Q24		4/3/2024	NE	43.13	NA	NA	NA	401.17		0.0	
3Q24		7/2/2024	NE	42.93	NA	NA	NA	401.37		17.1	
P-68											
4Q23	445.38	10/2/2023	43.41	43.47	401.91	401.97	0.06	401.96	401.62 - 376.62 (43.76 - 68.76)	0.0	*
1Q24		1/3/2024	44.57	44.64	400.74	400.81	0.07	400.80		202.7	
2Q24		4/1/2024	45.18	45.33	400.05	400.20	0.15	400.17		172.6	
3Q24		7/1/2024	46.45	46.62	398.76	398.93	0.17	398.90		3.4	
P-69											
4Q23	443.77	10/2/2023	NE	42.06	NA	NA	NA	401.71	402.95 - 377.95 (40.82 - 65.82)	0.0	
1Q24		1/3/2024	NE	43.56	NA	NA	NA	400.21		0.0	
2Q24		4/1/2024	NE	43.97	NA	NA	NA	399.80		0.0	
3Q24		7/1/2024	NE	46.03	NA	NA	NA	397.74		0.0	

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TABLE 1
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WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P-70											
4Q23	443.11	10/3/2023	NE	41.53	NA	NA	NA	401.58	398.44 - 373.44 (44.67 - 69.67)	171.8	*
1Q24		1/3/2024	NE	42.82	NA	NA	NA	400.29		160.1	*
2Q24		4/2/2024	NE	43.31	NA	NA	NA	399.80		113.2	*
3Q24		7/1/2024	44.33	45.65	397.46	398.78	1.32	398.52		207.1	
P-71											
4Q23	445.09	10/2/2023	NE	43.14	NA	NA	NA	401.95	402.48 - 377.48 (42.61 - 67.61)	0.0	
1Q24		1/3/2024	NE	44.17	NA	NA	NA	400.92		112.5	
2Q24		4/1/2024	NE	44.52	NA	NA	NA	400.57		0.0	
3Q24		7/1/2024	NE	44.98	NA	NA	NA	400.11		6.5	
P-72											
4Q23	444.70	10/2/2023	NE	42.73	NA	NA	NA	401.97	398.93 - 373.93 (45.77 - 70.77)	0.0	*
1Q24		1/3/2024	NE	43.71	NA	NA	NA	400.99		82.6	*
2Q24		4/1/2024	NE	44.11	NA	NA	NA	400.59		2.3	*
3Q24		7/1/2024	NE	44.58	NA	NA	NA	400.12		3.7	*
P-73											
4Q23	444.02	10/3/2023	NE	42.56	NA	NA	NA	401.46	402.43 - 377.43 (41.60 - 66.60)	0.0	
1Q24		1/3/2024	NE	43.56	NA	NA	NA	400.46		0.0	
2Q24		4/2/2024	NE	43.89	NA	NA	NA	400.13		20.9	
3Q24		7/1/2024	NE	45.05	NA	NA	NA	398.97		1.9	
P-74											
4Q23	442.93	10/2/2023	NE	41.11	NA	NA	NA	401.82	399.10 - 374.10 (43.83 - 68.83)	0.0	*
1Q24		1/3/2024	NE	42.44	NA	NA	NA	400.49		0.0	*
2Q24		4/1/2024	NE	43.00	NA	NA	NA	399.93		0.0	*
3Q24		7/1/2024	NE	44.68	NA	NA	NA	398.25		6.4	
P-75											
4Q23	446.68	10/4/2023	NE	44.95	NA	NA	NA	401.73	403.55 - 378.55 (43.13 - 68.13)	0.0	
1Q24		1/4/2024	NE	45.93	NA	NA	NA	400.75		0.7	
2Q24		4/3/2024	NE	46.38	NA	NA	NA	400.30		0.0	
3Q24		7/2/2024	NE	46.67	NA	NA	NA	400.01		0.0	
P-82A											
4Q23	434.94	10/3/2023	NE	30.05	NA	NA	NA	404.89	401.73 - 386.73 (33.21 - 48.21)	0.0	*
1Q24		1/4/2024	NE	31.02	NA	NA	NA	403.92		0.0	*
2Q24		4/2/2024	NE	31.20	NA	NA	NA	403.74		0.0	*
3Q24		7/1/2024	NE	30.49	NA	NA	NA	404.45		0.0	*
P-82B											
4Q23	434.68	10/3/2023	NE	29.76	NA	NA	NA	404.92	371.88 - 369.88 (62.80 - 64.80)	0.0	*
1Q24		1/4/2024	NE	30.74	NA	NA	NA	403.94		0.0	*
2Q24		4/2/2024	NE	30.93	NA	NA	NA	403.75		0.0	*
3Q24		7/1/2024	NE	30.20	NA	NA	NA	404.48		0.0	*
P-82C											
4Q23	434.41	10/3/2023	NE	29.48	NA	NA	NA	404.93	351.64 - 349.64 (82.77 - 84.77)	0.0	*
1Q24		1/4/2024	NE	30.45	NA	NA	NA	403.96		0.0	*
2Q24		4/2/2024	NE	30.85	NA	NA	NA	403.56		0.0	*
3Q24		7/1/2024	NE	29.91	NA	NA	NA	404.50		0.0	*
P-82D											
4Q23	435.09	10/3/2023	NE	30.25	NA	NA	NA	404.84	323.55 - 321.55 (111.54 - 113.54)	0.0	*
1Q24		1/4/2024	NE	31.21	NA	NA	NA	403.88		0.0	*
2Q24		4/2/2024	NE	31.40	NA	NA	NA	403.69		0.0	*
3Q24		7/1/2024	NE	30.66	NA	NA	NA	404.43		0.0	*
P-83A											
4Q23	445.54	10/3/2023	NE	43.94	NA	NA	NA	401.60	398.14 - 383.14 (47.40 - 62.40)	0.0	*
1Q24		1/2/2024	NE	44.82	NA	NA	NA	400.72		0.0	*
2Q24		4/2/2024	NE	45.44	NA	NA	NA	400.10		0.0	*
3Q24		7/2/2024	NE	45.00	NA	NA	NA	400.54		0.0	*
P-83B											
4Q23	445.77	10/3/2023	NE	44.20	NA	NA	NA	401.57	371.97 - 369.97 (73.80 - 75.80)	0.0	*
1Q24		1/2/2024	NE	44.90	NA	NA	NA	400.87		0.0	*
2Q24		4/2/2024	NE	45.71	NA	NA	NA	400.06		0.0	*
3Q24		7/2/2024	NE	45.28	NA	NA	NA	400.49		0.0	*

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WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P-83C											
4Q23	445.95	10/3/2023	NE	44.35	NA	NA	NA	401.60	353.56 - 351.56 (92.39 - 94.39)	0.0	*
1Q24		1/2/2024	NE	45.20	NA	NA	NA	400.75		0.0	*
2Q24		4/2/2024	NE	45.83	NA	NA	NA	400.12		0.0	*
3Q24		7/2/2024	NE	45.43	NA	NA	NA	400.52		0.0	*
P-83D											
4Q23	445.86	10/3/2023	NE	45.30	NA	NA	NA	400.56	312.06 - 310.06 (133.80 - 135.80)	0.0	*
1Q24		1/2/2024	NE	44.98	NA	NA	NA	400.88		0.0	*
2Q24		4/2/2024	NE	46.81	NA	NA	NA	399.05		0.0	*
3Q24		7/2/2024	NE	45.35	NA	NA	NA	400.51		0.0	*
P-84A											
4Q23	446.63	10/3/2023	NE	44.44	NA	NA	NA	402.19	397.71 - 382.71 (48.92 - 63.92)	0.0	*
1Q24		1/3/2024	NE	44.84	NA	NA	NA	401.79		0.0	*
2Q24		4/3/2024	NE	45.78	NA	NA	NA	400.85		0.0	*
3Q24		7/2/2024	NE	45.64	NA	NA	NA	400.99		0.0	*
P-84B											
4Q23	446.35	10/3/2023	NE	43.78	NA	NA	NA	402.57	372.85 - 370.85 (73.50 - 75.50)	0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.78		0.0	*
2Q24		4/3/2024	NE	45.40	NA	NA	NA	400.95		0.0	*
3Q24		7/2/2024	NE	45.38	NA	NA	NA	400.97		0.0	*
P-84C											
4Q23	446.37	10/3/2023	NE	43.78	NA	NA	NA	402.59	352.32 - 350.32 (94.05 - 96.05)	0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.80		0.0	*
2Q24		4/3/2024	NE	45.42	NA	NA	NA	400.95		0.0	*
3Q24		7/2/2024	NE	45.38	NA	NA	NA	400.99		0.0	*
P-84D											
4Q23	446.38	10/3/2023	NE	43.78	NA	NA	NA	402.60	325.55 - 323.55 (120.83 - 122.83)	0.0	*
1Q24		1/3/2024	NE	44.57	NA	NA	NA	401.81		0.0	*
2Q24		4/3/2024	NE	45.42	NA	NA	NA	400.96		0.0	*
3Q24		7/2/2024	NE	45.40	NA	NA	NA	400.98		0.0	*
P-88A											
4Q23	443.27	10/3/2023	NE	35.86	NA	NA	NA	407.41	404.87 - 389.87 (38.40 - 53.40)	0.0	*
1Q24		1/4/2024	NE	36.97	NA	NA	NA	406.30		0.0	*
2Q24		4/3/2024	NE	37.75	NA	NA	NA	405.52		0.0	*
3Q24		7/2/2024	NE	37.04	NA	NA	NA	406.23		0.0	*
P-88B											
4Q23	443.35	10/3/2023	NE	35.93	NA	NA	NA	407.42	371.70 - 369.70 (71.65 - 73.65)	0.0	*
1Q24		1/4/2024	NE	37.03	NA	NA	NA	406.32		0.0	*
2Q24		4/3/2024	NE	37.83	NA	NA	NA	405.52		0.0	*
3Q24		7/2/2024	NE	37.06	NA	NA	NA	406.29		0.0	*
P-88C											
4Q23	443.31	10/3/2023	NE	35.88	NA	NA	NA	407.43	351.01 - 349.01 (92.30 - 94.30)	0.0	*
1Q24		1/4/2024	NE	36.99	NA	NA	NA	406.32		0.0	*
2Q24		4/3/2024	NE	37.80	NA	NA	NA	405.51		0.0	*
3Q24		7/2/2024	NE	37.06	NA	NA	NA	406.25		0.0	*
P-88D											
4Q23	443.38	10/3/2023	NE	35.97	NA	NA	NA	407.41	331.21 - 329.21 (112.17 - 114.17)	0.0	*
1Q24		1/4/2024	NE	37.10	NA	NA	NA	406.28		0.0	*
2Q24		4/3/2024	NE	37.85	NA	NA	NA	405.53		0.0	*
3Q24		7/2/2024	NE	37.14	NA	NA	NA	406.24		0.0	*
P-89B											
4Q23	447.64	10/3/2023	NE	44.98	NA	NA	NA	402.66	370.28 - 368.28 (77.36 - 79.36)	0.6	*
1Q24		1/3/2024	NE	46.47	NA	NA	NA	401.17		0.0	*
2Q24		4/2/2024	NE	47.62	NA	NA	NA	400.02		0.0	*
3Q24		7/2/2024	NE	46.55	NA	NA	NA	401.09		0.0	*
P-89C											
4Q23	447.96	10/3/2023	NE	45.34	NA	NA	NA	402.62	351.56 - 349.56 (96.40 - 98.40)	103.6	*
1Q24		1/3/2024	NE	46.86	NA	NA	NA	401.10		0.0	*
2Q24		4/2/2024	NE	47.98	NA	NA	NA	399.98		0.0	*
3Q24		7/2/2024	NE	46.90	NA	NA	NA	401.06		0.0	*

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P-89D											
4Q23	447.83	10/3/2023	NE	45.36	NA	NA	NA	402.47	309.33 - 307.33 (138.50 - 140.50)	0.0	*
1Q24		1/3/2024	NE	46.88	NA	NA	NA	400.95		0.0	*
2Q24		4/2/2024	NE	47.99	NA	NA	NA	399.84		0.0	*
3Q24		7/2/2024	NE	46.93	NA	NA	NA	400.90		0.0	*
P-91A											
4Q23	447.43	10/3/2023	47.99	48.06	399.37	399.44	0.07	399.43	395.92 - 380.92 (51.52 - 66.52)	3.2	*
1Q24		1/2/2024	48.75	48.76	398.67	398.68	0.01	398.68		1.7	*
2Q24		4/2/2024	49.31	49.33	398.10	398.12	0.02	398.12		2.8	*
3Q24		7/2/2024	48.62	48.63	398.80	398.81	0.01	398.81		1.3	*
P-91B											
4Q23	447.47	10/3/2023	NE	48.02	NA	NA	NA	399.45	372.78 - 370.78 (74.69 - 76.69)	3.3	*
1Q24		1/2/2024	NE	48.78	NA	NA	NA	398.69		0.0	*
2Q24		4/2/2024	NE	49.31	NA	NA	NA	398.16		0.0	*
3Q24		7/2/2024	NE	48.65	NA	NA	NA	398.82		0.0	*
P-91C											
4Q23	447.27	10/3/2023	NE	47.76	NA	NA	NA	399.51	352.54 - 350.54 (94.73 - 96.73)	0.0	*
1Q24		1/2/2024	NE	48.54	NA	NA	NA	398.73		0.0	*
2Q24		4/2/2024	NE	49.11	NA	NA	NA	398.16		0.0	*
3Q24		7/2/2024	NE	48.43	NA	NA	NA	398.84		0.0	*
P-91D											
4Q23	447.26	10/3/2023	NE	47.76	NA	NA	NA	399.50	278.94 - 276.94 (168.32 - 170.32)	2.2	*
1Q24		1/2/2024	NE	48.81	NA	NA	NA	398.45		8.2	*
2Q24		4/2/2024	NE	49.14	NA	NA	NA	398.12		0.0	*
3Q24		7/2/2024	NE	48.45	NA	NA	NA	398.81		0.0	*
P-92A											
4Q23	446.39	10/2/2023	NE	46.16	NA	NA	NA	400.23	398.82 - 383.82 (47.57 - 62.57)	0.0	*
1Q24		1/3/2024	46.84	46.87	399.52	399.55	0.03	399.54		132.9	*
2Q24		4/1/2024	47.56	47.59	398.80	398.83	0.03	398.82		88.6	*
3Q24		7/1/2024	47.30	47.37	399.02	399.09	0.07	399.08		24.5	*
P-92B											
4Q23	446.33	10/2/2023	NE	46.10	NA	NA	NA	400.23	371.92 - 369.92 (74.41 - 76.41)	0.0	*
1Q24		1/3/2024	NE	46.81	NA	NA	NA	399.52		0.0	*
2Q24		4/1/2024	NE	47.51	NA	NA	NA	398.82		0.2	*
3Q24		7/1/2024	NE	47.25	NA	NA	NA	399.08		0.0	*
P-92C											
4Q23	446.34	10/2/2023	NE	46.12	NA	NA	NA	400.22	353.38 - 348.38 (92.96 - 97.96)	0.0	*
1Q24		1/3/2024	NE	46.79	NA	NA	NA	399.55		0.0	*
2Q24		4/1/2024	NE	47.55	NA	NA	NA	398.79		0.3	*
3Q24		7/1/2024	NE	47.37	NA	NA	NA	398.97		0.0	*
P-92D											
4Q23	446.15	10/2/2023	NE	45.99	NA	NA	NA	400.16	305.15 - 303.15 (141.00 - 143.00)	0.0	*
1Q24		1/3/2024	NE	45.68	NA	NA	NA	400.47		0.0	*
2Q24		4/1/2024	NE	47.41	NA	NA	NA	398.74		0.0	*
3Q24		7/1/2024	NE	47.10	NA	NA	NA	399.05		0.0	*
P-93A											
4Q23	445.37	10/2/2023	NE	43.64	NA	NA	NA	401.73	402.30 - 392.30 (43.07 - 53.07)	0.0	
1Q24		1/2/2024	NE	46.07	NA	NA	NA	399.30		0.4	
2Q24		4/1/2024	NE	45.12	NA	NA	NA	400.25		0.0	
3Q24		7/1/2024	NE	44.71	NA	NA	NA	400.66		0.0	
P-93B											
4Q23	446.70	10/2/2023	NE	44.98	NA	NA	NA	401.72	371.92 - 369.92 (74.78 - 76.78)	0.0	*
1Q24		1/2/2024	NE	46.07	NA	NA	NA	400.63		0.0	*
2Q24		4/1/2024	NE	46.49	NA	NA	NA	400.21		0.0	*
3Q24		7/1/2024	NE	47.05	NA	NA	NA	399.65		0.0	*
P-93C											
4Q23	446.55	10/2/2023	NE	44.83	NA	NA	NA	401.72	353.67 - 348.67 (92.88 - 97.88)	0.0	*
1Q24		1/2/2024	NE	45.90	NA	NA	NA	400.65		99.2	*
2Q24		4/1/2024	NE	46.33	NA	NA	NA	400.22		5.8	*
3Q24		7/1/2024	NE	46.90	NA	NA	NA	399.65		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
P-93D											
4Q23	446.97	10/2/2023	NE	45.21	NA	NA	NA	401.76	321.31 - 319.31 (125.66 - 127.66)	0.0	*
1Q24		1/2/2024	NE	46.26	NA	NA	NA	400.71		0.0	*
2Q24		4/1/2024	NE	46.70	NA	NA	NA	400.27		0.0	*
3Q24		7/1/2024	NE	47.25	NA	NA	NA	399.72		0.0	*
P-94											
4Q23	445.04	10/3/2023	NE	41.17	NA	NA	NA	403.87	398.80 - 383.80 (46.24 - 61.24)	0.0	*
1Q24		1/2/2024	NE	42.39	NA	NA	NA	402.65		0.0	*
2Q24		4/2/2024	NE	43.26	NA	NA	NA	401.78		0.0	*
3Q24		7/2/2024	NE	42.63	NA	NA	NA	402.41		0.0	*
P-95											
4Q23	443.95	10/3/2023	NE	34.04	NA	NA	NA	409.91	407.43 - 392.43 (36.52 - 51.52)	0.0	*
1Q24		1/4/2024	NE	35.25	NA	NA	NA	408.70		0.0	*
2Q24		4/2/2024	NE	36.15	NA	NA	NA	407.80		0.0	*
3Q24		7/2/2024	NE	35.54	NA	NA	NA	408.41		0.0	*
P-102											
4Q23	445.14	10/3/2023	NE	38.18	NA	NA	NA	406.96	402.39 - 382.39 (42.75 - 62.75)	2.9	*
1Q24		1/4/2024	NE	39.48	NA	NA	NA	405.66		2.3	*
2Q24		4/2/2024	NE	40.37	NA	NA	NA	404.77		0.0	*
3Q24		7/2/2024	NE	39.67	NA	NA	NA	405.47		0.3	*
P-114R											
4Q23	429.48	10/3/2023	NE	27.65	NA	NA	NA	401.83	406.47 - 396.47 (23.01 - 33.01)	0.0	
1Q24		1/3/2024	NE	28.45	NA	NA	NA	401.03		37.0	
2Q24		4/2/2024	NE	28.71	NA	NA	NA	400.77		16.8	
3Q24		7/2/2024	NE	27.41	NA	NA	NA	402.07		37.4	
P-115											
4Q23	433.54	10/3/2023	NE	31.71	NA	NA	NA	401.83	401.24 - 381.24 (32.30 - 52.30)	0.0	*
1Q24		1/4/2024	NE	32.65	NA	NA	NA	400.89		0.0	
2Q24		4/2/2024	NE	32.65	NA	NA	NA	400.89		24.9	
3Q24		7/2/2024	NE	31.17	NA	NA	NA	402.37		0.0	*
P-116											
4Q23	436.79	10/3/2023	NE	35.16	NA	NA	NA	401.63	399.35 - 379.35 (37.44 - 57.44)	0.0	*
1Q24		1/4/2024	NE	36.09	NA	NA	NA	400.70		0.0	*
2Q24		4/2/2024	NE	36.08	NA	NA	NA	400.71		0.0	*
3Q24		7/2/2024	NE	34.44	NA	NA	NA	402.35		0.0	*
P-117											
4Q23	432.87	10/3/2023	NE	31.38	NA	NA	NA	401.49	399.94 - 379.94 (32.93 - 52.93)	0.0	*
1Q24		1/3/2024	NE	32.15	NA	NA	NA	400.72		0.0	*
2Q24		4/2/2024	NE	32.32	NA	NA	NA	400.55		0.0	*
3Q24		7/2/2024	NE	30.58	NA	NA	NA	402.29		0.0	*
P-118											
4Q23	431.48	10/3/2023	NE	30.41	NA	NA	NA	401.07	400.36 - 384.43 (31.12 - 47.05)	0.0	*
1Q24		1/4/2024	NE	31.33	NA	NA	NA	400.15		0.0	
2Q24		4/2/2024	NE	31.28	NA	NA	NA	400.20		0.0	
3Q24		7/2/2024	NE	28.95	NA	NA	NA	402.53		0.0	*
P-119											
4Q23	432.11	10/3/2023	NE	29.85	NA	NA	NA	402.26	401.44 - 385.51 (30.67 - 46.60)	0.0	*
1Q24		1/4/2024	NE	30.79	NA	NA	NA	401.32		0.0	
2Q24		4/2/2024	NE	30.95	NA	NA	NA	401.16		0.0	
3Q24		7/2/2024	NM	NM	NM	NM	NM	NM		NM	Inaccess ble due to refinery construction.
P-120											
4Q23	433.00	10/3/2023	NE	30.38	NA	NA	NA	402.62	401.62 - 385.69 (31.38 - 47.31)	0.0	*
1Q24		1/4/2024	NE	31.32	NA	NA	NA	401.68		0.0	*
2Q24		4/2/2024	NE	31.30	NA	NA	NA	401.70		0.0	*
3Q24		7/2/2024	NE	30.20	NA	NA	NA	402.80		0.0	*
P-129											
4Q23	432.66	10/3/2023	NE	32.78	NA	NA	NA	399.88	400.69 - 384.76 (31.97 - 47.90)	1.3	
1Q24		1/3/2024	NE	33.41	NA	NA	NA	399.25		5.7	
2Q24		4/2/2024	NE	33.32	NA	NA	NA	399.34		63.1	
3Q24		7/2/2024	NE	30.07	NA	NA	NA	402.59		0.0	*

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WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
ROST-3-MW											
4Q23	442.52	10/2/2023	NE	40.44	NA	NA	NA	402.08	404.71 - 394.71 (37.81 - 47.81)	0.0	
1Q24		1/2/2024	NE	41.47	NA	NA	NA	401.05		0.0	
2Q24		4/2/2024	NE	42.12	NA	NA	NA	400.40		0.0	
3Q24		7/1/2024	NE	42.75	NA	NA	NA	399.77		0.0	
ROST-4-PZ											
4Q23	442.15	10/2/2023	NE	39.48	NA	NA	NA	402.67	407.22 - 397.22 (34.93 - 44.93)	0.0	
1Q24		1/2/2024	NE	40.10	NA	NA	NA	402.05		0.0	
2Q24		4/1/2024	NE	41.02	NA	NA	NA	401.13		0.0	
3Q24		7/1/2024	NE	41.87	NA	NA	NA	400.28		0.0	
ROST-4-PZ(A)											
4Q23	442.15	10/2/2023	NE	39.06	NA	NA	NA	403.09	407.38 - 397.38 (34.77 - 44.77)	0.0	
1Q24		1/2/2024	NE	40.34	NA	NA	NA	401.81		0.0	
2Q24		4/1/2024	NE	41.20	NA	NA	NA	400.95		0.0	
3Q24		7/1/2024	NE	42.36	NA	NA	NA	399.79		0.0	
ROST-4-PZ(B)											
4Q23	442.40	10/2/2023	NE	39.50	NA	NA	NA	402.90	407.35 - 397.35 (35.05 - 45.05)	0.0	
1Q24		1/2/2024	NE	40.35	NA	NA	NA	402.05		0.0	
2Q24		4/1/2024	NE	41.05	NA	NA	NA	401.35		0.0	
3Q24		7/1/2024	NE	41.82	NA	NA	NA	400.58		0.0	
ROST-4-PZ(C)											
4Q23	442.97	10/2/2023	NE	39.55	NA	NA	NA	403.42	408.02 - 398.02 (34.95 - 44.95)	0.0	
1Q24		1/2/2024	NE	41.36	NA	NA	NA	401.61		0.0	
2Q24		4/2/2024	NE	42.03	NA	NA	NA	400.94		0.0	
3Q24		7/1/2024	NE	42.87	NA	NA	NA	400.10		0.0	
ROST-4-PZ(D)											
4Q23	442.92	10/2/2023	NE	40.30	NA	NA	NA	402.62	407.95 - 397.95 (34.97 - 44.97)	0.0	
1Q24		1/2/2024	NE	41.10	NA	NA	NA	401.82		0.0	
2Q24		4/2/2024	NE	41.80	NA	NA	NA	401.12		0.0	
3Q24		7/1/2024	NE	42.68	NA	NA	NA	400.24		0.0	
ROST-4-PZ(E)											
4Q23	441.98	10/2/2023	NE	39.29	NA	NA	NA	402.69	407.23 - 397.23 (34.75 - 44.75)	0.0	
1Q24		1/2/2024	NE	39.80	NA	NA	NA	402.18		0.0	
2Q24		4/1/2024	NE	40.35	NA	NA	NA	401.63		0.0	
3Q24		7/1/2024	NE	41.76	NA	NA	NA	400.22		0.0	
ROST-4-PZ(F)											
4Q23	442.12	10/2/2023	NE	39.35	NA	NA	NA	402.77	407.59 - 397.59 (34.53 - 44.53)	0.0	
1Q24		1/2/2024	NE	39.80	NA	NA	NA	402.32		0.0	
2Q24		4/1/2024	NE	40.23	NA	NA	NA	401.89		0.0	
3Q24		7/1/2024	NE	40.42	NA	NA	NA	401.70		0.0	
ROST-4-PZ(G)											
4Q23	442.20	10/2/2023	NE	40.26	NA	NA	NA	401.94	407.92 - 397.92 (34.28 - 44.28)	0.0	
1Q24		1/2/2024	NE	41.35	NA	NA	NA	400.85		0.0	
2Q24		4/2/2024	NE	41.95	NA	NA	NA	400.25		0.0	
3Q24		7/1/2024	NE	43.05	NA	NA	NA	399.15		0.0	
S-1											
4Q23	444.06	10/2/2023	42.67	42.71	401.35	401.39	0.04	401.38	Unknown	0.0	
1Q24		1/3/2024	43.66	43.68	400.38	400.40	0.02	400.40		274.6	
2Q24		4/1/2024	44.22	44.34	399.72	399.84	0.12	399.82		96.8	
3Q24		7/1/2024	44.63	44.65	399.41	399.43	0.02	399.43		129.4	
T-1											
4Q23	445.61	10/2/2023	NE	43.33	NA	NA	NA	402.28	398.61 - 388.61 (47.00 - 57.00)	0.0	*
1Q24		1/2/2024	NE	44.33	NA	NA	NA	401.28		0.0	*
2Q24		4/1/2024	NE	45.06	NA	NA	NA	400.55		0.0	*
3Q24		7/1/2024	NE	45.40	NA	NA	NA	400.21		0.0	*
T-2											
4Q23	443.40	10/2/2023	NE	41.66	NA	NA	NA	401.74	392.91 - 372.76 (50.50 - 70.65)	0.0	*
1Q24		1/2/2024	NE	42.49	NA	NA	NA	400.91		0.0	*
2Q24		4/2/2024	NE	43.14	NA	NA	NA	400.26		0.0	*
3Q24		7/1/2024	NE	43.50	NA	NA	NA	399.90		0.0	*

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WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
T-3											
4Q23	449.21	10/3/2023	NE	48.85	NA	NA	NA	400.36	403.99 - 388.99 (45.22 - 60.22)	0.0	
1Q24		1/2/2024	NE	49.59	NA	NA	NA	399.62		0.0	
2Q24		4/2/2024	NE	50.14	NA	NA	NA	399.07		0.0	
3Q24		7/1/2024	NE	49.88	NA	NA	NA	399.33		0.0	
T-4											
4Q23	446.82	10/3/2023	NE	48.07	NA	NA	NA	398.75	396.80 - 381.80 (50.02 - 65.02)	0.0	*
1Q24		1/2/2024	NE	48.21	NA	NA	NA	398.61		0.0	*
2Q24		4/2/2024	NE	50.09	NA	NA	NA	396.73		0.0	
3Q24		7/2/2024	NE	48.63	NA	NA	NA	398.19		0.0	*
T-5											
4Q23	443.66	10/2/2023	NE	42.13	NA	NA	NA	401.53	395.33 - 378.78 (48.33 - 64.88)	0.0	*
1Q24		1/3/2024	NE	43.01	NA	NA	NA	400.65		54.8	*
2Q24		4/2/2024	NE	43.49	NA	NA	NA	400.17		2.0	*
3Q24		7/2/2024	NE	43.58	NA	NA	NA	400.08		0.0	*
T-6											
4Q23	446.78	10/2/2023	NE	45.07	NA	NA	NA	401.71	394.27 - 380.02 (52.51 - 66.76)	2.4	*
1Q24		1/2/2024	NE	46.19	NA	NA	NA	400.59		0.7	*
2Q24		4/1/2024	NE	46.82	NA	NA	NA	399.96		1.4	*
3Q24		7/1/2024	NE	47.35	NA	NA	NA	399.43		0.0	*
T-7											
4Q23	444.26	10/4/2023	NE	41.73	NA	NA	NA	402.53	395.54 - 380.54 (48.72 - 63.72)	3.2	*
1Q24		1/4/2024	NE	42.70	NA	NA	NA	401.56		12.0	*
2Q24		4/3/2024	NE	43.13	NA	NA	NA	401.13		1.2	*
3Q24		7/2/2024	NE	42.91	NA	NA	NA	401.35		0.2	*
T-12											
4Q23	444.99	10/2/2023	NE	43.09	NA	NA	NA	401.90	398.16 - 372.16 (46.83 - 72.83)	0.3	*
1Q24		1/2/2024	NE	44.32	NA	NA	NA	400.67		1.7	*
2Q24		4/1/2024	NE	44.87	NA	NA	NA	400.12		0.3	*
3Q24		7/1/2024	NE	46.62	NA	NA	NA	398.37		0.0	*
T-13											
4Q23	443.76	10/2/2023	NE	41.41	NA	NA	NA	402.35	399.95 - 373.95 (43.81 - 69.81)	0.0	*
1Q24		1/2/2024	NE	42.31	NA	NA	NA	401.45		0.0	*
2Q24		4/1/2024	NE	43.08	NA	NA	NA	400.68		0.0	*
3Q24		7/1/2024	NE	43.27	NA	NA	NA	400.49		0.0	*
T-15											
4Q23	445.35	10/3/2023	NE	43.79	NA	NA	NA	401.56	396.95 - 370.95 (48.40 - 74.40)	0.0	*
1Q24		1/2/2024	NE	44.56	NA	NA	NA	400.79		0.0	*
2Q24		4/2/2024	NE	45.21	NA	NA	NA	400.14		0.0	*
3Q24		7/1/2024	NE	45.18	NA	NA	NA	400.17		0.0	*
T-17											
4Q23	446.19	10/3/2023	NE	44.00	NA	NA	NA	402.19	401.72 - 375.72 (44.47 - 70.47)	0.0	*
1Q24		1/2/2024	NE	45.11	NA	NA	NA	401.08		0.0	
2Q24		4/2/2024	NE	46.00	NA	NA	NA	400.19		0.0	
3Q24		7/2/2024	NE	45.35	NA	NA	NA	400.84		0.0	
T-19											
4Q23	446.99	10/3/2023	NE	48.06	NA	NA	NA	398.93	396.22 - 370.22 (50.77 - 76.77)	92.6	*
1Q24		1/2/2024	NE	48.38	NA	NA	NA	398.61		55.2	*
2Q24		4/2/2024	NE	50.06	NA	NA	NA	396.93		24.7	*
3Q24		7/2/2024	NE	48.78	NA	NA	NA	398.21		7.5	*
T-21											
4Q23	444.22	10/3/2023	NE	34.42	NA	NA	NA	409.80	412.26 - 386.26 (31.96 - 57.96)	0.0	
1Q24		1/4/2024	NE	35.67	NA	NA	NA	408.55		0.0	
2Q24		4/3/2024	NE	36.63	NA	NA	NA	407.59		0.0	
3Q24		7/2/2024	NE	36.01	NA	NA	NA	408.21		0.2	
T-22											
4Q23	442.37	10/3/2023	NE	35.73	NA	NA	NA	406.64	410.82 - 385.12 (31.55 - 57.25)	0.0	
1Q24		1/4/2024	NE	36.77	NA	NA	NA	405.60		0.0	
2Q24		4/2/2024	NE	37.35	NA	NA	NA	405.02		0.0	
3Q24		7/2/2024	NE	36.37	NA	NA	NA	406.00		0.0	

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WELL ID & EVENT	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	COMMENTS
T-23											
4Q23	432.90	10/3/2023	NE	28.43	NA	NA	NA	404.47	405.67 - 379.67 (27.23 - 53.23)	0.0	
1Q24		1/4/2024	NE	29.42	NA	NA	NA	403.48		0.0	
2Q24		4/2/2024	NE	29.55	NA	NA	NA	403.35		0.0	
3Q24		7/1/2024	NE	28.85	NA	NA	NA	404.05		0.0	
T-24											
4Q23	444.00	10/2/2023	NE	42.40	NA	NA	NA	401.60	402.50 - 376.85 (41.50 - 67.15)	0.0	
1Q24		1/3/2024	43.17	45.03	398.97	400.83	1.86	400.46		25.6	
2Q24		4/2/2024	43.60	45.76	398.24	400.40	2.16	399.97		0.8	
3Q24		7/1/2024	43.15	43.22	400.78	400.85	0.07	400.84		16.4	
T-28											
4Q23	444.56	10/3/2023	NE	43.14	NA	NA	NA	401.42	Unknown	0.0	
1Q24		1/2/2024	NE	43.90	NA	NA	NA	400.66		0.0	
2Q24		4/2/2024	NE	44.81	NA	NA	NA	399.75		0.0	
3Q24		7/2/2024	NE	44.20	NA	NA	NA	400.36		0.0	
T-37											
4Q23	447.44	10/6/2023	NE	44.97	NA	NA	NA	402.47	398.59 - 378.59 (48.86 - 68.86)	0.6	*
1Q24		1/3/2024	NE	46.33	NA	NA	NA	401.11		0.0	*
2Q24		4/2/2024	NE	47.46	NA	NA	NA	399.98		0.1	*
3Q24		7/2/2024	NE	46.40	NA	NA	NA	401.04		0.0	*
T-38											
4Q23	445.89	10/3/2023	NE	42.02	NA	NA	NA	403.87	396.75 - 376.75 (49.14 - 69.14)	1.2	*
1Q24		1/3/2024	NE	43.44	NA	NA	NA	402.45		0.0	*
2Q24		4/2/2024	NE	44.36	NA	NA	NA	401.53		0.0	*
3Q24		7/2/2024	NE	43.35	NA	NA	NA	402.54		0.0	*
T-62											
4Q23	432.16	10/3/2023	NE	29.68	NA	NA	NA	402.48	412.45 - 382.45 (19.71 - 49.71)	0.0	
1Q24		1/4/2024	NE	30.86	NA	NA	NA	401.30		0.0	
2Q24		4/2/2024	NE	30.90	NA	NA	NA	401.26		0.0	
3Q24		7/2/2024	NE	29.83	NA	NA	NA	402.33		0.0	
T-63											
4Q23	431.55	10/3/2023	NE	29.36	NA	NA	NA	402.19	411.57 - 381.57 (19.98 - 49.98)	0.0	
1Q24		1/4/2024	NE	30.53	NA	NA	NA	401.02		0.0	
2Q24		4/2/2024	NE	30.30	NA	NA	NA	401.25		0.0	
3Q24		7/2/2024	NE	29.04	NA	NA	NA	402.51		0.0	
T-64											
4Q23	429.10	10/3/2023	NE	27.50	NA	NA	NA	401.60	409.29 - 379.29 (19.81 - 49.81)	0.0	
1Q24		1/4/2024	NE	27.58	NA	NA	NA	401.52		0.0	
2Q24		4/2/2024	NE	28.25	NA	NA	NA	400.85		0.0	
3Q24		7/2/2024	NE	26.40	NA	NA	NA	402.70		0.0	

NOTES:

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

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

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

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

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

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

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

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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-01							
4Q23	6.76	18.88	0.851	7.05	1.80	104.51	
1Q24	6.59	15.56	0.922	0.00	0.42	124.54	
2Q24	6.69	16.53	0.922	2.19	1.28	169.19	
3Q24	6.87	22.03	1.134	11.11	0.77	-63.33	
MW-02							
4Q23	7.22	19.57	0.941	19.98	0.51	-151.93	
1Q24	7.25	18.27	0.887	0.00	0.37	38.16	
2Q24	7.06	22.42	0.798	16.62	0.53	19.94	
3Q24	7.26	22.49	0.773	13.31	1.67	-180.17	
MW-03							
4Q23	6.95	20.07	1.021	0.03	0.60	-120.38	
1Q24	6.80	16.50	1.161	0.00	0.32	94.44	
2Q24	6.83	19.07	1.278	0.00	0.68	-72.63	
3Q24	7.03	21.12	1.369	2.44	0.48	-149.62	
MW-04							
4Q23	6.69	18.39	0.953	0.55	0.59	35.63	
1Q24	6.68	15.80	1.044	0.00	0.43	129.98	
2Q24	6.77	18.18	0.973	5.60	0.73	88.34	
3Q24	6.89	20.48	0.995	0.00	2.04	-135.76	
MW-05							
4Q23	6.44	18.18	1.188	0.00	0.57	-39.24	
1Q24	6.65	16.54	0.995	0.00	0.33	94.93	
2Q24	6.74	18.96	0.978	1.17	0.71	-70.26	
3Q24	6.60	20.45	1.097	0.00	0.89	-126.33	
MW-06A							
4Q23	6.80	19.67	0.913	14.00	0.66	-27.45	
1Q24	8.10	16.00	0.086	44.02	8.55*	-8.10	
2Q24	6.87	19.02	0.262	3.40	3.29*	84.22	
3Q24	6.67	21.45	0.676	5.97	1.62	-7.54	
MW-06B							
4Q23	7.04	19.58	0.814	3.33	0.61	-57.38	
1Q24	7.20	17.08	0.788	0.00	0.21	-48.44	
2Q24	7.00	18.60	0.681	11.92	0.62	16.74	
3Q24	6.95	21.58	0.789	2.97	0.51	-98.74	
MW-06C							
4Q23	6.93	18.44	0.819	27.31	0.59	-84.37	
1Q24	7.21	15.71	0.823	0.00	0.27	-103.72	
2Q24	7.03	19.80	0.700	3.44	0.66	-56.60	
3Q24	7.00	20.98	0.782	4.45	0.54	-124.05	
MW-06D							
4Q23	7.04	19.49	1.249	9.03	0.60	-83.34	
1Q24	7.09	14.98	1.307	44.00	0.28	-37.82	
2Q24	6.94	18.70	1.119	32.77	0.61	-59.40	
3Q24	6.98	20.84	1.092	33.91	0.39	-135.51	

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							
4Q23	6.68	19.45	1.116	0.00	0.59	12.36	
1Q24	6.67	16.76	1.034	0.00	0.36	86.03	
2Q24	6.95	19.06	0.744	0.45	0.70	1.84	
3Q24	6.74	22.70	0.937	0.00	1.29	-112.85	
MW-09							
4Q23	6.72	18.21	1.020	0.00	0.62	-47.63	
1Q24	6.97	16.34	1.026	2.46	0.26	-47.01	
2Q24	6.91	21.20	0.996	3.31	0.52	-2.81	
3Q24	7.02	21.65	1.014	5.69	0.48	-80.95	
MW-10							
4Q23	6.77	19.35	1.431	19.63	0.58	-77.60	
1Q24	7.09	14.65	1.305	23.10	0.46	-93.32	
2Q24	6.86	16.65	1.404	17.51	1.34	-26.88	
3Q24	7.00	19.98	1.179	47.17	0.38	-117.60	
MW-11							
4Q23	6.64	17.60	1.395	1.62	0.61	-12.31	
1Q24	6.67	14.86	1.426	2.04	0.40	108.78	
2Q24	6.68	17.21	1.317	16.32	0.68	-17.82	
3Q24	6.61	18.97	1.312	37.68	0.92	-86.06	
MW-12							
4Q23	6.87	19.36	0.862	0.64	0.64	40.61	
1Q24	6.64	17.48	0.812	0.00	0.46	121.32	
2Q24	6.87	18.17	0.761	1.03	0.87	40.01	
3Q24	6.88	19.76	0.772	22.28	0.93	80.31	
MW-13							
4Q23	6.26	20.78	1.209	1.73	0.55	-18.65	
1Q24	6.53	18.20	0.963	9.20	0.32	117.08	
2Q24	6.68	21.90	0.997	32.02	0.47	-59.83	
3Q24	6.61	22.35	0.990	3.94	2.07	-81.72	
MW-14							
4Q23	6.75	19.51	1.026	25.36	0.58	-76.88	
1Q24	6.49	16.50	1.081	0.00	0.43	61.91	
2Q24	6.55	19.56	1.125	0.96	0.70	-18.84	
3Q24	6.54	20.81	1.025	0.00	0.84	-79.46	
MW-16							
4Q23	6.54	18.64	0.806	0.00	0.71	89.08	
1Q24	6.97	15.27	0.800	0.00	0.30	-91.29	
2Q24	6.66	18.60	0.850	10.00	0.55	-35.10	
3Q24	6.80	19.80	0.964	0.00	0.82	-112.93	

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							
4Q23	6.77	19.26	1.307	0.00	0.64	-57.24	
1Q24	6.72	17.41	1.126	16.68	0.39	109.66	
2Q24	6.73	19.25	1.256	20.81	0.80	76.63	
3Q24	6.90	24.38	1.048	32.51	1.80	-138.62	
MW-23							
4Q23	6.41	19.14	1.140	15.65	0.60	-33.78	
1Q24	6.54	18.40	0.928	7.32	0.27	114.54	
2Q24	6.50	19.30	0.883	22.82	0.55	5.80	
3Q24	6.60	20.52	0.812	44.14	0.90	-90.60	
MW-24							
4Q23	6.66	18.71	1.764	1.18	0.72	147.60	
1Q24	6.53	15.88	1.750	0.00	0.38	127.53	
2Q24	6.86	19.93	1.798	3.34	0.74	191.98	
3Q24	6.64	21.23	1.666	13.59	0.90	230.03	
MW-25							
4Q23	6.69	19.14	0.898	22.65	0.75	9.98	
1Q24	6.44	16.90	0.954	0.00	0.40	117.25	
2Q24	6.65	19.72	0.904	0.00	0.72	15.68	
3Q24	6.91	22.05	0.789	3.72	2.12	-148.97	
MW-26							
4Q23	6.72	19.86	1.167	1.71	1.96	111.12	
1Q24	6.67	16.37	0.916	6.84	0.44	125.17	
2Q24	6.94	17.49	0.831	5.69	1.31	156.49	
3Q24	7.07	21.89	0.755	4.65	0.43	48.42	
MW-27							
4Q23	6.61	16.91	0.741	0.00	2.22	96.44	
1Q24	6.81	15.25	0.760	0.00	4.78*	108.38	
2Q24	6.99	15.31	0.782	5.62	3.66	121.86	
3Q24	6.86	20.52	0.870	10.58	3.10	112.46	
MW-28							
4Q23	6.77	20.31	1.282	3.90	0.67	16.06	
1Q24	6.97	17.19	1.686	5.65	1.17	-80.97	
2Q24	6.55	18.32	2.112	24.23	0.64	-5.67	
3Q24	6.82	23.69	1.627	56.62	0.17	-128.01	
P-54							
4Q23	6.87	19.17	1.283	1.36	4.28*	94.48	
1Q24	6.69	14.85	1.260	0.00	2.60	125.23	
2Q24	6.66	19.57	1.262	48.73	2.42	158.75	
3Q24	6.49	20.74	1.375	19.24	3.00	277.04	
P-55R							
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q24	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							
4Q23	7.27	20.45	1.214	5.50	0.31	-128.05	
1Q24	7.25	16.89	1.207	0.00	0.21	-5.74	
2Q24	7.17	20.30	0.989	8.54	0.69	-151.90	
3Q24	7.34	22.52	1.064	17.44	0.39	-163.49	
P-57							
4Q23	6.48	19.15	1.006	0.00	0.51	-23.89	
1Q24	6.82	15.98	1.006	0.00	0.40	-50.52	
2Q24	6.66	19.70	0.930	1.07	0.76	41.37	
3Q24	6.64	22.80	0.999	0.00	0.42	-111.50	
P-58							
4Q23	6.61	21.37	1.500	16.50	0.49	-74.73	
1Q24	6.85	17.32	1.731	13.58	0.31	-85.95	
2Q24	6.53	21.41	1.494	23.42	0.47	6.96	
3Q24	6.64	24.32	1.748	16.30	1.82	-148.20	
P-59							
4Q23	6.71	23.09	1.501	0.00	0.26	-108.90	
1Q24	6.75	18.34	1.546	3.93	0.22	-74.07	
2Q24	6.63	20.00	1.535	9.34	0.61	-114.50	
3Q24	6.66	26.87	1.537	17.52	0.42	-120.13	
P-66							
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-68							
4Q23	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-74							
4Q23	6.17	19.39	0.584	0.00	0.61	11.13	
1Q24	NM	NM	NM	NM	NM	NM	Inaccessible due to refinery construction.
2Q24	6.34	20.41	0.176	15.38	0.77	48.64	
3Q24	5.89	23.86	0.285	6.25	0.46	-37.81	
P-93A							
4Q23	6.82	20.09	1.208	0.00	0.43	46.42	
1Q24	6.77	16.91	1.172	0.00	0.27	21.28	
2Q24	6.71	19.60	1.118	2.00	0.76	-44.30	
3Q24	6.80	22.43	1.235	0.00	0.41	-135.07	
P-93B							
4Q23	6.85	18.34	1.439	0.00	0.23	-131.21	
1Q24	6.95	14.90	1.386	5.66	0.20	-92.02	
2Q24	6.70	17.50	1.270	4.92	0.74	-81.80	
3Q24	6.77	19.62	1.367	0.00	0.33	-112.38	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-93C							
4Q23	7.04	19.16	1.069	17.26	0.44	-95.38	
1Q24	6.81	14.55	1.396	0.00	0.40	44.23	
2Q24	6.81	17.20	1.266	12.46	0.81	-91.10	
3Q24	7.01	21.55	0.992	26.16	0.49	-120.43	
P-93D							
4Q23	7.16	18.50	0.945	0.00	0.22	-89.26	
1Q24	7.09	15.87	1.003	0.00	0.68	0.20	
2Q24	7.01	17.83	0.969	0.00	1.31	38.26	
3Q24	7.03	20.34	1.109	0.00	0.39	-120.63	
P-114R							
4Q23	6.50	22.58	0.861	38.90	0.46	-99.25	
1Q24	6.69	18.81	0.912	40.01	0.19	10.99	
2Q24	6.64	23.83	1.384	14.91	0.52	-33.99	
3Q24	6.78	24.07	0.976	4.95	1.91	-145.90	
ROST-3-MW							
4Q23	6.77	18.14	1.124	7.45	0.64	-92.31	
1Q24	6.65	16.16	1.053	7.03	0.36	86.14	
2Q24	6.34	20.50	1.089	1.55	0.62	-6.00	
3Q24	6.76	19.20	1.184	13.57	0.38	-127.40	
ROST-4-PZ(C)							
4Q23	6.58	17.64	1.158	0.00	0.61	39.01	
1Q24	6.78	14.12	1.121	0.00	0.33	-49.08	
2Q24	6.69	19.70	1.411	0.78	0.64	-63.30	
3Q24	6.90	20.34	1.583	8.64	0.28	-112.72	
ROST-4-PZ(E)							
4Q23	6.75	19.90	1.858	4.81	0.71	-21.86	
1Q24	6.81	21.49	1.829	0.00	1.16	102.38	
2Q24	6.66	21.80	1.612	0.29	0.89	-47.80	
3Q24	6.87	20.27	1.588	0.00	1.03	27.70	
ROST-4-PZ(G)							
4Q23	6.93	20.28	1.347	0.00	0.64	-73.40	
1Q24	7.07	16.43	1.383	0.00	0.24	-93.22	
2Q24	7.02	19.36	1.319	18.24	0.61	-100.53	
3Q24	7.05	20.84	1.303	9.36	0.42	-152.20	
T-12							
4Q23	6.83	20.64	2.010	2.36	0.28	-138.55	
1Q24	6.91	17.99	1.797	0.00	0.32	-90.34	
2Q24	6.65	19.50	1.620	1.20	0.65	-131.80	
3Q24	6.76	25.31	1.424	6.54	0.43	-127.87	

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.

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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 [1]	0.005 [1]	0.07 [1]			0.0002 [2]	0.07 [1]	0.7 [1]	0.7 [1]	0.56 [3]	0.7 [1]	0.14 [1]	0.7 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																		
MW-01	MW1-ROX-100523	10/5/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW1-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW1-ROX-040424	4/4/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000028 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW1-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00022 J	< 0.0050	< 0.0010
MW-02	MW2-ROX-101323	10/13/2023	0.15	0.0011	< 0.025	0.0029	0.0033	0.00083 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0028	< 0.000031	< 0.0010	0.067	0.035	< 0.025	< 0.0010	0.018	0.049
	MW2-ROX-011124	1/11/2024	0.026	0.0014	0.0058 J	0.0027	0.0044	0.00064 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0028	< 0.000029	< 0.0010	0.035	0.032	< 0.025	< 0.0010	0.0084	0.052
	MW2-ROX-041724	4/17/2024	0.052	0.0026	0.022 J	0.0045	0.0051	0.00071 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0041	< 0.000031 UJ	< 0.0010	0.21	0.043	< 0.025	< 0.0010	0.016	0.063
	MW2-ROX-071124	7/11/2024	< 0.05	< 0.0020	< 0.05	0.0040	0.0055	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0037	< 0.000031	< 0.0020	0.037 J	0.04	< 0.05	< 0.0020	0.0070 J	0.062
	MW2-ROX-071124-DUP	7/11/2024	< 0.05	< 0.0020	< 0.05	0.0043	0.0061	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0039	< 0.000034	< 0.0020	0.051 J	0.043	< 0.05	< 0.0020	0.0079 J	0.068
MW-03	MW3-ROX-101223	10/12/2023	0.024 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00087 J	< 0.0050	< 0.0010
	MW3-ROX-101223-DUP	10/12/2023	0.024 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00088 J	< 0.0050	< 0.0010
	MW3-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00076 J	< 0.0050	< 0.0010
	MW3-ROX-010924-DUP	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	0.00057 J	< 0.025	0.00077 J	< 0.0050	< 0.0010
	MW3-ROX-041224	4/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00031 J	< 0.0050	< 0.0010
	MW3-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00025 J	< 0.0050	< 0.0010
MW-04	MW4-ROX-102023	10/20/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW4-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW4-ROX-041924	4/19/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
	MW4-ROX-071224	7/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0026	< 0.0050	< 0.0010
MW-05	MW5-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.002	< 0.0050	< 0.0010
	MW5-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.0018	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0041	< 0.0050	< 0.0010
	MW5-ROX-041224	4/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00074 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
	MW5-ROX-070824	7/8/2024	< 0.025 UJ	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.0022	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0029	< 0.0050	< 0.0010
MW-06A	MW6A-ROX-101023	10/10/2023	0.013 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6A-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6A-ROX-041124	4/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6A-ROX-071024	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00029 J	< 0.0050	< 0.0010
MW-06B	MW6B-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6B-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00046 J	< 0.0050	< 0.0010
	MW6B-ROX-041124	4/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00048 J	< 0.0050	< 0.0010
	MW6B-ROX-041124-DUP	4/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00048 J	< 0.0050	< 0.0010
	MW6B-ROX-071024	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00047 J	< 0.0050	< 0.0010
MW-06C	MW6C-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010 UJ	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.025	< 0.0010	< 0.0050	< 0.0010 UJ
	MW6C-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6C-ROX-040924	4/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00023 J	< 0.0050	< 0.0010
	MW6C-ROX-071024	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-06D	MW6D-ROX-100923	10/9/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6D-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6D-ROX-040924	4/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	0.00062 J	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6D-ROX-071024	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6D-ROX-071024-DUP	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-07	MW7-ROX-102023	10/20/2023	< 130	1400	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 0.000030	< 5	< 5	< 5	< 130	< 5	< 25	< 5
	MW7-ROX-102023-DUP	10/20/2023	< 130	1200	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 0.000030	< 5	< 5	< 5	< 130	< 5	< 25	< 5
	MW7-ROX-011724	1/17/2024	< 50 UJ	680 J	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 0.000029 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ
	MW7-ROX-011724-DUP	1/17/2024	< 50 UJ	1000 J	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 0.000030 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ
	MW7-ROX-041924	4/19/2024	< 25	190	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 0.000031	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	MW7-ROX-041924-DUP	4/19/2024	< 25	220	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1 UJ	< 1	< 0.000031	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	MW7-ROX-071524	7/15/2024	< 63 UJ	900	< 63 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 0.000031	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 63 UJ	< 2.5 UJ	< 13 UJ	< 2.5 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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 [1]	0.005 [1]	0.07 [1]			0.0002 [2]	0.07 [1]	0.7 [1]	0.7 [1]	0.56 [3]	0.7 [1]	0.14 [1]	0.7 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-09	MW9-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW9-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW9-ROX-041524	4/15/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW9-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000037	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-10	MW10-ROX-101323	10/13/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW10-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW10-ROX-040424	4/4/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW10-ROX-070824	7/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-11	MW11-ROX-100623	10/6/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW11-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW11-ROX-040524	4/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW11-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-12	MW12-ROX-101023	10/10/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0014	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW12-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW12-ROX-041224	4/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW12-ROX-070524	7/5/2024	< 0.025 UJ	< 0.0010	< 0.025 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-13	MW13-ROX-101823	10/18/2023	0.013 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00070 J	< 0.0050	< 0.0010
	MW13-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00053 J	< 0.0050	< 0.0010
	MW13-ROX-041524	4/15/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00070 J	< 0.0050	< 0.0010
	MW13-ROX-071124	7/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000035	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
MW-14	MW14-ROX-100923	10/9/2023	< 0.025 UJ	0.011	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW14-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW14-ROX-041124	4/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW14-ROX-070824	7/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000036	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-16	MW16-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW16-ROX-101823-DUP	10/18/2023	0.011 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW16-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW16-ROX-040924	4/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW16-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-22	MW22-ROX-101623	10/16/2023	< 0.025	0.0061	< 0.025	0.0029	0.0015	0.0043	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0019	< 0.000030	< 0.0010	0.022	0.014	< 0.025	< 0.0010	0.034	0.027
	MW22-ROX-011224	1/12/2024	< 0.13	0.13	< 0.13	0.0093	0.0053	0.01	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0048 J	< 0.000030	< 0.0050	0.34	0.06	< 0.13	0.0013 J	0.14	0.11
	MW22-ROX-011224-DUP	1/12/2024	< 0.13	0.12	< 0.13	0.0078	0.0045 J	0.0087	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0039 J	< 0.000030	< 0.0050	0.29	0.051	< 0.13	< 0.0050	0.13	0.086
	MW22-ROX-041824	4/18/2024	< 0.13	0.057	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050 UJ	< 0.0050	< 0.000031	< 0.0050	0.072	0.014	< 0.13	< 0.0050	0.063	0.02
	MW22-ROX-041824-DUP	4/18/2024	< 0.13	0.052	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050 UJ	< 0.0050	< 0.000031	< 0.0050	0.064	0.012	< 0.13	< 0.0050	0.057	0.018
	MW22-ROX-071224	7/12/2024	< 0.05	0.044	< 0.05	0.0054	0.0031	0.0036	< 0.0020	< 0.0020	< 0.0020	< 0.0020	0.0015 J	< 0.000032	< 0.0020	0.40	0.042	< 0.05	< 0.0020	0.13	0.065
MW-23	MW23-ROX-101023	10/10/2023	0.015 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW23-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	0.00032 J	< 0.0010	< 0.0010	< 0.025	0.00095 J	< 0.0050	< 0.0010
	MW23-ROX-041524	4/15/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000031	0.00049 J	< 0.0010	< 0.0010	< 0.025	0.0013	< 0.0050	< 0.0010
	MW23-ROX-070824	7/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	0.00069 J	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
MW-24	MW24-ROX-101223	10/12/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW24-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW24-ROX-040824	4/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000032 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW24-ROX-070924	7/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-25	MW25-ROX-102023	10/20/2023	< 0.025	0.043	< 0.025	< 0.0010	< 0.0010	0.00091 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00035 J	< 0.0050	< 0.0010
	MW25-ROX-011824	1/18/2024	< 0.025	0.053	< 0.025	< 0.0010	< 0.0010	0.00064 J	0.00050 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW25-ROX-041924	4/19/2024	0.014 J	0.044	< 0.025	< 0.0010	< 0.0010	0.00093 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00089 J	< 0.0050	< 0.0010
	MW25-ROX-071524	7/15/2024	0.02 J*+ J	0.0067	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000034	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00038 J	< 0.0050	< 0.0010
	MW25-ROX-071524-DUP	7/15/2024	0.02 J*+ J	0.0072	< 0.025	< 0.0010	< 0.0010	0.00067 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000034	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00041 J	< 0.0050	< 0.0010

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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 [1]	0.005 [1]	0.07 [1]			0.0002 [2]	0.07 [1]	0.7 [1]	0.7 [1]	0.56 [3]	0.7 [1]	0.14 [1]	0.7 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-26	MW26-ROX-100523	10/5/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW26-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW26-ROX-040424	4/4/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW26-ROX-070524	7/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-27	MW27-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW27-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW27-ROX-040424	4/4/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW27-ROX-070824	7/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-28	MW28-ROX-101223	10/12/2023	0.01 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00051 J	< 0.0050	< 0.0010
	MW28-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0017	< 0.0050	< 0.0010
	MW28-ROX-041224	4/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0022	< 0.0050	< 0.0010
	MW28-ROX-070824	7/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0020	< 0.0050	< 0.0010
P-54	P54-ROX-100623	10/6/2023	0.011 JF1 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P54-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P54-ROX-040824	4/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P54-ROX-070924	7/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
P-56	P56-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	0.0025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.000030	< 0.0010	0.00059 J	0.011	< 0.025	< 0.0010	< 0.0050	0.014
	P56-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	0.0024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.00084 J	< 0.000029	< 0.0010	0.00094 J	0.015	< 0.025	< 0.0010	< 0.0050	0.017
	P56-ROX-041824	4/18/2024	< 0.025	0.00063 J	< 0.025	< 0.0010	0.0019	< 0.0010	0.00089 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	0.012	< 0.025	< 0.0010	< 0.0050	0.014
	P56-ROX-071024	7/10/2024	0.015 J*+ J	< 0.0010	< 0.025	< 0.0010	0.0012	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000034	< 0.0010	< 0.0010	0.0065	< 0.025	< 0.0010	< 0.0050	0.0063
P-57	P57-ROX-101723	10/17/2023	0.017 J	0.084	< 0.025	0.0031	0.004	0.0039	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	0.0015	0.022	< 0.025	< 0.0010	0.013	0.022
	P57-ROX-011124	1/11/2024	< 0.025	0.037	0.0031 J	0.0021	0.004	0.0051	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	0.00060 J	0.02	< 0.025	< 0.0010	< 0.0050	0.021 J
	P57-ROX-011124-DUP	1/11/2024	< 0.025	0.041	< 0.025	0.0031	0.0057	0.0064	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	0.00079 J	0.025	< 0.025	< 0.0010	< 0.0050	0.029 J
	P57-ROX-041824	4/18/2024	< 0.025	0.0089	< 0.025	0.001	0.0031	0.0038	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000031	< 0.0010	0.00068 J	0.015 J	< 0.025	< 0.0010	< 0.0050	0.016 J
	P57-ROX-041824-DUP	4/18/2024	< 0.025	0.0078	< 0.025	< 0.0010	0.0017	0.0022	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000030	< 0.0010	< 0.0010	0.0092 J	< 0.025	< 0.0010	< 0.0050	0.0091 J
	P57-ROX-071024	7/10/2024	< 0.025	0.0062	< 0.025	0.0013	0.0045	0.0054	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	0.00054 J	0.018	< 0.025	< 0.0010	< 0.0050	0.016
P-58	P58-ROX-101723	10/17/2023	< 25 UJ	570	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 0.000030	< 1 UJ	< 1 UJ	< 1 UJ	< 25 UJ	< 1 UJ	< 5 UJ	< 1 UJ
	P58-ROX-011224	1/12/2024	< 25	240	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000030	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	P58-ROX-011224-DUP	1/12/2024	< 25	250	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000030	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	P58-ROX-041724	4/17/2024	< 13	430	< 13	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.000031 UJ	< 0.5	0.28 J	< 0.5	< 13	< 0.5	< 2.5	< 0.5
	P58-ROX-071724	7/17/2024	< 50	340	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 0.000033	< 2	< 2	< 2	< 50	< 2	< 10	< 2
	P58-ROX-071724-DUP	7/17/2024	< 50	300	< 50	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 0.000033	< 2	< 2	< 2	< 50	< 2	< 10	< 2
P-59	P59-ROX-101823	10/18/2023	< 0.25	1.8	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000031	< 0.01	0.12	0.048	< 0.25	< 0.01	0.043 J	0.075
	P59-ROX-011224	1/12/2024	< 0.25	1.6	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000031	< 0.01	0.16	0.047	< 0.25	< 0.01	0.044 J	0.066
	P59-ROX-041924	4/19/2024	0.18	0.91	0.051 J	0.0048 J	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000030	< 0.0050	0.072	0.052	< 0.13	< 0.0050	0.026	0.076
	P59-ROX-071524	7/15/2024	< 0.13	0.19	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000033	< 0.0050	0.035	0.011	< 0.13	< 0.0050	< 0.025	0.013
P-74	P74-ROX-101723	10/17/2023	0.065 J	1	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000030	< 0.0050	0.0055	< 0.0050	0.016 J	0.0065	< 0.025	< 0.0050
	P74-ROX-101723-DUP	10/17/2023	0.071 J	1	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000030	< 0.0050	0.0050	< 0.0050	0.015 J	0.0065	< 0.025	< 0.0050
	P74-ROX-041824	4/18/2024	0.024 J	0.055	0.0083 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000031	< 0.0010	0.00067 J	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P74-ROX-071224	7/12/2024	0.22	0.91	0.054 J*+ J	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000033	< 0.0050	0.066	< 0.0050	0.0095 J	< 0.0050	< 0.025	< 0.0050
	P74-ROX-071224-DUP	7/12/2024	0.21	0.93	0.059 J*+ J	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000032	< 0.0050	0.070	< 0.0050	< 0.13	< 0.0050	< 0.025	< 0.0050
P-93A	P93A-ROX-101823	10/18/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.00070 J	< 0.0010	0.0012	0.0030	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P93A-ROX-011024	1/10/2024	< 0.025	0.055	< 0.025	< 0.0010	< 0.0010	0.0023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P93A-ROX-041824	4/18/2024	< 0.13	0.85	< 0.13	< 0.0050	< 0.0050	0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000031	< 0.0050	< 0.0050	< 0.0050	< 0.13	< 0.0050	< 0.025	< 0.0050
	P93A-ROX-071224	7/12/2024	< 5	29	< 5	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.000040	< 0.2	< 0.2	< 0.2	< 5	< 0.2	< 1	< 0.2

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Carbon tetrachloride	Chloroform	Chloromethane	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	cis-1,2-Dichloroethene	Ethylbenzene	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	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 [1]	0.005 [1]	0.07 [1]			0.0002 [2]	0.07 [1]	0.7 [1]	0.7 [1]	0.56 [3]	0.7 [1]	0.14 [1]	0.7 [3]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
P-93B	P93B-ROX-101923	10/19/2023	< 130	610	< 130	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 0.000030	< 5	< 5	< 5	< 130	< 5	< 25	< 5
	P93B-ROX-011224	1/12/2024	< 63	690	< 63	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 0.000030	< 2.5	< 2.5	< 2.5	< 63	< 2.5	< 13	< 2.5
	P93B-ROX-041924	4/19/2024	< 50 UJ	1000	< 50 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 0.000032	< 2 UJ	< 2 UJ	< 2 UJ	< 50 UJ	< 2 UJ	< 10 UJ	< 2 UJ
	P93B-ROX-071724	7/17/2024	< 25	990	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0.000057	< 1	< 1	< 1	< 25	< 1	< 5	< 1
P-93C	P93C-ROX-101623	10/16/2023	< 0.025	0.013	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0025	< 0.0050	< 0.0010
	P93C-ROX-011124	1/11/2024	< 13 UJ	490	< 13 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.000029	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 13 UJ	< 0.5 UJ	< 2.5 UJ	< 0.5 UJ
	P93C-ROX-041924	4/19/2024	< 25	180	< 25	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.000031	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	P93C-ROX-071524	7/15/2024	< 0.025	13	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	0.00068 J	< 0.0010	< 0.025	0.0012	< 0.0050	< 0.0010
P-93D	P93D-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00053 J	< 0.0050	< 0.0010
	P93D-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00047 J	< 0.0050	< 0.0010
	P93D-ROX-042224	4/22/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0012	< 0.0050	< 0.0010
	P93D-ROX-071224	7/12/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
P-114R	P114R-ROX-101823	10/18/2023	0.019 J	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0015	< 0.0050	< 0.0010
	P114R-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0018	< 0.0050	< 0.0010
	P114R-ROX-041524	4/15/2024	< 0.025	0.0021	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00066 J	< 0.0050	< 0.0010
	P114R-ROX-071124	7/11/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
ROST-3-MW	ROST3MW-ROX-100623	10/6/2023	0.038	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST3MW-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST3MW-ROX-041624	4/16/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST3MW-ROX-070924	7/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
ROST-4-PZ(C)	ROST4PZ(C)-ROX-101623	10/16/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(C)-ROX-041624	4/16/2024	< 0.025	0.0020	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029 UJ	< 0.0010	0.00053 J	0.0013	< 0.025	< 0.0010	< 0.0050	0.0025
	ROST4PZ(C)-ROX-041624-DUP	4/16/2024	< 0.025	0.0019	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029 UJ	< 0.0010	< 0.0010	0.0012	< 0.025	< 0.0010	< 0.0050	0.0022
	ROST4PZ(C)-ROX-070924	7/9/2024	0.014 J	0.0011	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	0.00051 J	0.0014	< 0.025	< 0.0010	0.014	0.0019
ROST-4-PZ(E)	ROST4PZ(E)-ROX-101323	10/13/2023	0.062	0.00061 J	0.0082 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	0.0054	0.00076 J	< 0.025	< 0.0010	0.0031 J	0.00075 J
	ROST4PZ(E)-ROX-011124	1/11/2024	< 0.025	0.00095 J	0.0086 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000029	< 0.0010	0.0087	0.00095 J	< 0.025	< 0.0010	< 0.0050	0.00085 J
	ROST4PZ(E)-ROX-041624	4/16/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(E)-ROX-071024	7/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
ROST-4-PZ(G)	ROST4PZ(G)-ROX-101223	10/12/2023	0.033	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(G)-ROX-040524	4/5/2024	< 0.025	< 0.0010	0.0066 J	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZ(G)-ROX-070924	7/9/2024	0.013 J	0.0012	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	0.00091 J	< 0.025	< 0.0010	< 0.0050	0.00095 J
T-12	T12-ROX-101923	10/19/2023	< 0.25	1.5	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000032	< 0.01	0.013	0.019	< 0.25	< 0.01	< 0.05	0.031
	T12-ROX-011124	1/11/2024	< 0.25	1.3	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000029	< 0.01	0.0069 J	0.011	< 0.25	< 0.01	< 0.05	0.01
	T12-ROX-041924	4/19/2024	< 0.25	1.2	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000031	< 0.01	< 0.01	0.0061 J	< 0.25	< 0.01	< 0.05	< 0.01
	T12-ROX-071524	7/15/2024	< 0.25	1.9	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000032	< 0.01	0.19	0.013	< 0.25	< 0.01	< 0.05	0.022

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

										SVOCs									
			Toluene	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	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine
Screening Values (mg/L)			1.0 [1]	0.005	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]	0.012 [1]	
Location	Sample ID	Sample Date																	
MW-01	MW1-ROX-100523	10/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.0057
	MW1-ROX-010524	1/5/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW1-ROX-040424	4/4/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	0.000051 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
	MW1-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00020	< 0.01
MW-02	MW2-ROX-101323	10/13/2023	0.0032	< 0.0010	0.012	0.015	0.028	0.0029 J	0.031	< 0.00099 UJ	< 0.00099 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.0099
	MW2-ROX-011124	1/11/2024	0.0024	< 0.0010	0.0054	0.0085	0.014	0.0017 J	0.016	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW2-ROX-041724	4/17/2024	0.0033	< 0.0010	0.024	0.023	0.11	0.01	0.12	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097 UJ
	MW2-ROX-071124	7/11/2024	0.0022	< 0.0020	0.0067	0.012	0.014	0.0020 J	0.016 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	MW2-ROX-071124-DUP	7/11/2024	0.0025	< 0.0020	0.0083	0.015	0.022	0.0025 J	0.025	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
MW-03	MW3-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.0098
	MW3-ROX-101223-DUP	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.0098
	MW3-ROX-010924	1/9/2024	< 0.0010	< 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	< 0.00020	< 0.0099
	MW3-ROX-010924-DUP	1/9/2024	< 0.0010	< 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	< 0.00020	< 0.01
	MW3-ROX-041224	4/12/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW3-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00020	< 0.0098
MW-04	MW4-ROX-102023	10/20/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW4-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.011
	MW4-ROX-041924	4/19/2024	< 0.0010	< 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	< 0.00020 UJ	< 0.0098
	MW4-ROX-071224	7/12/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.000046 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
MW-05	MW5-ROX-101623	10/16/2023	< 0.0010	< 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	< 0.00020 UJ	< 0.01
	MW5-ROX-010924	1/9/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW5-ROX-041224	4/12/2024	< 0.0010	< 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	< 0.00019	< 0.0096
	MW5-ROX-070824	7/8/2024	< 0.0010	< 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	< 0.00019	< 0.0094
MW-06A	MW6A-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00026	0.00022	< 0.00019	0.000045 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
	MW6A-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	0.000035 J	< 0.00021	< 0.00021	0.000063 J	< 0.00021	0.000077 J	< 0.01
	MW6A-ROX-041124	4/11/2024	< 0.0010	< 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	< 0.00019	< 0.0097
	MW6A-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.00020	< 0.00020	0.000039 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000036 J	< 0.01
MW-06B	MW6B-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00011 J	0.00010 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0094
	MW6B-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00022	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	MW6B-ROX-041124	4/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.000049 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
	MW6B-ROX-041124-DUP	4/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.000055 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW6B-ROX-071024	7/10/2024	< 0.0010	< 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	< 0.00020	< 0.01
MW-06C	MW6C-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010 UJ	< 0.0010 UJ	< 0.0050	< 0.0050 UJ	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000043 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
	MW6C-ROX-010924	1/9/2024	< 0.0010	< 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	< 0.00021	< 0.01
	MW6C-ROX-040924	4/9/2024	< 0.0010	< 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	< 0.00019	< 0.0096
	MW6C-ROX-071024	7/10/2024	< 0.0010	< 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	< 0.00019	< 0.0094
MW-06D	MW6D-ROX-100923	10/9/2023	< 0.0010	< 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	< 0.00020	< 0.0098
	MW6D-ROX-010924	1/9/2024	< 0.0010	< 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	< 0.00020	< 0.01
	MW6D-ROX-040924	4/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00061	0.00041 B	0.00076	0.00010 J	< 0.00020	0.000065 J	< 0.00020	< 0.00020	0.000054 J	< 0.0099
	MW6D-ROX-071024	7/10/2024	< 0.0010	< 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	< 0.00021	< 0.01
	MW6D-ROX-071024-DUP	7/10/2024	< 0.0010	< 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	< 0.00020	< 0.01
MW-07	MW7-ROX-102023	10/20/2023	< 5	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00022	0.00015 J	0.000087 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW7-ROX-102023-DUP	10/20/2023	< 5	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00022	0.00016 J	0.000058 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW7-ROX-011724	1/17/2024	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	0.00026	0.00012 J	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.00024	< 0.012
	MW7-ROX-011724-DUP	1/17/2024	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	0.00030	0.00013 J	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.011
	MW7-ROX-041924	4/19/2024	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00025	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
	MW7-ROX-041924-DUP	4/19/2024	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00034	< 0.00019	0.000047 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.00019 UJ	< 0.0097
	MW7-ROX-071524	7/15/2024	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 2.5 UJ	< 13 UJ	< 13 UJ	< 25 UJ	0.00019 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

											SVOCs									
			Toluene	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	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine
Screening Values (mg/L)			1.0 [1]	0.005	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]	0.012 [1]	
Location	Sample ID	Sample Date																		
MW-09	MW9-ROX-101623	10/16/2023	< 0.0010	< 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	< 0.00020	< 0.0099
	MW9-ROX-010524	1/5/2024	0.00090 J	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0050	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	MW9-ROX-041524	4/15/2024	< 0.0010	< 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	< 0.00020	0.0038 J
	MW9-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00020	< 0.0098
MW-10	MW10-ROX-101323	10/13/2023	< 0.0010	< 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	< 0.00020 UJ	< 0.0099
	MW10-ROX-010524	1/5/2024	< 0.0010	< 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	< 0.00021	< 0.011
	MW10-ROX-040424	4/4/2024	< 0.0010	< 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	< 0.00019	< 0.0095
	MW10-ROX-070824	7/8/2024	< 0.0010	< 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	< 0.00019	< 0.0097
MW-11	MW11-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.00012	< 0.0059
	MW11-ROX-010524	1/5/2024	< 0.0010	< 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	< 0.00021	< 0.01
	MW11-ROX-040524	4/5/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW11-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00019	< 0.0097
MW-12	MW12-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000052 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0094
	MW12-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00013 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
	MW12-ROX-041224	4/12/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW12-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	0.000052 J	0.000045 J	< 0.00019	0.000038 J	< 0.0097
MW-13	MW13-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00034	< 0.00020	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
	MW13-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00024	0.00038	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW13-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00015 J	0.000076 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0039 J
	MW13-ROX-071124	7/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	0.000052 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
MW-14	MW14-ROX-100923	10/9/2023	0.0033 F1 J	< 0.0010	< 0.0010	< 0.0010	0.00066 J	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW14-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	0.000070 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW14-ROX-041124	4/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.000056 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	MW14-ROX-070824	7/8/2024	< 0.0010	< 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	< 0.00020	< 0.01
MW-16	MW16-ROX-101823	10/18/2023	< 0.0010	< 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	< 0.00020	< 0.01
	MW16-ROX-101823-DUP	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW16-ROX-010824	1/8/2024	< 0.0010	< 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	< 0.00021	< 0.01
	MW16-ROX-040924	4/9/2024	< 0.0010	< 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	< 0.00020	< 0.01
	MW16-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00020	< 0.01
MW-22	MW22-ROX-101623	10/16/2023	0.0088	< 0.0010	0.049	0.035	0.13	0.0061	0.14	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.0098
	MW22-ROX-011224	1/12/2024	0.060	< 0.0050	0.16	0.13	0.76	0.039	0.8	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	MW22-ROX-011224-DUP	1/12/2024	0.052	< 0.0050	0.13	0.11	0.65	0.033	0.68	0.00011 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	MW22-ROX-041824	4/18/2024	0.026	< 0.0050	0.018	0.028	0.21	0.01 J	0.22	0.00011 J	< 0.00022	0.000084 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022 UJ	< 0.00022	< 0.011 UJ
	MW22-ROX-041824-DUP	4/18/2024	0.024	< 0.0050	0.016	0.024	0.18	0.0089 J	0.19	< 0.00021	< 0.00021	0.000071 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021 UJ	< 0.00021	< 0.01 UJ
	MW22-ROX-071224	7/12/2024	0.052	< 0.0020	0.11	0.074	1	0.061	1.1	0.00011 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
MW-23	MW23-ROX-101023	10/10/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	< 0.00019	0.000046 JB	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
	MW23-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.00014 J	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0095
	MW23-ROX-041524	4/15/2024	< 0.0010	0.00023 J	< 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	< 0.00019	< 0.0096 UJ
	MW23-ROX-070824	7/8/2024	< 0.0010	0.00029 J	< 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	< 0.00021	< 0.01
MW-24	MW24-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	0.00012 J	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.0098
	MW24-ROX-010924	1/9/2024	< 0.0010	< 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	< 0.00019	< 0.0097
	MW24-ROX-040824	4/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	MW24-ROX-070924	7/9/2024	< 0.0010	< 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	< 0.00021	< 0.01
MW-25	MW25-ROX-102023	10/20/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW25-ROX-011824	1/18/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.00023	< 0.012
	MW25-ROX-041924	4/19/2024	< 0.0010	< 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	< 0.00020 UJ	< 0.0099
	MW25-ROX-071524	7/15/2024	< 0.0010	< 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	< 0.00020	< 0.01
	MW25-ROX-071524-DUP	7/15/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

										SVOCs									
			Toluene	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	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine
Screening Values (mg/L)			1.0 [1]	0.005	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]	0.012 [1]	
Location	Sample ID	Sample Date																	
MW-26	MW26-ROX-100523	10/5/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.0057
	MW26-ROX-010524	1/5/2024	< 0.0010	< 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	< 0.00020	< 0.0099
	MW26-ROX-040424	4/4/2024	< 0.0010	< 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	< 0.00019	< 0.0097
	MW26-ROX-070524	7/5/2024	< 0.0010	< 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	< 0.00019	< 0.0097
MW-27	MW27-ROX-101823	10/18/2023	< 0.0010	< 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	< 0.00020	< 0.0098
	MW27-ROX-010824	1/8/2024	< 0.0010	< 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	< 0.00019	< 0.0095
	MW27-ROX-040424	4/4/2024	< 0.0010	< 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	< 0.00020	< 0.0098
	MW27-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.000060 J	0.000047 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
MW-28	MW28-ROX-101223	10/12/2023	< 0.0010	< 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	< 0.00020 UJ	< 0.01
	MW28-ROX-010524	1/5/2024	< 0.0010 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.011
	MW28-ROX-041224	4/12/2024	< 0.0010	< 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	< 0.00019	< 0.0097
	MW28-ROX-070824	7/8/2024	< 0.0010	< 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	< 0.00019	< 0.0097
P-54	P54-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.000036 J	< 0.00011	< 0.00011	< 0.00011	< 0.0057
	P54-ROX-010824	1/8/2024	< 0.0010	< 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	< 0.00020	< 0.0099
	P54-ROX-040824	4/8/2024	< 0.0010	< 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	< 0.00019	< 0.0096
	P54-ROX-070924	7/9/2024	< 0.0010	< 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	< 0.00019	< 0.0095
P-56	P56-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0015 J	< 0.0050	< 0.01	0.00043	< 0.00021	0.000072 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.01
	P56-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0025 J	< 0.0050	0.0025 J	0.00067	< 0.00019	0.00011 J J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
	P56-ROX-041824	4/18/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0014 J	< 0.0050	< 0.01	0.00037	< 0.00022	0.000061 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022 UJ	< 0.00022	< 0.011 UJ
	P56-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00062	< 0.00020	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
P-57	P57-ROX-101723	10/17/2023	0.0031	< 0.0010	< 0.0010	< 0.0010	0.00075 J	< 0.0050	< 0.01	0.00022	< 0.00020	0.00014 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
	P57-ROX-011124	1/11/2024	0.0031	< 0.0010	< 0.0010	< 0.0010	0.00067 J	< 0.0050	< 0.01	0.00032	< 0.00021	0.00017 J J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	P57-ROX-011124-DUP	1/11/2024	0.0035	< 0.0010	< 0.0010	< 0.0010	0.00082 J	< 0.0050	< 0.01	0.00032	< 0.00021	0.00016 J J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	P57-ROX-041824	4/18/2024	0.0045	< 0.0010	< 0.0010	< 0.0010	0.00099 J	< 0.0050	< 0.01	0.00029	0.000052 J	0.00018 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021 UJ	< 0.00021	< 0.011 UJ
	P57-ROX-041824-DUP	4/18/2024	0.0031	< 0.0010	< 0.0010	< 0.0010	0.00065 J	< 0.0050	< 0.01	0.00023	< 0.00022	0.000074 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022 UJ	< 0.00022	< 0.011 UJ
	P57-ROX-071024	7/10/2024	0.0035	< 0.0010	< 0.0010	< 0.0010	0.00068 J	< 0.0050	< 0.01	0.00044	< 0.00020	0.000073 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
P-58	P58-ROX-101723	10/17/2023	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	0.00046	< 0.00020	0.00018 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000043 J	< 0.0099
	P58-ROX-011224	1/12/2024	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00058	< 0.00021	0.00036	0.00034	0.00029	0.00016 J	0.00013 J	< 0.00021	0.00056	< 0.01
	P58-ROX-011224-DUP	1/12/2024	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00060	< 0.00020	0.00046	0.00033	0.00028	0.00018 J	0.00012 J	< 0.00020	0.00061	< 0.01
	P58-ROX-041724	4/17/2024	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.5	< 5	0.00063	< 0.00020	0.00030	0.00023	0.00013 J	0.000072 J	0.000038 J	< 0.00020	0.00028	< 0.01 UJ
	P58-ROX-071724	7/17/2024	< 2	< 2	< 2	< 2	< 10	< 10	< 20	0.00060	< 0.00021	< 0.00027 U	0.000086 J	< 0.00021	0.000038 J	< 0.00021	< 0.00021	0.00012 J	< 0.01
	P58-ROX-071724-DUP	7/17/2024	< 2	< 2	< 2	< 2	< 10	< 10	< 20	0.00059	< 0.00021	< 0.00021 U	0.000059 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	0.000083 J	< 0.01
P-59	P59-ROX-101823	10/18/2023	0.086	< 0.01	0.037	0.031	0.12	< 0.05	0.12	0.00056	< 0.00021	0.00029	< 0.00021 U	< 0.00021	< 0.00021	< 0.00021	< 0.00021	0.000068 J	< 0.01
	P59-ROX-011224	1/12/2024	0.075	< 0.01	0.031	0.032	0.12	< 0.05	0.12	0.00045	< 0.00021	0.00023	0.000075 J	< 0.00021	0.000050 J	0.000037 J	< 0.00021	0.000084 J	< 0.011
	P59-ROX-041924	4/19/2024	0.057	< 0.0050	0.017	0.030	0.11	0.0034 J	0.12	0.00047	< 0.00021	0.00052	0.00012 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	0.00020 J J	< 0.011
	P59-ROX-071524	7/15/2024	0.015	< 0.0050	0.008	0.0069	0.069	< 0.025	0.069	0.00035	< 0.00020	0.00012 J	0.000041 J	< 0.00020	< 0.00020	0.000026 J	< 0.00020	0.000059 J	< 0.0098
P-74	P74-ROX-101723	10/17/2023	0.0086	< 0.0050	< 0.0050	< 0.0050	0.011 J	< 0.025	0.011 J	< 0.00020	0.000075 J	< 0.00020	0.000057 JB	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	P74-ROX-101723-DUP	10/17/2023	0.0091	< 0.0050	< 0.0050	< 0.0050	0.01 J	< 0.025	0.01 J	< 0.00020 H UJ	< 0.00020 H UJ	< 0.00020 H UJ	0.00019 J H J	0.000091 J H J	0.00015 J H J	0.000048 J H J	0.000092 J H J	0.000096 J H J	< 0.0099
	P74-ROX-041824	4/18/2024	0.0013	< 0.0010	< 0.0010	< 0.0010	0.0012 J	< 0.0050	< 0.01	< 0.00022	0.000086 J	0.00011 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022 UJ	< 0.00022	< 0.011 UJ
	P74-ROX-071224	7/12/2024	0.018	< 0.0050	0.0066	< 0.0050	0.071	< 0.025	0.073	< 0.00020	< 0.00020	0.000065 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	P74-ROX-071224-DUP	7/12/2024	0.019	< 0.0050	0.0069	0.0029 J	0.075	< 0.025	0.077	0.00011 J	< 0.00019	0.00011 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
P-93A	P93A-ROX-101823	10/18/2023	< 0.0010	0.00047 J	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
	P93A-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00013 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0094
	P93A-ROX-041824	4/18/2024	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.025	< 0.025	< 0.05	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021 UJ	< 0.00021	< 0.011 UJ
	P93A-ROX-071224	7/12/2024	< 0.2	< 0.2	< 0.2	< 0.2	< 1	< 1	< 2	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

												SVOCs							
			Toluene	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	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine
Screening Values (mg/L)			1.0 [1]	0.005	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]	0.012 [1]	
Location	Sample ID	Sample Date																	
P-93B	P93B-ROX-101923	10/19/2023	< 5	< 5	< 5	< 5	< 25	< 25	< 50	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	P93B-ROX-011224	1/12/2024	< 2.5	< 2.5	< 2.5	< 2.5	< 13	< 13	< 25	< 0.00021	0.00010 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.011
	P93B-ROX-041924	4/19/2024	< 2 UJ	< 2 UJ	< 2 UJ	< 2 UJ	< 10 UJ	< 10 UJ	< 20 UJ	0.00027	0.00018 J	0.000089 J	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021 UJ	< 0.011
	P93B-ROX-071724	7/17/2024	< 1	< 1	< 1	< 1	0.85 J	< 5	< 10	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
P-93C	P93C-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00021	0.00018 J	< 0.00021	< 0.00020 U	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.01
	P93C-ROX-011124	1/11/2024	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 0.5 UJ	< 2.5 UJ	< 2.5 UJ	< 5 UJ	0.00012 J	0.00033	< 0.00021 UJ	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.01
	P93C-ROX-041924	4/19/2024	< 1	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021 UJ	< 0.011
	P93C-ROX-071524	7/15/2024	0.0013	< 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	< 0.00019	< 0.0096
P-93D	P93D-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.01
	P93D-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	0.00016 J	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0095
	P93D-ROX-042224	4/22/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.00020 UJ	< 0.00020 UJ	< 0.00020 UJ	< 0.00020 UJ	< 0.00020 UJ	< 0.01
	P93D-ROX-071224	7/12/2024	< 0.0010	< 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	< 0.00019	< 0.0096
P-114R	P114R-ROX-101823	10/18/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00099	< 0.00020	0.000085 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	P114R-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00076	0.00026	< 0.00020 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0095
	P114R-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00022	0.000064 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.0038 J
	P114R-ROX-071124	7/11/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00018 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
ROST-3-MW	ROST3MW-ROX-100623	10/6/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00011	< 0.00011	< 0.00011	< 0.00011	< 0.00011	0.000024 J	< 0.00011	< 0.00011	< 0.00011	< 0.0057
	ROST3MW-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00014 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.00019	< 0.00019	< 0.0096
	ROST3MW-ROX-041624	4/16/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	ROST3MW-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00012 J	< 0.00019	0.000049 J	< 0.00019	< 0.00019 UJ	< 0.00019 UJ	< 0.00019 UJ	< 0.00019 UJ	< 0.00019	< 0.0097
ROST-4-PZ(C)	ROST4PZ(C)-ROX-101623	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00057	< 0.00019	0.00025	< 0.00019 U	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.0006	< 0.00019	0.00024	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00010 J	< 0.00020	0.00014 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
	ROST4PZ(C)-ROX-041624	4/16/2024	0.0019	< 0.0010	0.0014	< 0.0010	0.0014 J	< 0.0050	0.0016 J	0.00029	< 0.00019	0.00031	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
	ROST4PZ(C)-ROX-041624-DUP	4/16/2024	0.0017	< 0.0010	0.0013	< 0.0010	0.0012 J	< 0.0050	< 0.01	0.00031	< 0.00020	0.00034	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	ROST4PZ(C)-ROX-070924	7/9/2024	0.0042	< 0.0010	0.0015	< 0.0010	0.0055	< 0.0050	0.0060 J	0.00034 J	< 0.00039	0.00028	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
ROST-4-PZ(E)	ROST4PZ(E)-ROX-101323	10/13/2023	< 0.0010	< 0.0010	0.01	< 0.0010	0.0048 J	< 0.0050	0.0053 J	0.00048	< 0.00020	0.00082	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020 U	< 0.0098
	ROST4PZ(E)-ROX-011124	1/11/2024	0.00090 J	< 0.0010	0.01	< 0.0010	0.0054	0.00061 J	0.0060 J	0.00082	< 0.00020	0.0015 J	0.000085 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.00011 J	< 0.01
	ROST4PZ(E)-ROX-041624	4/16/2024	< 0.0010	< 0.0010	0.0024	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00017 J	< 0.00019	0.00024	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0096
	ROST4PZ(E)-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00019	< 0.00019	0.000069 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.0097
ROST-4-PZ(G)	ROST4PZ(G)-ROX-101223	10/12/2023	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	0.000046 JB	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.0010	< 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	< 0.00021	< 0.01
	ROST4PZ(G)-ROX-040524	4/5/2024	< 0.0010	< 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	< 0.00019	< 0.0097
	ROST4PZ(G)-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0016 J	< 0.0050	0.0018 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0099
T-12	T12-ROX-101923	10/19/2023	0.037	< 0.01	< 0.01	< 0.01	0.042 J	< 0.05	0.045 J	0.00029	< 0.00020	0.00014 J	< 0.00020 U	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.0098
	T12-ROX-011124	1/11/2024	0.024	< 0.01	< 0.01	< 0.01	0.031 J	< 0.05	0.034 J	0.00037	< 0.00020	0.00015 J J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.01
	T12-ROX-041924	4/19/2024	0.023	< 0.01	< 0.01	< 0.01	0.017 J	< 0.05	0.017 J	0.0004	< 0.00022	0.00011 J	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022	< 0.00022 UJ	< 0.011
	T12-ROX-071524	7/15/2024	0.22	< 0.01	< 0.01	0.0092 J	0.28	0.016 J	0.30	0.00025	< 0.00020	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 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	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.14 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-01	MW1-ROX-100523	10/5/2023	< 0.00011	< 0.0057	< 0.0057	< 0.0057	< 0.0057	0.000049 J	< 0.00011	< 0.0057	< 0.00011	< 0.00011	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	MW1-ROX-010524	1/5/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW1-ROX-040424	4/4/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	0.000036 J	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 U	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW1-ROX-070524	7/5/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-02	MW2-ROX-101323	10/13/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00099 UJ	< 0.0099	< 0.00020	0.0082	0.015	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW2-ROX-011124	1/11/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.00020	0.0069	0.0091	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW2-ROX-041724	4/17/2024	< 0.00019 UJ	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097 UJ	< 0.00019	0.0055	0.0090 B	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW2-ROX-071124	7/11/2024	< 0.00019 UJ	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	0.0048	0.0067	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW2-ROX-071124-DUP	7/11/2024	< 0.00020 UJ	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	0.0056	0.0078	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
MW-03	MW3-ROX-101223	10/12/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-101223-DUP	10/12/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-010924	1/9/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW3-ROX-010924-DUP	1/9/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW3-ROX-041224	4/12/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-070524	7/5/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-04	MW4-ROX-102023	10/20/2023	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW4-ROX-011724	1/17/2024	< 0.00023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00023	< 0.00023	< 0.011	< 0.00023	< 0.00023	< 0.00023	< 0.011	< 0.023	< 0.011	< 0.023	< 0.00023	< 0.011	< 0.00023
	MW4-ROX-041924	4/19/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.00033	< 0.0004B U	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020 UJ
	MW4-ROX-071224	7/12/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	0.000089 J	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-05	MW5-ROX-101623	10/16/2023	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW5-ROX-010924	1/9/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW5-ROX-041224	4/12/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW5-ROX-070824	7/8/2024	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
MW-06A	MW6A-ROX-101023	10/10/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW6A-ROX-010924	1/9/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	0.000073 J	< 0.00021	< 0.01	0.000043 J	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	0.00011 J	< 0.01	0.000091 J
	MW6A-ROX-041124	4/11/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW6A-ROX-071024	7/10/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 U	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	0.000055 J
MW-06B	MW6B-ROX-101023	10/10/2023	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019 U	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
	MW6B-ROX-010924	1/9/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
	MW6B-ROX-041124	4/11/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW6B-ROX-041124-DUP	4/11/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW6B-ROX-071024	7/10/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	0.00013 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-06C	MW6C-ROX-101023	10/10/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	0.000032 J	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW6C-ROX-010924	1/9/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW6C-ROX-040924	4/9/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW6C-ROX-071024	7/10/2024	< 0.00019 UJ	< 0.0094	< 0.0094	< 0.0094 UJ	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	0.000092 J	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
MW-06D	MW6D-ROX-100923	10/9/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW6D-ROX-010924	1/9/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW6D-ROX-040924	4/9/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	0.00054	0.00099	< 0.0099	< 0.00020	< 0.00079 U	< 0.0011 U	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00097	< 0.0099	0.00049
	MW6D-ROX-071024	7/10/2024	< 0.00021 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW6D-ROX-071024-DUP	7/10/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	0.000098 J	0.00018 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-07	MW7-ROX-102023	10/20/2023	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022 U	< 0.00022	< 0.011	< 0.00022	0.0011	0.0015	< 0.011	0.00055 J	< 0.011	< 0.022	0.00013 J	0.11	< 0.00022
	MW7-ROX-102023-DUP	10/20/2023	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	0.0011	0.0015	< 0.011	0.00045 J	< 0.011	< 0.022	0.00014 J	0.082	< 0.00022
	MW7-ROX-011724	1/17/2024	< 0.00024	< 0.012	< 0.012	< 0.012	< 0.012	< 0.00024	0.00014 J	< 0.012	< 0.00024	0.0013	0.0017	< 0.012	< 0.024	< 0.012	< 0.024	0.00024	0.095	< 0.00024
	MW7-ROX-011724-DUP	1/17/2024	< 0.00023	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00023	0.00016 J	< 0.011	< 0.00023	0.0012	0.0016	< 0.011	< 0.023	< 0.011	< 0.023	0.00024	0.088	< 0.00023
	MW7-ROX-041924	4/19/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	0.00024	< 0.0099	< 0.00020	0.0021	0.0019	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00051	0.045	< 0.00020 UJ
	MW7-ROX-041924-DUP	4/19/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	0.000033 J	0.00026	< 0.0097	< 0.00019	0.0020	0.0020	< 0.0097	< 0.019	< 0.0097	< 0.019	0.00058	0.051	0.000094 J
	MW7-ROX-071524	7/15/2024	< 0.00022 UJ	< 0.011	< 0.011	< 0.011 UJ	< 0.011	< 0.00022	0.00016 J	< 0.011	< 0.00022	0.0014	0.0014	< 0.011	< 0.022	< 0.011	< 0.022	0.00031	0.063	< 0.00022

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	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.14 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-09	MW9-ROX-101623	10/16/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW9-ROX-010524	1/5/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	0.000093 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
	MW9-ROX-041524	4/15/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW9-ROX-070524	7/5/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-10	MW10-ROX-101323	10/13/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	MW10-ROX-010524	1/5/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	< 0.011	< 0.00021
	MW10-ROX-040424	4/4/2024	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019 U	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW10-ROX-070824	7/8/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019 U	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-11	MW11-ROX-100623	10/6/2023	< 0.00012	< 0.0058	< 0.0058	< 0.0058	< 0.0058	< 0.00012	< 0.00012	< 0.0058	< 0.00012	< 0.00012 UJ	< 0.00012 UJ	< 0.0058	< 0.012 UJ	< 0.0058	< 0.012	< 0.00012	< 0.0058 UJ	< 0.00012
	MW11-ROX-010524	1/5/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW11-ROX-040524	4/5/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW11-ROX-070524	7/5/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-12	MW12-ROX-101023	10/10/2023	< 0.00019	< 0.0094	0.00028 J	< 0.0094	0.00049 J	< 0.00019 U	< 0.00019	< 0.0094	0.000073 J	< 0.00019	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
	MW12-ROX-011124	1/11/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	0.000034 J J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW12-ROX-041224	4/12/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW12-ROX-070524	7/5/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097 UJ	< 0.0097	0.000048 J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097 UJ	< 0.00019
MW-13	MW13-ROX-101823	10/18/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099 UJ	< 0.02 UJ	< 0.0099	< 0.02 UJ	< 0.00020	< 0.0099 UJ	< 0.00020
	MW13-ROX-011024	1/10/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW13-ROX-041524	4/15/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW13-ROX-071124	7/11/2024	< 0.00020 UJ	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
MW-14	MW14-ROX-100923	10/9/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	0.0018 J	0.0011 J	< 0.0098	< 0.02	< 0.00020	0.0047 J	< 0.00020
	MW14-ROX-011724	1/17/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW14-ROX-041124	4/11/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW14-ROX-070824	7/8/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-16	MW16-ROX-101823	10/18/2023	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW16-ROX-101823-DUP	10/18/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.00020 U	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW16-ROX-010824	1/8/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW16-ROX-040924	4/9/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01 UJ	< 0.00020
	MW16-ROX-070524	7/5/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
MW-22	MW22-ROX-101623	10/16/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.00014 J	< 0.0098	< 0.00020	0.0037	0.0039	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-011224	1/12/2024	< 0.00020	< 0.0098	< 0.0098	0.01 J	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.012	0.017	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-011224-DUP	1/12/2024	< 0.00019	< 0.0096	< 0.0096	0.011 J	< 0.0096	< 0.00019	0.000090 J	< 0.0096	< 0.00019	0.013	0.018	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW22-ROX-041824	4/18/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00013 J	< 0.011	< 0.00022	0.0076	0.010	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW22-ROX-041824-DUP	4/18/2024	< 0.00021	< 0.01	< 0.01	0.0054 J	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	0.0084	0.011	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	MW22-ROX-071224	7/12/2024	< 0.00022 UJ	< 0.011	< 0.011	< 0.011 UJ	< 0.011	< 0.00022	< 0.00022	0.0070 J	< 0.00022	0.012	0.017	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
MW-23	MW23-ROX-101023	10/10/2023	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 U	< 0.00019	< 0.0095	0.000044 J	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW23-ROX-011124	1/11/2024	< 0.00020	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00020 UJ	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.00020	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00020	< 0.0095	< 0.00020
	MW23-ROX-041524	4/15/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
	MW23-ROX-070824	7/8/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-24	MW24-ROX-101223	10/12/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW24-ROX-010924	1/9/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW24-ROX-040824	4/8/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	< 0.00019 H UJ	< 0.00019 H UJ	< 0.0096	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019 H UJ	< 0.0096	< 0.00019
	MW24-ROX-070924	7/9/2024	< 0.00021 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	0.00012 J	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
MW-25	MW25-ROX-102023	10/20/2023	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW25-ROX-011824	1/18/2024	< 0.00023	< 0.012	< 0.012	< 0.012	< 0.012	< 0.00023	< 0.00023	< 0.012	< 0.00023	< 0.00023	< 0.00023	< 0.012	< 0.023	< 0.012	< 0.023	< 0.00023	< 0.012	< 0.00023
	MW25-ROX-041924	4/19/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020 UJ
	MW25-ROX-071524	7/15/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW25-ROX-071524-DUP	7/15/2024	< 0.00022 UJ	< 0.011	< 0.011	< 0.011 UJ	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022

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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	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.14 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
MW-26	MW26-ROX-100523	10/5/2023	< 0.00011	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	< 0.00011	< 0.00011	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	MW26-ROX-010524	1/5/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099 UJ	< 0.00020
	MW26-ROX-040424	4/4/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW26-ROX-070524	7/5/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-27	MW27-ROX-101823	10/18/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW27-ROX-010824	1/8/2024	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	MW27-ROX-040424	4/4/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020 U	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	MW27-ROX-070824	7/8/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	0.00011 J	< 0.0097	< 0.00019	0.000080 J	< 0.00019 U	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
MW-28	MW28-ROX-101223	10/12/2023	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	MW28-ROX-010524	1/5/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.011	< 0.022	< 0.011	< 0.022	< 0.00022	< 0.011	< 0.00022
	MW28-ROX-041224	4/12/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	MW28-ROX-070824	7/8/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
P-54	P54-ROX-100623	10/6/2023	< 0.00011	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	0.000020 J	< 0.00011 UJ	< 0.00011 UJ	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	P54-ROX-010824	1/8/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	P54-ROX-040824	4/8/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.0096 UJ	< 0.019 UJ	< 0.0096 UJ	< 0.019	< 0.00019	< 0.0096 UJ	< 0.00019
	P54-ROX-070924	7/9/2024	< 0.00019 UJ	< 0.0095	< 0.0095	< 0.0095 UJ	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	0.00011 J	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
P-56	P56-ROX-101823	10/18/2023	< 0.00021	0.00025 J	< 0.01	< 0.01	< 0.01	< 0.00021	0.00023	< 0.01	< 0.00021	0.0032	0.0017	< 0.01	< 0.021	< 0.01	< 0.021	0.00036	< 0.01	< 0.00021
	P56-ROX-011024	1/10/2024	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 UJ	0.00034	< 0.0095	< 0.00019	0.0068	0.0048	< 0.0095	< 0.019	< 0.0095	< 0.019	0.00052	< 0.0095	< 0.00019
	P56-ROX-041824	4/18/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00022	< 0.011	< 0.00022	0.0026	0.00087	< 0.011	< 0.022	< 0.011	< 0.022	0.00029	< 0.011	< 0.00022
	P56-ROX-071024	7/10/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	0.00028	< 0.01	< 0.00020	0.0043	0.0018	< 0.01	< 0.02	< 0.01	< 0.02	0.00043	< 0.01	0.000049 J
P-57	P57-ROX-101723	10/17/2023	< 0.00020	0.00051 J	< 0.0099	< 0.0099	< 0.0099	< 0.00020 U	0.00038	< 0.0099	< 0.00020 U	0.021	0.014	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00033	0.0061 J	< 0.00020
	P57-ROX-011124	1/11/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 UJ	0.00054	< 0.011	< 0.00021	0.027	0.022	< 0.011	< 0.022	< 0.011	< 0.022	0.0004	< 0.011	< 0.00021
	P57-ROX-011124-DUP	1/11/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 UJ	0.00051	< 0.011	< 0.00021	0.025	0.019	< 0.011	< 0.021	< 0.011	< 0.021	0.00037	< 0.011	< 0.00021
	P57-ROX-041824	4/18/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	0.000044 J	0.00042	< 0.011	< 0.00021	0.015	0.0014	< 0.011	< 0.021	< 0.011	< 0.021	0.00025	< 0.011	< 0.00021
	P57-ROX-041824-DUP	4/18/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00036	< 0.011	< 0.00022	0.015	0.0015	< 0.011	< 0.022	< 0.011	< 0.022	0.00019 J	< 0.011	< 0.00022
	P57-ROX-071024	7/10/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	0.00046	< 0.01	< 0.00020	0.022	0.013	< 0.01	< 0.02	< 0.01	< 0.02	0.00042	< 0.01	< 0.00020
P-58	P58-ROX-101723	10/17/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 U	0.001	< 0.0099	< 0.00020 U	0.035	0.025	< 0.0099	< 0.02	0.00044 J	< 0.02	0.00079	0.22	0.00013 J
	P58-ROX-011224	1/12/2024	0.000071 J	< 0.01	< 0.01	< 0.01	< 0.01	0.00020 J	0.0014	< 0.01	0.000073 J	0.058	0.019	< 0.01	< 0.021	< 0.01	< 0.021	0.0021	0.31	0.00088
	P58-ROX-011224-DUP	1/12/2024	0.000087 J	< 0.01	< 0.01	< 0.01	< 0.01	0.00019 J	0.0014	< 0.01	0.000070 J	0.058	0.019	< 0.01	< 0.02	< 0.01	< 0.02	0.0021	0.28	0.00094
	P58-ROX-041724	4/17/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01	< 0.01	0.00016 J	0.0013	< 0.01 UJ	< 0.00020	0.031	0.013 B	< 0.01	< 0.02	< 0.01	< 0.02	0.0011	0.19	0.00045
	P58-ROX-071724	7/17/2024	< 0.00021	< 0.01	< 0.01	< 0.01 UJ	< 0.01	0.000081 J	0.00063 B	< 0.01	< 0.00021	0.039 B	0.015 B	< 0.01	< 0.021	< 0.01	< 0.021	0.0012	0.48	0.00027
	P58-ROX-071724-DUP	7/17/2024	< 0.00021	< 0.01	< 0.01	< 0.01 UJ	< 0.01	0.000056 J	0.00065 B	< 0.01	< 0.00021	0.038 B	0.015 B	< 0.01	< 0.021	< 0.01	< 0.021	0.00096	0.43	0.00016 J
P-59	P59-ROX-101823	10/18/2023	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021 U	0.0004	< 0.01	< 0.00021	0.0098	0.013	< 0.01	< 0.021	< 0.01	0.0088 J*1	0.00065	0.013	0.00043
	P59-ROX-011224	1/12/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	0.00014 J	0.00025	< 0.011	< 0.00021	0.0082	0.011	< 0.011	< 0.021	< 0.011	< 0.021	0.00071	0.017	0.00036
	P59-ROX-041924	4/19/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	0.00037	< 0.011	< 0.00021	0.009	0.012	< 0.011	< 0.021	< 0.011	< 0.021	0.00073	0.0071 J	0.00063
	P59-ROX-071524	7/15/2024	< 0.00020 UJ	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.0098	0.000082 J	0.00014 J	< 0.0098	< 0.00020	0.0081	0.0066	< 0.0098	< 0.02	< 0.0098	< 0.02	0.00022	0.0041 J	0.00021
P-74	P74-ROX-101723	10/17/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.00020 U	0.00043	0.00042	< 0.0098	0.0014 J	< 0.0098	< 0.02	< 0.00020	0.02	< 0.00020
	P74-ROX-101723-DUP	10/17/2023	0.00011 J H J	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020 H UJ	< 0.00020 H UJ	< 0.0099	0.00011 J H J	0.00027 H J	0.00026 H J	< 0.0099	0.0024 J	< 0.0099	< 0.02	< 0.00020 H UJ	0.023	< 0.00020 H UJ
	P74-ROX-041824	4/18/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	0.000085 J	0.00011 J	< 0.011	< 0.00022	0.00020 J	0.00020 J	< 0.011	< 0.022	< 0.011	< 0.022	0.00010 J	< 0.011	0.000063 J
	P74-ROX-071224	7/12/2024	< 0.00020 UJ	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.0016	0.0017	< 0.0098	0.018 J	< 0.0098	< 0.02	0.00041	< 0.0098	0.000061 J
	P74-ROX-071224-DUP	7/12/2024	< 0.00019 UJ	< 0.0097	< 0.0097	< 0.0097 UJ	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	0.0014	0.0015	< 0.0097	0.019	< 0.0097	< 0.019	0.00034	< 0.0097	0.000055 J
P-93A	P93A-ROX-101823	10/18/2023	< 0.00020	< 0.01	0.00034 J	< 0.01	< 0.01	< 0.00020 U	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
	P93A-ROX-011024	1/10/2024	< 0.00019	< 0.0094	< 0.0094	< 0.0094	< 0.0094	< 0.00019 UJ	< 0.00019	< 0.0094	< 0.00019	0.000075 J	< 0.00019	< 0.0094	< 0.019	< 0.0094	< 0.019	< 0.00019	< 0.0094	< 0.00019
	P93A-ROX-041824	4/18/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	0.00022	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.0098 J	< 0.00021
	P93A-ROX-071224	7/12/2024	< 0.00019 UJ	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	0.0011	0.000063 J	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	0.13	< 0.00019

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	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3&4-Methylphenol	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]		0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.14 [3]	0.0032 [2]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]
Location	Sample ID	Sample Date	Analytical Results (mg/L)																	
P-93B	P93B-ROX-101923	10/19/2023	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021 U	< 0.00021	< 0.011	< 0.00021	0.00015 J	0.00014 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.2	< 0.00021
	P93B-ROX-011224	1/12/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	0.00022	0.00017 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.2	< 0.00021
	P93B-ROX-041924	4/19/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	0.000036 J	< 0.00021	< 0.011	< 0.00021	0.00018 J	0.00019 J	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.17	< 0.00021 UJ
	P93B-ROX-071724	7/17/2024	< 0.00019	< 0.0095	< 0.0095	< 0.0095 UJ	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00095 UJ	< 0.00095 UJ	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	0.15	< 0.00019
P-93C	P93C-ROX-101623	10/16/2023	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	P93C-ROX-011124	1/11/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021 UJ	< 0.00021	< 0.01	< 0.00021	< 0.00021	0.000095 J	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	0.063	< 0.00021
	P93C-ROX-041924	4/19/2024	< 0.00021	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.011	< 0.021	< 0.011	< 0.021	< 0.00021	0.059	< 0.00021 UJ
	P93C-ROX-071524	7/15/2024	< 0.00019 UJ	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	0.000070 J	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	0.024	< 0.00019
P-93D	P93D-ROX-101623	10/16/2023	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020 U	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	0.000043 J
	P93D-ROX-011024	1/10/2024	< 0.00019	< 0.0095	< 0.0095	< 0.0095	< 0.0095	< 0.00019 UJ	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00019	< 0.0095	< 0.00019
	P93D-ROX-042224	4/22/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	0.000086 J	0.000094 J	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020 UJ
	P93D-ROX-071224	7/12/2024	< 0.00019 UJ	< 0.0096	< 0.0096	< 0.0096 UJ	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.0096	< 0.019	< 0.0096	< 0.019	< 0.00019	< 0.0096	< 0.00019
P-114R	P114R-ROX-101823	10/18/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	< 0.00020	< 0.0098	< 0.00020	0.00025	< 0.00020	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	P114R-ROX-011024	1/10/2024	< 0.00020	< 0.0095	< 0.0095	< 0.0095	< 0.0095	0.000065 J J	< 0.00020	< 0.0095	< 0.00020	0.00022	< 0.00020	< 0.0095	< 0.019	< 0.0095	< 0.019	< 0.00020	< 0.0095	< 0.00020
	P114R-ROX-041524	4/15/2024	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	P114R-ROX-071124	7/11/2024	< 0.00020 UJ	< 0.01	< 0.01	< 0.01 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	< 0.00020
ROST-3-MW	ROST3MW-ROX-100623	10/6/2023	< 0.00011	< 0.0057	< 0.0057	< 0.0057	< 0.0057	< 0.00011	< 0.00011	< 0.0057	< 0.00011	0.000072 J	< 0.00011	< 0.0057	< 0.011 UJ	< 0.0057	< 0.011	< 0.00011	< 0.0057 UJ	< 0.00011
	ROST3MW-ROX-010824	1/8/2024	< 0.00019	< 0.0096 UJ	< 0.0096 UJ	< 0.0096	< 0.0096 UJ	< 0.00019	0.00015 J	< 0.0096 UJ	< 0.00019	0.00029 J	< 0.00019 UJ	< 0.0096 UJ	< 0.019 UJ	< 0.0096 UJ	< 0.019 UJ	0.000087 J	< 0.0096 UJ	< 0.00019
	ROST3MW-ROX-041624	4/16/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.00013 J	< 0.0098	< 0.00020	0.000080 J	< 0.00020 U	< 0.0098	< 0.02	< 0.0098	< 0.02	< 0.00020	< 0.0098	< 0.00020
	ROST3MW-ROX-070924	7/9/2024	< 0.00019 UJ	< 0.0097	< 0.0097	< 0.0097 UJ	< 0.0097	< 0.00019	0.00010 J	< 0.0097	< 0.00019 UJ	0.00012 J	0.00016 J	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
ROST-4-PZ(C)	ROST4PZ(C)-ROX-101623	10/16/2023	< 0.00019	0.00054 J	< 0.0097	< 0.0097	< 0.0097	0.000066 JB	0.00057	< 0.0097	< 0.00019	0.0081	0.00018 J	< 0.0097	< 0.019	< 0.0097	< 0.019	0.0010	< 0.0097	< 0.00019
	ROST4PZ(C)-ROX-101623-DUP	10/16/2023	< 0.00019	0.00060 J	< 0.0096	< 0.0096	< 0.0096	< 0.00019	0.00061	< 0.0096	< 0.00019	0.0094	0.00028	< 0.0096	< 0.019	< 0.0096	< 0.019	0.0012	< 0.0096	< 0.00019
	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00020	0.00017 J	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.01	< 0.02	< 0.01	< 0.02	< 0.00020	< 0.01	0.000057 J
	ROST4PZ(C)-ROX-041624	4/16/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	0.000042 J	0.00036	< 0.0097	< 0.00019	0.0021	< 0.00019 U	< 0.0097	< 0.019	< 0.0097	< 0.019	0.00010 J	< 0.0097	0.000039 J
	ROST4PZ(C)-ROX-041624-DUP	4/16/2024	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	0.000051 J	0.00036	< 0.0098	< 0.00020	0.0023	< 0.00020 U	< 0.0098	< 0.02	< 0.0098	< 0.02	0.00013 J	< 0.0098	0.000046 J
	ROST4PZ(C)-ROX-070924	7/9/2024	< 0.00020 UJ	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.0099	< 0.00020	0.00027 J	< 0.0099	< 0.00020	0.0051	0.00035	< 0.0099	< 0.02	< 0.0099	< 0.02	0.00022	< 0.0099	0.000070 J
ROST-4-PZ(E)	ROST4PZ(E)-ROX-101323	10/13/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020	0.00059 B	< 0.0098	< 0.00020	0.0079	0.0032	< 0.0098	< 0.02	< 0.0098	< 0.02	0.0042	< 0.0098	0.00013 J
	ROST4PZ(E)-ROX-011124	1/11/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	0.00037	0.00064	< 0.01	< 0.00020	0.0092	0.0026	< 0.01	< 0.02	< 0.01	< 0.02	0.0047	< 0.01	0.00049
	ROST4PZ(E)-ROX-041624	4/16/2024	< 0.00019	< 0.0096	< 0.0096	< 0.0096	< 0.0096	0.000054 J	0.00021	< 0.0096	< 0.00019	0.0019	0.00082 B	< 0.0096	< 0.019	< 0.0096	< 0.019	0.00074	< 0.0096	0.000084 J
	ROST4PZ(E)-ROX-071024	7/10/2024	< 0.00019 UJ	< 0.0097	< 0.0097	< 0.0097 UJ	< 0.0097	0.000037 J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	0.000072 J
ROST-4-PZ(G)	ROST4PZ(G)-ROX-101223	10/12/2023	< 0.00020	< 0.0099	< 0.0099	< 0.0099	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.00021	< 0.01	< 0.01	< 0.01	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.01	< 0.021	< 0.01	< 0.021	< 0.00021	< 0.01	< 0.00021
	ROST4PZ(G)-ROX-040524	4/5/2024	< 0.00019	< 0.0097	< 0.0097	< 0.0097	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.0097	< 0.019	< 0.0097	< 0.019	< 0.00019	< 0.0097	< 0.00019
	ROST4PZ(G)-ROX-070924	7/9/2024	< 0.00020 UJ	< 0.0099	< 0.0099	< 0.0099 UJ	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	0.00015 J	0.00021	< 0.0099	< 0.02	< 0.0099	< 0.02	< 0.00020	< 0.0099	< 0.00020
T-12	T12-ROX-101923	10/19/2023	< 0.00020	< 0.0098	< 0.0098	< 0.0098	< 0.0098	< 0.00020 U	0.00029	< 0.0098	< 0.00020	0.016	0.022	< 0.0098	0.00065 J	< 0.0098	< 0.02	0.0005	0.049	< 0.00020
	T12-ROX-011124	1/11/2024	< 0.00020	< 0.01	< 0.01	< 0.01	< 0.01	0.000037 J J	0.00028	< 0.01	< 0.00020	0.016	0.024	< 0.01	< 0.021	< 0.01	< 0.021	0.00052	0.030	0.000039 J
	T12-ROX-041924	4/19/2024	< 0.00022	< 0.011	< 0.011	< 0.011	< 0.011	< 0.00022	0.00035	< 0.011	< 0.00022	0.016	0.023	< 0.011	< 0.022	< 0.011	< 0.022	0.00054	0.032	< 0.00022 UJ
	T12-ROX-071524	7/15/2024	< 0.00020 UJ	< 0.0098	< 0.0098	< 0.0098 UJ	< 0.0098	< 0.00020	0.0002	< 0.0098	< 0.00020	0.012	0.018	< 0.0098	< 0.02	< 0.0098	< 0.02	0.00044	0.022	< 0.00020

Notes:

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

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

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

Groundwater monitoring wells designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-66, and P-68, contained LNAPL; therefore, these wells were not sampled.

Well P-74 was inaccessible during the 1Q24 quarterly sampling event due to construction activities in the WRR.

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

Indicates a historical exceedance of screening criteria.

Indicates a current exceedance of screening criteria.

Empty shaded cell without a value indicates previous quarter analyte result was rejected or the analyte was not analyzed.

-- Empty cell without a value indicates current quarter analyte result was rejected or the analyte was not analyzed.

LABORATORY QUALIFIERS

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

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

H = Analyzed or extracted out of holding time criteria.

F1 = Indicates MS/MSD is outside acceptance limit.

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

*1 = LCS/LCSD RPD is outside contol limit

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

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

AECOM QUALIFIERS

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Figures

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

MVS Descriptions and Assumptions:

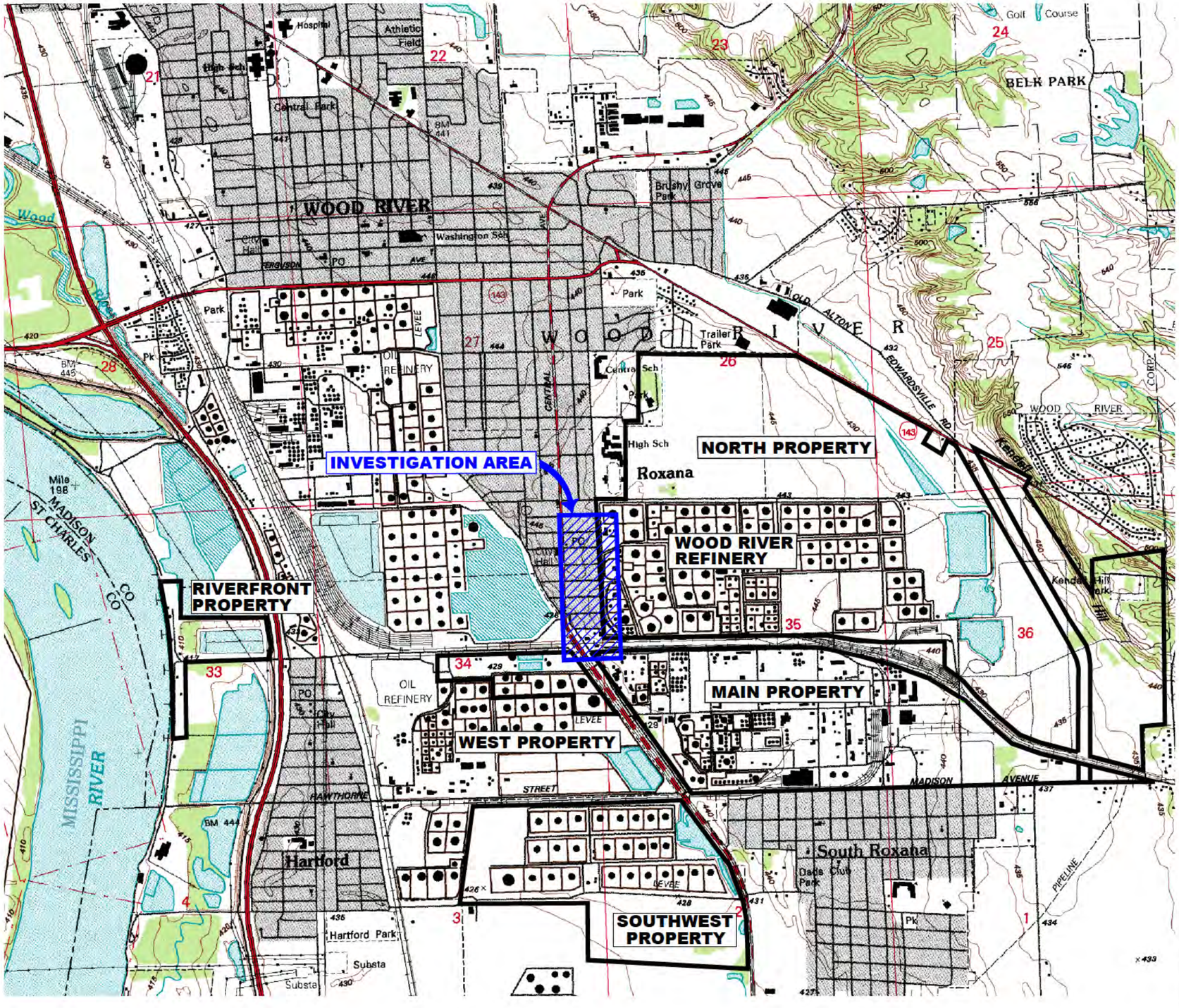
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

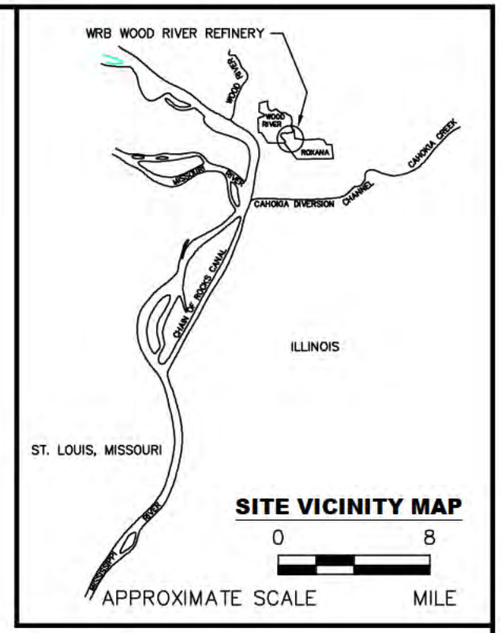
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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

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

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





LEGEND

WOOD RIVER REFINERY PROPERTY BOUNDARY

INVESTIGATION AREA

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

0 2000

APPROXIMATE SCALE FEET

N

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

PROJECT NO. 60721927

AECOM

DRN. BY:gds October 2024
DSGN. BY:mar
CHKD. BY:wmp

Investigation Area Location Map

FIG. NO. 1

File: C:\USERS\LURKEY\ADOWS\DS SERVICES - DS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\60666--ROO_S_CENTRAL_AVE--ROXANA--IL\ROXANA 2024.dwt (WPT\WORKSPACE\FIGURE 1 INVESTIGATION AREA LOCATION MAP.DWG Last edited: 09/17/24 ● 8:36 AM ● 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 3Q24 GW RPT\WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Sep. 17, 24 @ 8:38 AM 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) *
P-60
ROST-4-PZ(F)
P-68 *
ROST-4-PZ(G) *
P-60-13
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
P-69
MW-18
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 *
MW-26 *
MW-21
T-6
P-57 *
MW-4 *
MW-3 *
P-93A *
P-93B *
P-93C *
P-93D *
MW-25 *
MW-5 *
MW-7 *
MW-23 *
MW-8
P-58 *
P-66 *
P-75
MW-13 *
MW-6A
MW-6B *
MW-6C *
MW-6D *
MW-14 *
P-114R *
P-73

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

0 200
SCALE FEET
N

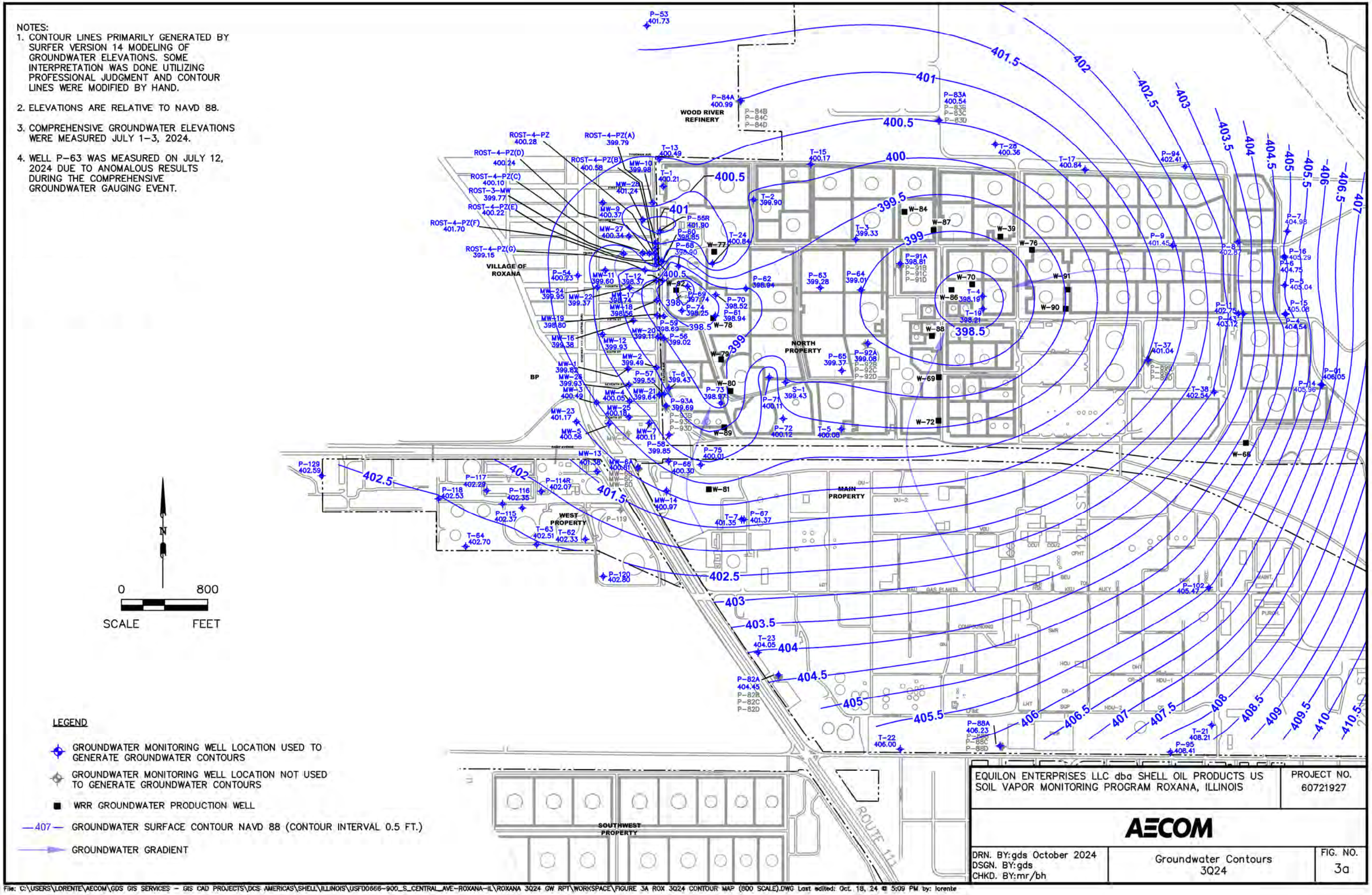
EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds October 2024 DSGN. BY:mr CHKD. BY:wmp	Roxana Interim Groundwater Monitoring Well Locations	FIG. NO. 2

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

2. ELEVATIONS ARE RELATIVE TO NAVD 88.

3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JULY 1–3, 2024.

4. WELL P–63 WAS MEASURED ON JULY 12, 2024 DUE TO ANOMALOUS RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.



LEGEND

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

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US SOIL VAPOR MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds October 2024 DSGN. BY:gds CHKD. BY:mr/bh	Groundwater Contours 3Q24	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 3Q24 GW RPT\WORKSPACE\FIGURE 3A ROX 3Q24 CONTOUR MAP (800 SCALE).DWG Last edited: Oct. 18, 24 @ 5:09 PM by: lorente

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LEGEND

GROUNDWATER MONITORING WELL LOCATION USED TO GENERATE GROUNDWATER CONTOURS

GROUNDWATER MONITORING WELL LOCATION NOT USED TO GENERATE GROUNDWATER CONTOURS

WRR GROUNDWATER PRODUCTION WELL

400 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 1–3, 2024.

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

T-13 400.49
T-1 400.21
T-2 399.90
T-24 400.84
T-12 398.37
T-64 402.70
T-63 402.51
T-62 402.33
T-7 401.35
T-6 399.43
MW-10 399.98
MW-9 400.37
MW-28 401.24
MW-27 400.34
MW-24 399.95
MW-22 399.37
MW-18 398.56
MW-19 398.80
MW-16 399.38
MW-12 399.93
MW-20 399.11
MW-1 399.82
MW-2 399.49
MW-26 399.93
MW-4 400.05
MW-21 399.64
MW-3 400.49
MW-25 400.18
MW-5 400.56
MW-7 400.11
MW-8
MW-23 401.17
MW-11 399.60
MW-17 398.74
MW-13 401.38
MW-6A 400.81
MW-6B
MW-6D
MW-14 400.97
ROST-4-PZ(A) 399.79
ROST-4-PZ(B) 400.58
ROST-4-PZ(D) 400.24
ROST-4-PZ(C) 400.10
ROST-3-MW 399.77
ROST-4-PZ(E) 400.22
ROST-4-PZ(F) 401.70
ROST-4-PZ(G) 399.15
ROST-4-PZ 400.28
P-55R 401.90
P-60 398.85
P-68 398.90
P-69 397.74
P-70 398.52
P-74 398.25
P-59 398.69
P-56 399.02
P-57 399.55
P-58 399.85
P-93A 399.69
P-93B
P-93C
P-93D
P-54 400.23
P-62 398.94
P-61 398.44
P-71 400.11
P-73 398.97
P-72 400.12
P-66 400.30
P-75 400.01
P-67 401.37
P-117 402.29
P-114R 402.07
P-116 402.35
P-115 402.37
P-119
PZ-1(104)
PZ-1(85)
PZ-2(84)
PZ-2(70.5)
OPS-PZ
W-77
W-92
W-78
W-79
W-80
W-89
W-81
A-32
A-31
A-34
A-57
A-33
A-37
A-35
A-27
A-16
A-2
A-147
F-76
F-77
F-78
F-73
F-74
F-75

400.5
401
400.5
400
399.5
398
398.5
399
399.5
400
401
400.5
402
401.5
402.5
402.5

0 300
SCALE FEET
N

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

File: C:\USERS\LORENTE\AECOM\BDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00885-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q24 GW RPT\WORKSPACE\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE) 3Q24.DWG Last edited: Sep. 17, 24 @ 9:14 AM 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 1-3, 2024.

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

P-84A P-84B P-84C P-84D
T-13 T-1 T-2 T-12 T-24 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-29 A-30 A-22
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-55R 0.01 0.05
P-60 P-68 0.1 0.17 P-69 P-74 P-59 P-56 P-54 P-57 P-58 P-73 P-93A P-93B P-93C P-93D P-72 P-71 P-75 P-66 0.1 0.55 P-67
R-77 W-77 0.01 T-24 0.07
W-92 1.0 P-62 1.03 P-70 1.32* P-61 2.35
R-78 W-78
W-79 L-79
R-80 W-80
R-89 W-89
R-81 W-81
S-1 0.01 0.02
P-117 P-114R P-116 P-115 P-119
F-50 F-76 F-77 F-78 F-73 F-74 F-75

0 300
SCALE FEET
N

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

PROJECT NO. 60721927

AECOM

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

3Q24 Thickness of LNAPL – West Fenceline

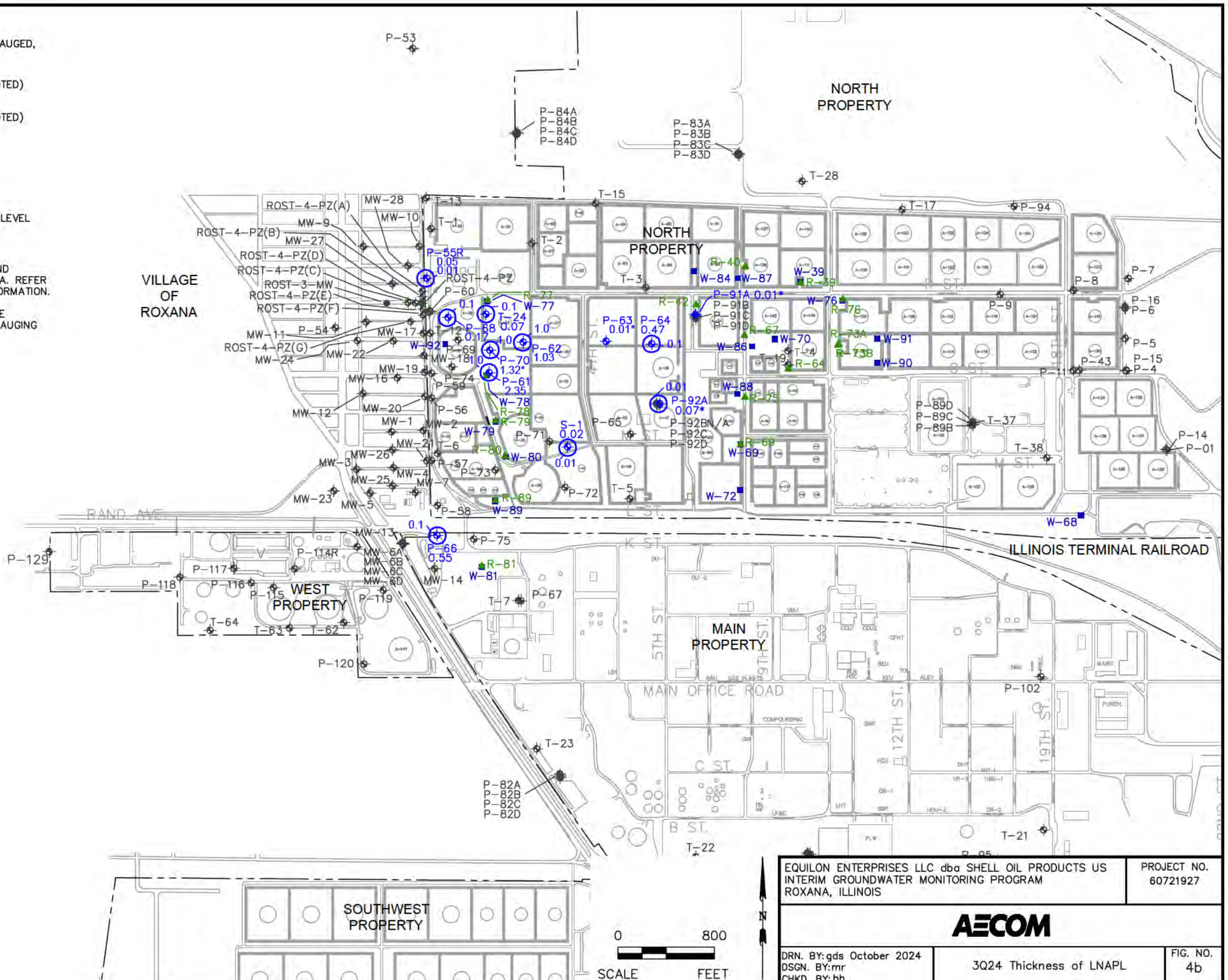
FIG. NO. 4a

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 1-3, 2024.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY: gds October 2024 DSGN. BY: mr CHKD. BY: bh	3Q24 Thickness of LNAPL
	FIG. NO. 4b

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00668-P00_5 CENTRAL AVE-ROXANA-IL\ROXANA 3Q24 GW RPT\WORKSPACE\FIGURE 5 3Q24 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Oct. 17, 24 @ 12:34 PM by: lorente

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

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

Analyte	Screening Criteria (mg/L)
Benzene	0.005
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
Phenol	0.1

3. MULTIPLE RESULTS (e.g., 0.0067 / 0.0072) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
4. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
5. WELLS P-55R, P-66 AND P-68 WERE NOT SAMPLED DURING 3Q24 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 ROST-4-PZ(D) THIRD ST ROST-3-MW 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 HIGHWAY 111 (S. CENTRAL AVE) MW-18 MW-19 FIFTH ST MW-16 VILLAGE OF ROXANA MW-12 MW-20 P-56 P-59 P-74 P-61 MW-1 MW-2 CHAFFER AVE SEVENTH ST MW-26 MW-21 T-6 P-57 P-93A P-93B P-93C P-93D MW-4 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 WEST PROPERTY MW-13 MW-6A MW-6B MW-6C MW-6D MAIN PROPERTY MW-14 P-114R NORTH PROPERTY A-34 P-68 A-28 T-24 P-69 A-27 P-70 WOOD RIVER REFINERY F-78 A-22 P-73 2ND STREET 1ST STREET

Sample Location	T-12
Sampled 7/15/2024	Result (mg/L)
Benzene	1.9

Sample Location	MW-22
Sampled 7/12/2024	Result (mg/L)
Benzene	0.044
1,2,4-Trimethylbenzene	0.11
1,3,5-Trimethylbenzene	0.074

Sample Location	P-59
Sampled 7/15/2024	Result (mg/L)
Benzene	0.19

Sample Location	P-74
Sampled 7/12/2024	Result (mg/L)
Benzene	0.91 / 0.93

Sample Location	P-93A	P-93B	P-93C
Sampled 7/12, 7/17, 7/15/2024	Result (mg/L)	Result (mg/L)	Result (mg/L)
Benzene	29	990	13
Phenol	0.13	0.15	

Sample Location	P-57
Sampled 7/9/2024	Result (mg/L)
Benzene	0.0062

Sample Location	MW-7
Sampled 7/15/2024	Result (mg/L)
Benzene	900

Sample Location	MW-25
Sampled 7/15/2024	Result (mg/L)
Benzene	0.0067 / 0.0072

Sample Location	P-58
Sampled 7/17/2024	Result (mg/L)
Benzene	340 / 300
Phenol	0.48 / 0.43

0 200 SCALE FEET N

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

PROJECT NO. 60721927

AECOM

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

3Q24 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00868-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 3Q24 GW RPT\WORKSPACE\FIGURE 6 3Q24 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Sep. 25, 24 @ 12:44 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. 0.0067 / 0.0072) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE 3Q24 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
MAIN PROPERTY
WEST PROPERTY
WOOD RIVER REFINERY
PUBLIC WORKS YARD
BP

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) 0.0011 ROST-4-PZ(D) ROST-4-PZ(E) <0.001 ROST-4-PZ(F) ROST-4-PZ(G) 0.0012 J ROST-3-MW <0.001 MW-11 <0.001 MW-22 0.044 MW-17 MW-18 MW-19 MW-16 <0.001 MW-20 PZ-2(84) PZ-2(70.5) MW-12 <0.001 MW-01 <0.001 MW-2 <0.001 / <0.001 MW-26 <0.001 MW-21 MW-3 <0.001 MW-4 <0.001 MW-25 0.0067 / 0.0072 MW-5 <0.001 MW-7 900 MW-8 MW-23 <0.001 MW-13 <0.001 MW-6A <0.001 MW-6B <0.001 MW-6C <0.001 MW-6D <0.001/<0.001 MW-14 <0.001 P-54 <0.001 MW-24 <0.001 P-55R 0.05 0.01 P-60-11 P-60-S P-60 P-60-12 P-60-13 P-66 0.17 0.1 T-12 1.9 P-69 W-92 P-74 0.91 / 0.93 P-59 0.19 P-56 <0.001 P-57 0.0062 P-93A 29 P-93B 990 P-93C 13 P-93D <0.001 P-58 340 / 300 P-66 0.55 0.1 P-114R <0.001 P-115 P-70 P-73 P-75 R-77 W-77 T-24 0.07 0.01 R-78 W-78 P-61 2.35 1.0 R-79 W-79 R-80 W-80 R-89 W-89 R-81 W-81 A-34 A-28 A-33 A-27 A-22 F-76 F-77 F-78 F-73 F-74 F-75 0.005 0.05 0.5 5 50 500

0 200 SCALE FEET N

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

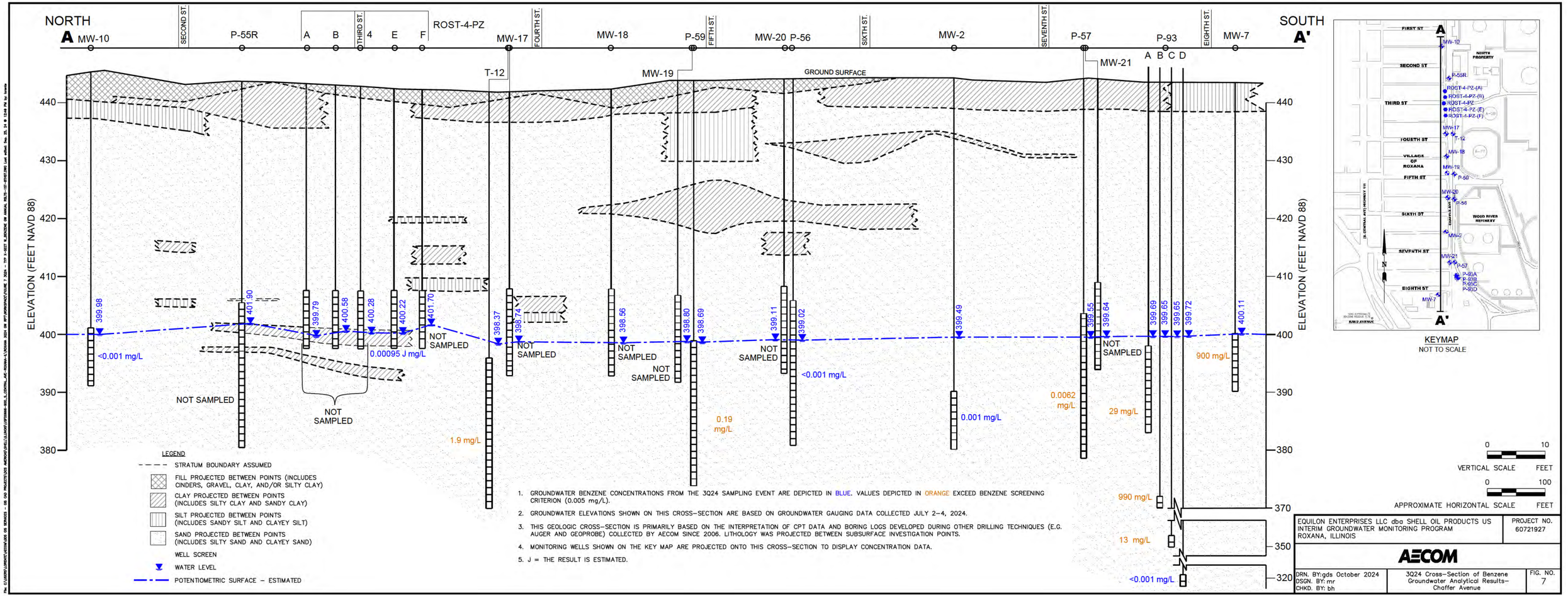
PROJECT NO. 60721927

AECOM

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

3Q24 Dissolved Phase Benzene Concentrations in Groundwater

FIG. NO. 6



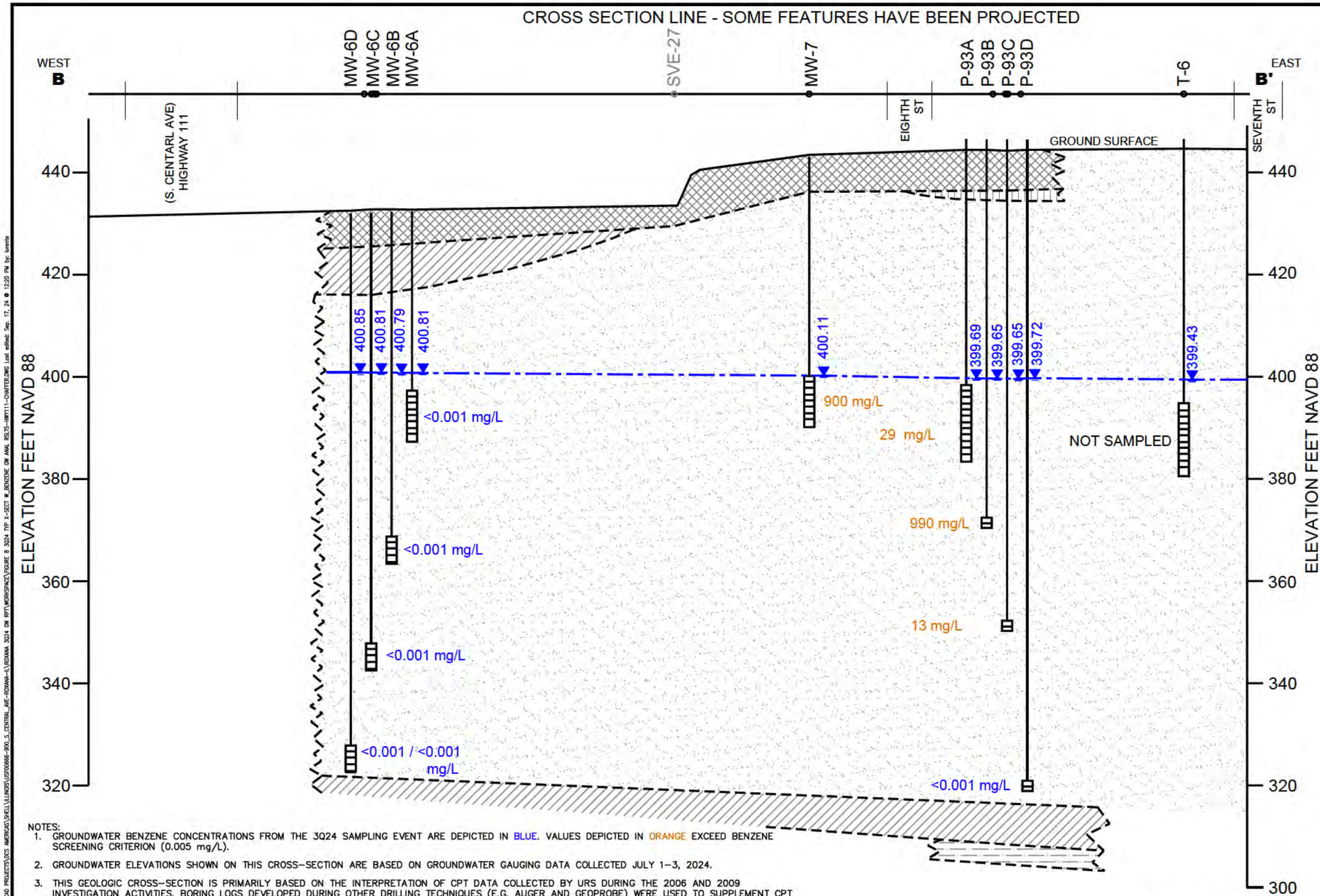
1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q24 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JULY 2–4, 2024.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA AND BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) COLLECTED BY AECOM SINCE 2006. LITHOLOGY WAS PROJECTED BETWEEN SUBSURFACE INVESTIGATION POINTS.
4. MONITORING WELLS SHOWN ON THE KEY MAP ARE PROJECTED ONTO THIS CROSS-SECTION TO DISPLAY CONCENTRATION DATA.
5. J = THE RESULT IS ESTIMATED.

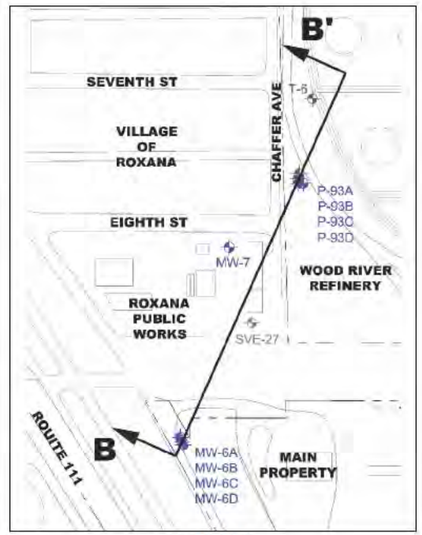
KEYMAP
NOT TO SCALE

0 10
VERTICAL SCALE FEET

0 100
APPROXIMATE HORIZONTAL SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY: gds October 2024 DSGN. BY: mr CHKD. BY: bh	3Q24 Cross-Section of Benzene Groundwater Analytical Results–Chaffer Avenue
	FIG. NO. 7


CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED



KEYMAP
NOT TO SCALE

LEGEND

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

0 20
VERTICAL SCALE FEET

0 100
HORIZONTAL SCALE FEET

NOTES:

1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 3Q24 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 1-3, 2024.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA COLLECTED BY URS DURING THE 2006 AND 2009 INVESTIGATION ACTIVITIES. BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) WERE USED TO SUPPLEMENT CPT DATA.
4. THE DEPTH AND THICKNESS OF INDIVIDUAL STRATA DEPICTED MAY BE BASED ON CPT LOGS GENERATED AT NEARBY LOCATIONS. THEREFORE, WELL SCREENS MAY APPEAR TO BE PARTIALLY WITHIN CLAY LAYERS OR SHALLOWER/DEEPER WITHIN A PERMEABLE STRATUM THAN ACTUAL CONDITIONS DUE TO MAP PROJECTIONS.
5. LITHOLOGICAL INFORMATION FROM SVE-27 WAS OBTAINED FROM BORING LOG TO SUPPLEMENT SITE GEOLOGY ONLY.
6. HISTORIC BORING LOG IS NOT AVAILABLE FOR T-6.
7. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g. <0.001 mg/L).
8. MULTIPLE RESULTS (<0.001 / <0.001) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927

AECOM

DRN. BY:gds October 2024 DSGN. BY:mr CHKD. BY:bh	3Q24 Cross-Section of Benzene Groundwater Analytical Results– Roxana Public Works Yard	FIG. NO. 8

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 (CA-67) 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 (CA-38 and -41) 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 (CA-63) (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). On March 11, 2024 a replacement RCRA form with wet signatures was submitted to IEPA (AECOM, 2024c). A response to this July 27, 2016 letter is pending as of the date of this report.

In a July 18, 2013 letter (CA-33, -45, and -48) 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 (CA-47) 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 (CA-70) 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 (CA-83) 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 (CA-85 and -90) dated February 23, 2016 (IEPA, 2016c), IEPA agreed with this determination and

required a Groundwater Management Zone (GMZ) proposal be submitted within 90 days. The GMZ proposal was submitted by AECOM, on behalf of SOPUS, on May 19, 2016 (AECOM, 2016b). IEPA provided comments via email in October 2017; AECOM responded to IEPA comments on January 2, 2018 (AECOM, 2018a). Meetings with SOPUS, AECOM, and IEPA representatives were held on April 5, 2018 and July 19, 2018 in order to provide additional information regarding the proposed GMZ. On September 26, 2018, AECOM, on behalf of SOPUS, submitted *Groundwater Management Zone – Additional Information* to present information requested via email dated September 5, 2018 (AECOM, 2018b). On 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). A response to the proposed GMZ is still pending as of the date of this report.

In a letter (CA-37 and -58) 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 response to this letter is still pending as of the date of this report.

On August 22, 2022, IEPA approved with conditions the Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan (CA-107) (IEPA, 2022). The PWY SEE Workplan was submitted to IEPA on January 31, 2022 (AECOM, 2022a), 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.

Condition 2 of IEPA's August 22, 2022 letter (CA-107) 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) (IEPA, 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 (AECOM, 2022b).

On December 16, 2022, AECOM, on behalf of Shell, submitted the Roxana PWY SEE – FDRCWP (AECOM, 2022c) 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 (CA-107).

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, 2023a) 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, 2022c). 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 (AECOM, 2023b). This was submitted after receipt of IEPA's July 11, 2022 contained-in concurrence letter (IEPA, 2022X). On March 2, 2022, AECOM, on behalf of Shell, submitted the Contained-In Determination Request Form (AECOM, 2022X) to IEPA that was inadvertently left out of the Contained-In Determination submitted February 21, 2022 (AECOM, 2022X). 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 (AECOM, 2023c).

On April 4, 2023, IEPA approved with conditions the FPWY Construction and Operation of Steam Enhanced Extraction Pretreatment System permit (IEPA, 2023a). 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 (CA-109) (IEPA, 2023b).

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" (IEPA, 2023c). 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 3, 2023, AECOM, on behalf of Shell, submitted a response (AECOM, 2023d) 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 11, 2023, AECOM on behalf of Shell, submitted a Class 1* Permit Modification (AECOM, 2023e) 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.

On November 8, 2023, IEPA issued a Violation Notice (VN L-2023-00369), in response to the triennial site inspection performed in July 2023. The alleged violations included in this violation notice were related to monitoring well labels and construction. A meeting was held between AECOM, Shell and IEPA on January 4, 2024. A request for extension to submit a response to the Violation Notice was submitted to IEPA on January 15, 2024, and was approved by IEPA

in an email dated January 24, 2024. AECOM, on behalf of Shell, submitted a Response to Violation Notice L-2023-00370 on February 16, 2024. IEPA issued a Proposed Compliance Commitment Agreement, which was dated March 21, 2024, and received by AECOM on March 25, 2024.

On January 26,2024, IEPA approved with conditions the Response to 5/5/2023 Illinois EPA Letter as well as two Additional Information submittals related to the FPWY SEE FDRCWP (CA-113, -114, and -115) (IEPA, 2024a).

On February 23, 2024, AECOM, on behalf of Shell, submitted a response to the IEPA letter dated 1/26/2024 (AECOM, 2024a). On March 14, 2024, a virtual meeting was held between IEPA, Shell and AECOM to provide an update on the SEE prior to startup and facilitate an open forum for any questions.

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

On April 9, 2024, IEPA approved the July 6, 2023 Request to Change Due Dates of Roxana Interim Groundwater Monitoring Reports, extending due dates by approximately two weeks (CA-112) (IEPA, 2024b).

On April 22, 2024, IEPA approved with conditions the Response to 1/26/2023 IEPA letter dated February 23, 2024 as well as another submittal *Former Public Works Yard Steam Enhanced Extraction – Pre-SEE Additional Sampling Results* dated March 4, 2024 (CA-116 and -117) (IEPA, 2024c).

Historical 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, 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.

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

AECOM, 2023 (AECOM, 2023b); *Application for Water Pollution Control Permit – Wastewater Pretreatment System.* Prepared for Shell Oil Products US (Shell), dated January 30, 2023.

AECOM, 2023 (AECOM, 2023c); *Former Public Works Yard Class V Injection Well Inventory Form.* Prepared for Shell Oil Products US (Shell), dated February 23, 2023.

AECOM, 2023 (AECOM, 2023d); *Response to May 5, 2023 IEPA FPWY SEE Letter*. Prepared for Shell Oil Products US (Shell), dated August 3, 2023.

AECOM, 2023 (AECOM, 2023e); *Class 1* Permit Modification – Further Discussion of W-85 Notification Timeline; W-85 Removal; Proposal for New Well (W-92).* Prepared for Shell Oil Products US (Shell), dated August 11, 2023.

AECOM, 2024 (AECOM, 2024a); *Response to January 26, 2024 IEPA FPWY SEE Letter.* Prepared for Shell Oil Products US (Shell), dated February 23, 2024.

AECOM, 2024 (AECOM, 2024b); *FPWY Pre-SEE Additional Sampling Results.* Prepared for Shell Oil Products US (Shell), dated March 4, 2024.

AECOM, 2024 (AECOM, 2024c); *Response to IEPA Letter dated July 27, 2016 – Groundwater Conditions near East 3rd and Chaffer Streets.* Prepared for Shell Oil Products US (Shell), dated March 11, 2024.

Illinois Environmental Protection Agency, 2010 (IEPA, 2010b); *Hazardous Waste Management RCRA Post-Closure Permit.* Issued to Shell Oil Products US (Shell) at the WRB Refining LP Wood River Refinery (WRB WRR), issued September 23, 2010; effective October 28, 2010; modified April 2, 2013; modified June 13, 2014; modified November 25, 2014; modified July 29, 2015; modified December 20, 2019; modified March 28, 2022; modified October 31, 2022.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Illinois Environmental Protection Agency, 2022 (IEPA, 2022); *Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan Approval with Conditions*. Issued to Shell Oil Products US (Shell), dated August 22, 2022.

Illinois Environmental Protection Agency, 2023 (IEPA, 2023a); *Water Pollution Control Permit.* Issued to Shell Oil Products US (Shell) at the Village of Roxana Wastewater Treatment Plant, issued April 4, 2023; expires February 23, 2028.

Illinois Environmental Protection Agency, 2023 (IEPA, 2023b); *Approval with Conditions of Old Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Final Design Report & Construction Work Plan.* Issued to Shell Oil Products US (Shell), dated May 5, 2023.

Illinois Environmental Protection Agency, 2023 (IEPA, 2023c); *Response to Part B Permit W-85 Outage Notice.* Issued to Shell Oil Products US (Shell), dated August 1, 2023.

Illinois Environmental Protection Agency, 2024 (IEPA, 2024a); *Approval with Conditions of Three Recent FPWY SEE Submittals.* Issued to Shell Oil Products US (Shell), dated January 26, 2024.

Illinois Environmental Protection Agency, 2024 (IEPA, 2024b); *Approval of Request to Change Due Dates of Roxana Interim Groundwater Monitoring Reports.* Issued to Shell Oil Products US (Shell), dated April 9, 2024.

Illinois Environmental Protection Agency, 2024 (IEPA, 2024c); *Approval with Conditions of Two Recent FPWY SEE Submittals*. Issued to Shell Oil Products US (Shell), dated April 22, 2024.

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

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

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

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

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

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

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDaniel, E.Chalfant

DATE: 07-05-24 **WEATHER:** partly cloudy, 93°F

MONITORING WELL ID: MW-1 **SAMPLE ID:** MW1-ROX-070524

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.90 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 59.13 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.96 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 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): 16.15 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1335	42.96	clear	none	21.5	0.91	1.132 (mS/cm) uS/cm	6.86	-12.55	15.33
300	1336	42.96	↓	↓	21.4	0.87	1.133 (mS/cm) uS/cm	6.86	-31.31	11.33
600	1337	42.96			21.5	0.83	1.131 (mS/cm) uS/cm	6.86	-45.15	7.30
900	1338	42.98			21.6	0.81	1.131 (mS/cm) uS/cm	6.87	-53.08	9.63
1200	1339	42.98			21.9	0.79	1.132 (mS/cm) uS/cm	6.86	-58.52	10.28
1500	1340	↓			22.0	0.76	1.133 (mS/cm) uS/cm	6.87	-63.37	11.11
							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			

CM Daniel 07-05-24

Start Time: 13:35 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS - 23011/210771

Stop Time: 13:40 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-03-24

SAMPLING DATA

Sample Date: 07-05-24 **Sample Time:** 13:45 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, T.Jenkins

DATE: 07-11-24 **WEATHER:** partly cloudy, 83°F

MONITORING WELL ID: MW-2 **SAMPLE ID:** MW2-ROX-071124

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	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): 44.56 ft		Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 55.2 ppm	
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
Screen Length: 10 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		
Water Column Height (not including NAPL): 15.70 ft			

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	1318	44.55	Clear	Strong	22.6	2.73	0.770 mS/cm uS/cm	7.26	-152.99	7.99
300	1319	44.55			22.8	2.55	0.770 mS/cm uS/cm	7.26	-156.33	7.79
600	1320	44.55			22.7	2.42	0.772 mS/cm uS/cm	7.26	-158.66	8.01
900	1321				22.7	2.29	0.771 mS/cm uS/cm	7.26	-161.97	8.64
1200	1322				22.6	2.18	0.772 mS/cm uS/cm	7.26	-164.75	9.05
1500	1323				22.6	2.09	0.771 mS/cm uS/cm	7.26	-167.23	9.803
1800	1324				22.7	2.00	0.770 mS/cm uS/cm	7.26	-169.61	10.11
2100	1325				22.8	1.92	0.772 mS/cm uS/cm	7.26	-172.04	9.97
2400	1326				22.6	1.85	0.773 mS/cm uS/cm	7.26	-174.27	10.59
2700	1327				22.5	1.78	0.773 mS/cm uS/cm	7.26	-176.32	11.50
3000	1328				22.5	1.72	0.772 mS/cm uS/cm	7.26	-178.27	12.09
3300	1329	↓	↓	↓	22.4	1.67	0.772 mS/cm uS/cm	7.26	-180.17	13.21
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CM reviewed 07-11-24

Start Time: 13:18 **Elapsed Time (min):** 11 **Water Quality Meter ID & SN:** YSI ProDSS -- 21I368/49391

Stop Time: 13:29 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-11-24

SAMPLING DATA

Sample Date: 07-11-24 **Sample Time:** 13:40 **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:** CM

COMMENTS:

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

Estimated Total Purge Volume: 3300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** J. Mayer, T. Jenkins

DATE: 7-5-2024 **WEATHER:** 81°F Clear

MONITORING WELL ID: MW-3 **SAMPLE ID:** MW3-ROX-070524

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 39.67 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 45.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 29.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 34.67 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (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	0958	29.78	Clear	none	21.2	~~0.61~~ 0.92	1.365 mS/cm uS/cm	~~6~~ 7.00	-127.0	~~1.26~~ 0.94
600	1000	↓	↓	↓	21.1	0.61	1.370 mS/cm uS/cm	7.02	-140.8	1.24
900	1001	↓	↓	↓	21.1	0.54	1.369 mS/cm uS/cm	7.02	-145.3	2.41
1200	1002	↓	↓	↓	21.1	0.52	1.369 mS/cm uS/cm	7.02	-147.1	2.55
1500	1003	↓	↓	↓	21.2	0.48	1.369 mS/cm uS/cm	7.03	-149.6	2.44
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-5-24

Start Time: 0958 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 43195/223344

Stop Time: 1003 Average Purge Rate (mL/min): 300 Date Calibrated: 7-3-2024

SAMPLING DATA

Sample Date: 7-5-24 Sample Time: 1010 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: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.McDaniel, E.Chalfant

DATE: 07-12-24 WEATHER: rain, 70°F

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-071224

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	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): 41.25 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	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF 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): 45.06 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): 14.11 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	0955	41.30	clear	moderate	20.7	2.66	1.007 (mS/cm) uS/cm	6.98	-129.66	0
300	0956	41.30			20.6	2.55	1.007 (mS/cm) uS/cm	6.88	-130.74	0
600	0957	41.30			20.5	2.46	1.005 (mS/cm) uS/cm	6.93	-131.68	0
900	0958				20.5	2.37	1.004 (mS/cm) uS/cm	6.88	-132.44	0
1200	0959				20.5	2.29	1.003 (mS/cm) uS/cm	6.93	-133.26	0
1500	1000				20.5	2.22	1.002 (mS/cm) uS/cm	6.85	-133.97	0
1800	1001				20.5	2.16	1.001 (mS/cm) uS/cm	6.88	-134.42	0
2100	1002				20.5	2.09	0.997 (mS/cm) uS/cm	6.89	-135.10	0
2400	1003				20.4	2.04	0.995 (mS/cm) uS/cm	6.89	-135.76	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			

Chet Javis 07-12-24

Start Time: 09:55 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 21I368/19391

Stop Time: 10:03 Average Purge Rate (mL/min): 300 Date Calibrated: 07-12-24

SAMPLING DATA

Sample Date: 07-12-24 Sample Time: 10:10 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.McDavid, E.Chalfant

DATE: 07-08-24 WEATHER: 71°F, overcast

MONITORING WELL ID: MW-5 SAMPLE ID: MW-ROX-070824

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 39.97 ft btoc
Total Well Depth (btoc): 44.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 29.41 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 33.97 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): 14.89 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	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	09:33	29.46	clear	slight	20.2	1.80	1.093 mS/cm uS/cm	6.37	-89.00	0
300	0939	29.46			20.5	1.48	1.090 mS/cm uS/cm	6.43	-100.12	0
600	0935	29.45			20.3	1.30	1.100 mS/cm uS/cm	6.47	-106.89	0
900	0936	29.44			20.4	1.16	1.097 mS/cm uS/cm	6.50	-112.51	0
1200	0937	29.44			20.4	1.06	1.098 mS/cm uS/cm	6.53	-117.23	0
1500	0938	29.44			20.3	0.99	1.098 mS/cm uS/cm	6.55	-120.94	0
1800	0939	↓	↓	↓	20.4	0.94	1.096 mS/cm uS/cm	6.57	-123.89	0
2100	0940				20.4	0.89	1.096 mS/cm uS/cm	6.59	-126.53	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-08-24

Start Time: 09:33 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 22J011/21077

Stop Time: 09:40 Average Purge Rate (mL/min): 300 Date Calibrated: 07-08-24

SAMPLING DATA

Sample Date: 07-08-24 Sample Time: 09:50 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: ~~C. Mudrand~~, MMassa, LBadnivy

DATE: 7-10-24 WEATHER: partly cloudy 71°

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-071024

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): 31.44 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Depth to LNAPL/DNAPL (btoc): ND ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 33.85 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		Wellbore PID/FID Reading: 0.0 ppm
Water Column Height (not including NAPL): 13.04 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0915	31.44	Cloudy	Slight HO	21.3	7.11	0.153 mS/cm uS/cm	6.83	240.05	65.4
300	0916	31.43			21.2	6.82	0.162 mS/cm uS/cm	6.81	241.63	63.2
600	0917	31.43			21.3	6.59	0.183 mS/cm uS/cm	6.78	243.38	60.8
900	0918	31.43			21.4	6.29	0.203 mS/cm uS/cm	6.75	244.77	57.8
1200	0919				21.4	6.10	0.218 mS/cm uS/cm	6.73	244.81	53.6
1500	0920				21.3	5.89	0.234 mS/cm uS/cm	6.71	244.44	48.3
1800	0921				21.3	5.67	0.255 mS/cm uS/cm	6.69	242.88	57.6
2100	0922				21.4	5.47	0.265 mS/cm uS/cm	6.67	240.87	40.3
2400	0923				21.5	5.28	0.276 mS/cm uS/cm	6.67	239.15	75.5
2700	0924				21.6	5.11	0.284 mS/cm uS/cm	6.67	236.72	64.7
3000	0925				21.9	4.92	0.299 mS/cm uS/cm	6.67	233.66	51.3
3300	0926				21.8	4.76	0.319 mS/cm uS/cm	6.67	230.98	45.0
3600	0927				21.6	4.55	0.339 mS/cm uS/cm	6.66	227.00	42.1
3900	0928				21.5	4.33	0.362 mS/cm uS/cm	6.65	220.68	39.2
4200	0929				21.5	4.08	0.384 mS/cm uS/cm	6.63	208.30	34.1
4500	0930				21.8	3.97	0.389 mS/cm uS/cm	6.63	201.17	31.8

Start Time: 0915 Elapsed Time (min): 38 Water Quality Meter ID & SN: YSI ProDSS -- 223328/218074

Stop Time: 0953 Average Purge Rate (mL/min): 300 Date Calibrated: 7-10-24

SAMPLING DATA

Sample Date: 7-10-24 Sample Time: 0955 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: m

COMMENTS:

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

Estimated Total Purge Volume: 11400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3624 GW **PROJECT NUMBER:** 60781927 **FIELD PERSONNEL:** MMassa, CBadmus

DATE: 7-10-24 **MONITORING WELL ID:** MW-6A **SAMPLE ID:** MW6A-Rox-071024

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)
4800	0931	21.43	clear	Slight HC	22.4	3.89	0.395 mS/cm uS/cm	6.63	195.07	29.7
5100	0932				22.4	3.82	0.407 mS/cm uS/cm	6.63	187.39	28.0
5400	0933				22.0	3.70	0.420 mS/cm uS/cm	6.64	176.67	25.1
5700	0934				21.7	3.52	0.445 mS/cm uS/cm	6.64	163.88	24.4
6000	0935				21.8	3.40	0.456 mS/cm uS/cm	6.63	150.50	22.8
6300	0936				22.1	3.28	0.476 mS/cm uS/cm	6.63	136.28	21.5
6600	0937				21.9	3.15	0.487 mS/cm uS/cm	6.63	121.26	19.1
6900	0938				21.9	3.02	0.500 mS/cm uS/cm	6.63	105.91	17.2
7200	0939				21.9	2.93	0.511 mS/cm uS/cm	6.63	92.28	17.0
7500	0940				21.9	2.82	0.524 mS/cm uS/cm	6.64	79.91	15.5
7800	0941				22.0	2.72	0.535 mS/cm uS/cm	6.64	69.25	14.2
8100	0942				21.8	2.64	0.546 mS/cm uS/cm	6.64	59.95	13.5
8400	0943				21.9	2.52	0.557 mS/cm uS/cm	6.64	49.82	12.6
8700	0944				22.0	2.43	0.570 mS/cm uS/cm	6.65	41.97	11.8
9000	0945				21.9	2.34	0.581 mS/cm uS/cm	6.65	35.32	11.3
9300	0946				21.5	2.23	0.594 mS/cm uS/cm	6.65	28.17	10.7
9600	0947				21.5	2.12	0.610 mS/cm uS/cm	6.65	20.76	10.2
9900	0948				21.5	2.07	0.623 mS/cm uS/cm	6.65	14.46	9.2
10200	0949				21.4	1.93	0.634 mS/cm uS/cm	6.65	8.94	8.4
10500	0950				21.4	1.82	0.648 mS/cm uS/cm	6.66	3.10	7.5
10800	0951				21.4	1.77	0.655 mS/cm uS/cm	6.66	0.27	7.2
11100	0952				21.4	1.68	0.666 mS/cm uS/cm	6.67	-4.47	6.6
11400	0953				21.4	1.62	0.675 mS/cm uS/cm	6.67	-7.54	5.9
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** Mmassa LBadmus

DATE: 7-10-24 **WEATHER:** clear 76°

MONITORING WELL ID: MW-6B **SAMPLE ID:** MW6B-POX-071024

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
Total Well Depth (btoc): 69.38 ft	
Depth to Water (btoc): 31.44 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): 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
Screen Length: 5 ft	
Water Column Height (not including NAPL): 37.94 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	1024	31.50	clear	Slight HC	21.1	1.12	0.776 mS/cm uS/cm	6.89	-21.26	13.2
300	1025	31.50			21.3	0.84	0.777 mS/cm uS/cm	6.90	-45.48	9.6
600	1026	31.50			21.3	0.73	0.780 mS/cm uS/cm	6.91	-57.32	8.7
900	1027				21.3	0.67	0.782 mS/cm uS/cm	6.92	-67.70	6.7
1200	1028				21.3	0.61	0.783 mS/cm uS/cm	6.93	-76.61	5.9
1500	1029				21.4	0.58	0.784 mS/cm uS/cm	6.93	-84.11	5.1
1800	1030				21.4	0.55	0.786 mS/cm uS/cm	6.94	-89.73	4.2
2100	1031				21.5	0.52	0.786 mS/cm uS/cm	6.94	-94.44	3.5
2400	1032				21.5	0.51	0.788 mS/cm uS/cm	6.94	-98.74	2.9
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/10/24

Start Time: 1024 **Elapsed Time (min):** 8 **Water Quality Meter ID & SN:** YSI ProDSS - 22328/218074

Stop Time: 1032 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 7-10-24

SAMPLING DATA

Sample Date: 7-10-24 **Sample Time:** 1035 **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: 1400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** MMassa Woodmansee

DATE: 7-10-24 **WEATHER:** partly cloudy 80°

MONITORING WELL ID: MW-6C **SAMPLE ID:** MW6C-ROX-071024

INITIAL DATA

Well Diameter: 2 in	
Total Well Depth (btoc): 90.28 ft	
Depth to Water (btoc): 31.35 ft	
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 84.95 ft	
Screen Length: 5 ft	
Water Column Height (not including NAPL): 58.93 ft	

IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 87.45 ft btoc

IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc

IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc

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	1228	31.35	clear	slight HC	20.7	0.84	0.764	mS/cm uS/cm	6.96	-89.30	4.8
300	1229	31.35	↓	↓	20.8	0.71	0.767	mS/cm uS/cm	6.97	-102.31	4.6
600	1230	31.35	↓	↓	20.8	0.65	0.793	mS/cm uS/cm	6.98	-111.09	4.2
900	1231	↓	↓	↓	20.9	0.61	0.796	mS/cm uS/cm	6.99	-117.44	3.8
1200	1232	↓	↓	↓	20.9	0.56	0.780	mS/cm uS/cm	6.99	-121.32	4.0
1500	1233	↓	↓	↓	20.9	0.53	0.932	mS/cm uS/cm	6.99	-124.05	4.4
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

7/10/24

Start Time: 1228

Stop Time: 1233

Elapsed Time (min): 5

Average Purge Rate (mL/min): 300

Water Quality Meter ID & SN: YSI ProDSS - 22328/218074

Date Calibrated: 7-10-24

SAMPLING DATA

Sample Date: 7-10-24

Sample Time: 1235

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: M

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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: MMarra LBadmaev

DATE: 7-10-24 WEATHER: partly cloudy 82°

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-071024

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 107.22 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 110.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 31.16 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): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 78.89 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1307	31.20	cloudy	slight HC	21.2	0.65	1.093 mS/cm uS/cm	6.93	-109.16	3,772,882
3000 ~~300~~	1317	31.20			21.0	0.46	1.090 mS/cm uS/cm	6.96	-128.82	72.3
3300 ~~600~~	1318	31.20			21.1	0.44	1.089 mS/cm uS/cm	6.97	-130.09	66.9
3600 ~~900~~	1319				21.0	0.44	1.091 mS/cm uS/cm	6.97	-130.70	60.3
3900 ~~1200~~	1320				20.9	0.42	1.090 mS/cm uS/cm	6.97	-131.89	50.8
4200	1321				20.9	0.41	1.091 mS/cm uS/cm	6.97	-133.03	47.1
~~4500~~	1322				20.9	0.40	1.091 mS/cm uS/cm	6.97	-133.94	40.5
4800	1323				20.9	0.40	1.090 mS/cm uS/cm	6.97	-134.68	37.9
5200	1324				20.8	0.39	1.092 mS/cm uS/cm	6.97	-135.51	33.9
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7/10/24

Start Time: 1307 Elapsed Time (min): 17 Water Quality Meter ID & SN: YSI ProDSS -- 22J328/218074

Stop Time: 1324 Average Purge Rate (mL/min): 300 Date Calibrated: 7-10-24

SAMPLING DATA

Sample Date: 7-10-24 Sample Time: 1330 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: mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, E.Chalfant

DATE: 07-15-24 **WEATHER:** Clear, 90°F

MONITORING WELL ID: MW-7 **SAMPLE ID:** MW7-ROX-071524

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): 52.92 ft	
Depth to Water (btoc): 43.26 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 48.09 ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.66 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: 0.6 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1040	43.34	clear	slight	23.0	2.19	0.891 mS/cm uS/cm	6.82	-115.79	0
300	1041	43.34	↓	↓	23.2	2.06	0.889 mS/cm uS/cm	6.82	-116.17	0
600	1042	43.34	↓	↓	22.9	1.95	0.889 mS/cm uS/cm	6.82	-116.14	0
900	1043	↓	↓	↓	22.8	(1.85) 1.85	0.887 mS/cm uS/cm	6.82	-116.06	0
1200	1044	↓	↓	↓	22.7	1.76	0.916 mS/cm uS/cm	6.80	-115.02	0
1500	1045	↓	↓	↓	22.1	1.66	0.955 mS/cm uS/cm	6.69	-108.45	0
1800	1046	↓	↓	↓	22.0	1.55	0.956 mS/cm uS/cm	6.67	-108.00	0
2100	1047	↓	↓	↓	22.0	1.46	0.951 mS/cm uS/cm	6.70	-109.33	0
2400	1048	↓	↓	↓	22.3	1.39	0.947 mS/cm uS/cm	6.72	-110.78	0
2700	1049	↓	↓	↓	22.4	1.34	0.942 mS/cm uS/cm	6.73	-111.93	0
3000	1050	↓	↓	↓	22.7	1.29	0.936 mS/cm uS/cm	6.74	-112.89	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CM/JDavid 07-15-24

Start Time: 10:40 **Elapsed Time (min):** 10 **Water Quality Meter ID & SN:** YSI ProDSS - 21136B/19391

Stop Time: 10:50 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-15-24

SAMPLING DATA

Sample Date: 07-15-24 **Sample Time:** 11:00 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW | PROJECT NUMBER: 60721927 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-5-2024 | WEATHER: 81°F Partly Cloudy

MONITORING WELL ID: MW-9 | SAMPLE ID: MW9-ROX-070524

INITIAL DATA

Well Diameter:	2 in
Total Well Depth (btoc):	56.37 ft
Depth to Water (btoc):	44.88 ft
Depth to LNAPL/DNAPL (btoc):	NE ft
Depth to Top of Screen (btoc):	46.04 ft
Screen Length:	10 ft
Water Column Height (not including NAPL):	11.49 ft

IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.09 ft btoc

IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc

IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc

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% | Spec. Cond. +/-5% or +/-2 uS/cm | DO +/-0.2 mg/L | ORP +/-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	1248	44.90	Clear	None	21.7	0.64	1.021 mS/cm uS/cm	6.97	-68.2	2.24
300	1249				21.7	0.57	1.018 mS/cm uS/cm	6.98	-72.3	3.31
600	1250				21.7	0.53	1.018 mS/cm uS/cm	6.99	-75.1	4.18
900	1251				21.6	0.49	1.017 mS/cm uS/cm	6.99	-77.4	5.15
1200	1252				21.7	0.48	1.014 mS/cm uS/cm	7.02	-81.0	5.69
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-5-2024

Start Time: 1248 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS -- 43195/223344

Stop Time: 1252 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7-3-24

SAMPLING DATA

Sample Date: 7-5-2024 | 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: 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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-8-2024 WEATHER: 81°F Cloudy

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-070824

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): 54.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 49.91 ft btoc
Depth to Water (btoc): 45.05 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
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 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	Volume of Flow Through Cell: 320* mL
Water Column Height (not including NAPL): 9.71 ft	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
	Ambient PID/FID Reading: 0.0 ppm
	Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0900	45.08	Clear	None	20.1	1.10	1.290 mS/cm uS/cm	6.92	-66.5	128.17
600	0902	↓	↓	↓	20.0	0.62	1.190 mS/cm uS/cm	6.94	-93.0	107.69
900	0903				20.0	0.53	1.181 mS/cm uS/cm	6.96	-101.0	88.10
1200	0904				20.0	0.48	1.176 mS/cm uS/cm	6.99	-107.2	77.59
1500	0905				20.1	0.44	1.176 mS/cm uS/cm	6.99	-110.5	69.10
1800	0906				20.1	0.43	1.178 mS/cm uS/cm	7.00	-113.6	62.54
2100	0907				19.9	0.40	1.178 mS/cm uS/cm	7.00	-115.9	52.15
2400	0908				20.0	0.38	1.179 mS/cm uS/cm	7.00	-117.6	47.17
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-8-2024

Start Time: 0900 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 43195/223344

Stop Time: 0908 Average Purge Rate (mL/min): 300 Date Calibrated: 7-8-2024

SAMPLING DATA

Sample Date: 7-8-2024 Sample Time: 0915 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: JM

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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C. McDavid, E. Chalfant

DATE: 07-05-24 WEATHER: partly cloudy, 73°F

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-070524

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.73 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 47.36 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NF 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): 9.26 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	0910	42.73	clear	none	19.5	1.97	1.305 (mS/cm) uS/cm	6.41	-61.18	35.81
300	0911	42.73			19.1	1.60	1.353 (mS/cm) uS/cm	6.47	-69.78	33.72
600	0912	42.73			19.0	1.34	1.351 (mS/cm) uS/cm	6.51	-74.03	38.37
900	0913				19.0	1.17	1.342 (mS/cm) uS/cm	6.54	-77.41	39.73
1200	0914				19.0	1.08	1.353 (mS/cm) uS/cm	6.57	-80.11	39.40
1500	0915				19.1	1.02	1.327 (mS/cm) uS/cm	6.58	-81.85	37.29
1800	0916				18.9	0.96	1.321 (mS/cm) uS/cm	6.59	-83.77	35.76
2100	0917				18.9	0.92	1.312 (mS/cm) uS/cm	6.60	-86.06	37.67
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-05-24

Start Time: 09:10 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 22301I/21077I

Stop Time: 09:17 Average Purge Rate (mL/min): 300 Date Calibrated: 07-03-24

SAMPLING DATA

Sample Date: 07-05-24 Sample Time: 09:25 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: cmcDavid, E.Chalfant

DATE: 07-05-24 WEATHER: clear, 79°F

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-070524

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 52.25 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 47.95 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 9.59 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	1018	42.68	clear	none	19.9	1.38	0.778 (mS/cm) uS/cm	6.87	83.62	28.29
300	1019	42.68	↓	↓	19.9	1.20	0.780 (mS/cm) uS/cm	6.87	82.73	25.68
600	1020	42.68			19.8	1.09	0.777 (mS/cm) uS/cm	6.87	81.92	22.72
900	1021	↓			19.7	1.01	0.775 (mS/cm) uS/cm	6.87	81.26	20.29
1200	1022				19.7	0.96	0.773 (mS/cm) uS/cm	6.87	80.76	26.31
1500	1023				19.7	0.95	0.771 (mS/cm) uS/cm	6.87	80.31	22.27
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

cmcDavid 07-05-24

Start Time: 10:18 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 22301I/21D771

Stop Time: 10:23 Average Purge Rate (mL/min): 300 Date Calibrated: 07-03-24

SAMPLING DATA

Sample Date: 07-05-24 Sample Time: 10:30 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C. McDaniel, T. Jenkins

DATE: 07-11-24 **WEATHER:** clear, 69°F

MONITORING WELL ID: MW-13 **SAMPLE ID:** MW13-ROX-071124

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): 28.90 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 31.98 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 24.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ___ ft btoc	
Screen Length: 10 ft		Wellbore PID/FID Reading: 0.0 ppm
Water Column Height (not including NAPL): 6.15 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ___ ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0957	28.93	clear	strong	21.9	4.85	0.706 mS/cm uS/cm	6.50	1.43	32.67
300	0958	28.93			22.0	4.34	0.758 mS/cm uS/cm	6.52	-17.63	27.57
600	0959	28.93			22.1	~~3.1~~ 3.96	0.803 mS/cm uS/cm	6.55	-32.64	26.72
900	1000				22.1	3.67	0.831 mS/cm uS/cm	6.56	-43.21	23.02
1200	1001				22.2	3.41	0.859 mS/cm uS/cm	6.57	-51.40	18.87
1500	1002				22.2	3.20	0.883 mS/cm uS/cm	6.57	-57.38	15.87
1800	1003				22.3	3.02	0.900 mS/cm uS/cm	6.58	-61.85	14.04
2100	1004				22.3	2.86	0.917 mS/cm uS/cm	6.58	-65.53	12.19
2400	1005				22.3	2.73	0.930 mS/cm uS/cm	6.58	-68.58	10.72
2700	1006				22.3	2.61	0.943 mS/cm uS/cm	6.59	-70.94	8.91
3000	1007				22.2	2.51	0.953 mS/cm uS/cm	6.59	-72.89	7.96
3300	1008				22.2	2.42	0.960 mS/cm uS/cm	6.59	-74.57	7.13
3600	1009				22.3	2.33	0.967 mS/cm uS/cm	6.60	-76.28	6.38
3900	1010				22.3	2.25	0.975 mS/cm uS/cm	6.60	-77.99	5.61
4200	1011				22.2	2.18	0.982 mS/cm uS/cm	6.60	-79.41	5.10
4500	1012				22.2	2.12	0.985 mS/cm uS/cm	6.60	-80.43	4.36

Start Time: 09:57 **Elapsed Time (min):** 16 **Water Quality Meter ID & SN:** YSI ProDSS ~~223329/218074~~ 211368/49391 CM

Stop Time: 10:13 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-11-24

SAMPLING DATA

Sample Date: 07-11-24 **Sample Time:** 10:20 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 07-11-24 MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-071124

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)
4900	1013	20.93	Clear	Strong	22.3	2.06	0.989 (mS/cm) uS/cm	6.61	-81.72	3.94
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.Mydland, E.Chalfant

DATE: 07-08-24 WEATHER: partly cloudy, 71°F 83°F

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-070824

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 44.00 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 38.85 ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 33.70 ft		Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 110.6 ppm	
Depth to Top of Screen (btoc): 33.42 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
Screen Length: 10 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		
Water Column Height (not including NAPL): 10.30 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	1237	33.70	clear	strong	21.1	1.82	1.004 mS/cm uS/cm	6.51	-61.74	14.78
300	1238	33.70			21.1	1.45	1.007 mS/cm uS/cm	6.51	-66.55	9.35
600	1239	33.70			20.9	1.23	1.010 mS/cm uS/cm	6.51	-69.84	6.44
900	1240				20.9	1.09	1.013 mS/cm uS/cm	6.51	-72.59	3.95
1200	1241				20.8	0.99	1.017 mS/cm uS/cm	6.52	-74.89	1.56
1500	1242				20.9	0.92	1.020 mS/cm uS/cm	6.52	-76.97	0
1800	1243				20.9	0.87	1.023 mS/cm uS/cm	6.53	-78.90	0
2100	1244				20.9	0.83	1.024 mS/cm uS/cm	6.54	-79.46	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			

CM Dewil 07-08-24

Start Time: 12:37 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 22301I/21077I

Stop Time: 12:44 Average Purge Rate (mL/min): 300 Date Calibrated: 07-08-24

SAMPLING DATA

Sample Date: 07-08-24 Sample Time: 12:50 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW | PROJECT NUMBER: 60721927 - 3.3.1/2/3 | FIELD PERSONNEL: C. McDonald, E. Chalfant

DATE: 07-05-24 | WEATHER: partly cloudy, 81°F

MONITORING WELL ID: MW-16 | SAMPLE ID: MW16-ROX-070524

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): 47.75 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 44.16 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.95 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE 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 (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 3.59 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	1238	44.26	clear	slight	21.4	1.86	0.959 (mS/cm) uS/cm	6.69	-98.79	0
300	1239	44.26			21.1	1.47	0.961 (mS/cm) uS/cm	6.71	-102.74	0
600	1240	44.26			20.8	1.22	0.960 (mS/cm) uS/cm	6.72	-105.45	0
900	1241	44.25			20.4	1.07	0.964 (mS/cm) uS/cm	6.74	-107.79	0
1200	1242	44.26			19.9	0.98	0.959 (mS/cm) uS/cm	6.77	-109.47	0
1500	1243	44.26			19.8	0.90	0.963 (mS/cm) uS/cm	6.78	-110.46	0
1800	1244	44.26			19.8	0.85	0.964 (mS/cm) uS/cm	6.79	-111.67	0
2100	1245	44.26			19.8	0.81	0.963 (mS/cm) uS/cm	6.80	-112.93	0
							(mS/cm) uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Checked 07-05-24

Start Time: 12:38 | Elapsed Time (min): 7 | Water Quality Meter ID & SN: YSI ProDSS - 22301I/21077I

Stop Time: 12:45 | Average Purge Rate (mL/min): 300 | Date Calibrated: 07-03-24

SAMPLING DATA

Sample Date: 07-05-24 | Sample Time: 12:55 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C. McDaniel, E. Chalfant

DATE: 07-12-24 WEATHER: Overcast, 78°F

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-071224

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): 48.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.86 ft btoc
Depth to Water (btoc): 43.03 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 38.43 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	Volume of Flow Through Cell: 320* mL
Water Column Height (not including NAPL): 5.65 ft	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
	Ambient PID/FID Reading: 0.0 ppm
	Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1200	43.10	clear	strong	21.9	2.66	1.026 (mS/cm) uS/cm	6.90	-130.67	64.10
300	1201	43.10			21.9	2.51	1.026 (mS/cm) uS/cm	6.90	-131.89	59.38
600	1202	43.10			22.3	2.37	1.024 (mS/cm) uS/cm	6.90	-133.29	54.08
900	1203				22.3	2.26	1.031 (mS/cm) uS/cm	6.90	-134.05	47.88
1200	1204				22.5	2.16	1.036 (mS/cm) uS/cm	6.90	-134.74	45.12
1600	1205				22.5	2.07	1.035 (mS/cm) uS/cm	6.90	-135.32	38.90
1900	1206				23.1	1.99	1.026 (mS/cm) uS/cm	6.90	-136.37	33.67
2100	1207				23.5	1.94	1.029 (mS/cm) uS/cm	6.90	-137.22	31.80
2400	1208				24.0	1.86	1.036 (mS/cm) uS/cm	6.90	-138.02	32.56
2700	1209				24.3	1.80	1.040 (mS/cm) uS/cm	6.89	-138.62	32.51
							(mS/cm) uS/cm			
							(mS/cm) uS/cm			
							(mS/cm) uS/cm			
							(mS/cm) uS/cm			
							(mS/cm) uS/cm			
							(mS/cm) uS/cm			

CM reviewed 07-12-24

Start Time: 1200 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS - 21368/19391

Stop Time: 1209 Average Purge Rate (mL/min): 300 Date Calibrated: 07-12-24

SAMPLING DATA

Sample Date: 07-12-24 Sample Time: 12:20 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace (X) Initials: CM

COMMENTS:

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

Water initially came out black with a sheen. Let run for ~15min before it became clear with no sheen. No NAPL detected with probe

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C. McDavid, E. Chalfant

DATE: 07-08-24 **WEATHER:** light rain, 79°F

MONITORING WELL ID: MW-23 **SAMPLE ID:** MW23-ROX-070824

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): 29.39 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 34.33 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 9.98 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1039	30.39	cloudy	slight	19.5	1.34	0.814 (mS/cm) uS/cm	6.54	-73.27	65.01
300	1040	30.39	↓	↓	19.6	1.17	0.814 (mS/cm) uS/cm	6.56	-78.17	54.74
600	1041	30.39	↓	↓	19.8	1.07	0.813 (mS/cm) uS/cm	6.57	-81.57	48.94
900	1042	↓	↓	↓	20.0	0.99	0.811 (mS/cm) uS/cm	6.58	-84.98	47.87
1200	1043	↓	↓	↓	20.4	0.94	0.806 (mS/cm) uS/cm	6.59	-88.05	44.27
1500	1044	↓	↓	↓	20.5	0.90	0.812 (mS/cm) uS/cm	6.60	-90.60	44.14
							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			

CMcDavid 07-08-24

Start Time: 10:39 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS -- 22301/21077

Stop Time: 10:44 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-08-24

SAMPLING DATA

Sample Date: 07-08-24 **Sample Time:** 10:50 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** CMcDavid, E.Chalfant

DATE: 07-09-24 **WEATHER:** rain, 72°F

MONITORING WELL ID: MW-24 **SAMPLE ID:** MW24-ROX-070924

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ___ ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 49.86 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 43.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 46.73 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NF ft			
Depth to Top of Screen (btoc): 39.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ___ ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 6.26 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	1342	43.60	clear	none	20.1	1.79	1.650 mS/cm uS/cm	6.64	222.16	36.87
300	1343				20.3	1.47	1.658 mS/cm uS/cm	6.64	224.63	29.78
600	1344				20.6	1.26	1.662 mS/cm uS/cm	6.63	226.22	25.33
900	1345				20.7	1.14	1.664 mS/cm uS/cm	6.63	227.35	23.17
1200	1346				20.8	1.04	1.665 mS/cm uS/cm	6.63	228.39	20.35
1500	1347				21.0	0.96	1.665 mS/cm uS/cm	6.63	229.19	16.88
1800	1348				21.0	0.94	1.665 mS/cm uS/cm	6.63	229.50	15.05
2100	1349				21.2	0.90	1.665 mS/cm uS/cm	6.63	230.03	13.58
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-09-24

Start Time: 13:42 **Elapsed Time (min):** 7 **Water Quality Meter ID & SN:** YSI ProDSS - 223328/21B074

Stop Time: 13:49 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-09-24

SAMPLING DATA

Sample Date: 07-09-24 **Sample Time:** 13:55 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ **Initials:** CM

COMMENTS:

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

Gave Team 2 solinst to finish their well

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.McDaniel, E. Chalfant

DATE: 07-15-24 WEATHER: Clear, 90°F

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX-071524

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): 38.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.01 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 35.59 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.66 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	38.18	lightgrey	slight	22.2	2.44	0.793 mS/cm uS/cm	6.90	-145.76	7.69
300	0901	38.18	↓	↓	22.1	2.36	0.791 mS/cm uS/cm	6.90	-146.33	4.67
600	0902	38.18	↓	↓	22.1	2.29	0.791 mS/cm uS/cm	6.90	-147.20	3.40
900	0903	↓	↓	↓	22.2	2.22	0.792 mS/cm uS/cm	6.90	-147.89	2.70
1200	0904	↓	↓	↓	22.3	2.16	0.791 mS/cm uS/cm	6.90	-148.39	3.42
1500	0905	↓	↓	↓	22.0	2.11	0.789 mS/cm uS/cm	6.91	-148.97	3.72
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CM reviewed 07-15-24

Start Time: 09:00 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 21I368/99391

Stop Time: 09:05 Average Purge Rate (mL/min): 300 Date Calibrated: 07-15-24

SAMPLING DATA

Sample Date: 07-15-24 Sample Time: 09:15 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 (Y) Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-5-24 WEATHER: 81°F Partly Cloudy

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-Rox-070524

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): 41.28 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.84 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 7.12 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1106	41.31	Clear	None	21.6	0.66	0.754 mS/cm uS/cm	7.06	55.9	2.52
300	1107	↓	↓	↓	22.0	0.55	0.753 mS/cm uS/cm	7.07	52.7	2.58
600	1108				22.2	0.53	0.754 mS/cm uS/cm	7.07	51.7	2.88
900	1109				22.0	0.48	0.757 mS/cm uS/cm	7.07	49.8	4.11
1200	1110				21.9	0.43	0.755 mS/cm uS/cm	7.07	48.4	4.65
							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			

7-5-2024

Start Time: 1106 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 43195/223344

Stop Time: 1110 Average Purge Rate (mL/min): 300 Date Calibrated: 7-3-24

SAMPLING DATA

Sample Date: 7-5-2024 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 [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 3Q24 GW | PROJECT NUMBER: 60721927 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-8-2024 | WEATHER: ~~8~~ JM 76°F Light Rain

MONITORING WELL ID: MW-27 | SAMPLE ID: MW27-ROX-070824

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 50.04 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 43.25 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 46.63 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): 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 (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 6.79 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1051	44.18	Clear	None	19.6	3.56	0.863 mS/cm uS/cm	6.90	107.9	31.36
1200	1055	44.72			19.8	3.44	0.861 mS/cm uS/cm	6.90	108.1	26.30
1500	1056	44.85			20.0	3.27	0.860 mS/cm uS/cm	6.89	109.4	22.27
2700	1105	45.12			20.4	3.07	0.865 mS/cm uS/cm	6.85	112.6	13.77
3000	1101	45.19			20.5	3.07	0.867 mS/cm uS/cm	6.85	112.6	12.77
3300	1102	45.25			20.5	3.08	0.869 mS/cm uS/cm	6.86	112.5	11.82
3600	1103	45.33			20.5	3.10	0.870 mS/cm uS/cm	6.86	112.5	10.58
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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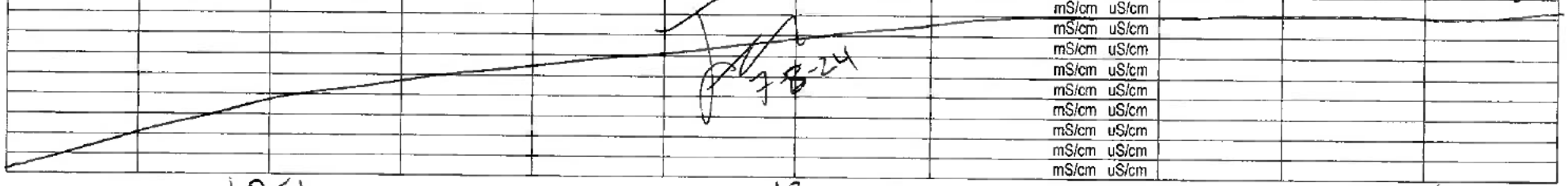

Start Time: 1051 | Elapsed Time (min): 12 | Water Quality Meter ID & SN: YSI ProDSS -- 43195/223344

Stop Time: 1103 | Average Purge Rate (mL/min): 300 | Date Calibrated: 07-08-2024

SAMPLING DATA

Sample Date: 7-8-2024 | Sample Time: 1110 | 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: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW | PROJECT NUMBER: 60721927 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayer J. Jenkins

DATE: 7-8-2024 | WEATHER: 76° F Partly Cloudy

MONITORING WELL ID: MW-28 | SAMPLE ID: MW28-ROX-070824

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): 42.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.08 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE 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): 1.56 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1205	42.35	Clear	Moderate	21.5	1.81	1.493	mS/cm uS/cm	6.75	-27.8	20.49
600	1207		Cloudy		21.0	0.74	1.516	mS/cm uS/cm	6.79	-65.4	547.42
1800	1211				21.3	1.07	1.543	mS/cm uS/cm	6.83	-90.2	163.35
3300	1216				21.3	0.55	1.567	mS/cm uS/cm	6.83	-105.3	112.73
3600	1217				21.3	0.50	1.568	mS/cm uS/cm	6.83	-105.2	102.97
5100	1222				21.3	0.40	1.590	mS/cm uS/cm	6.83	-109.3	106.23
12200	1249				22.3	0.62	1.626	mS/cm uS/cm	6.80	-88.3	80.18
13500	1250				22.4	0.43	1.625	mS/cm uS/cm	6.81	-96.3	80.29
14400	1253				23.0	0.26	1.623	mS/cm uS/cm	6.83	-110.6	67.00
14700	1254				23.0	0.24	1.623	mS/cm uS/cm	6.83	-112.7	68.35
16500	1300		Clear		23.2	0.18	1.628	mS/cm uS/cm	6.83	-123.1	56.95
16800	1301				23.4	0.18	1.630	mS/cm uS/cm	6.82	-124.6	56.11
17100	1302				23.2	0.18	1.631	mS/cm uS/cm	6.83	-125.4	55.84
17400	1303				23.4	0.12	1.629	mS/cm uS/cm	6.82	-126.1	55.83
17700	1304				23.5	0.17	1.629	mS/cm uS/cm	6.82	-127.0	56.39
18000	1305				23.7	0.17	1.627	mS/cm uS/cm	6.82	-128.0	56.62

Start Time: 1205 | Elapsed Time (min): 60 | Water Quality Meter ID & SN: YSI ProDSS - 43195/223544

Stop Time: 1305 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7-8-2024

SAMPLING DATA

Sample Date: 7-8-2024 | Sample Time: 1310 | 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: 18000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, E.Chalfant

DATE: 07-09-24 **WEATHER:** light rain, 69°F

MONITORING WELL ID: P-54 **SAMPLE ID:** P54-KOX-070924

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): 42.24 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 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): 47.24 ft btoc	
Screen Length: 25 ft		Wellbore PID/FID Reading: 4.2 ppm
Water Column Height (not including NAPL): 20.76 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)	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	0906	42.23	clear	None	20.2	-561.40	1.265 mS/cm uS/cm	6.32	111.35	0.51
0 ~~300~~	~~0909~~ 1038	42.24	↓	↓	20.0	3.64	1.365 mS/cm uS/cm	6.33	279.45	29.16
300 ~~600~~	~~0908~~ 1039	42.24	↓	↓	20.0	3.41	1.369 mS/cm uS/cm	6.40	278.05	27.00
600 ~~900~~	~~0909~~ 1040	42.24	↓	↓	20.1	3.28	1.371 mS/cm uS/cm	6.43	277.42	25.03
900 ~~1200~~	~~0910~~ 1041	↓	↓	↓	20.2	3.16	1.374 mS/cm uS/cm	6.45	277.00	23.41
1200	1042	↓	↓	↓	20.3	3.07	1.373 mS/cm uS/cm	6.47	276.80	22.41
1500	1043	↓	↓	↓	20.5	3.03	1.374 mS/cm uS/cm	6.48	276.84	20.86
1800	1044	↓	↓	↓	20.7	3.00	1.374 mS/cm uS/cm	6.49	277.04	19.24
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-09-24

Start Time: ~~0906~~ 10:38 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS ~~223011/210771~~ 223328/218079

Stop Time: 10:44 Average Purge Rate (mL/min): 300 Date Calibrated: 07-09-24

SAMPLING DATA

Sample Date: 07-09-24 Sample Time: 11:20 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDaniel, E.Schalfant

DATE: 07-17-24 **WEATHER:** clear, 79°F

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

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 50.68 ft	
Depth to Water (btoc): 42.10 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): 41.89 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.58 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

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: 167.3 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

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 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, T. Jenkins

DATE: 07-10-24 **WEATHER:** clear, 79°F

MONITORING WELL ID: P56 **SAMPLE ID:** P56-ROX-071024

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): 47.23 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 52.23 ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 18.59 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	1129	47.28	clear	strong	21.8	0.61	1.066 mS/cm uS/cm	7.31	-128.10	3.74
300	1130	47.26			21.8	0.49	1.062 mS/cm uS/cm	7.32	-139.86	4.11
600	1131	47.26			21.9	0.43	1.062 mS/cm uS/cm	7.33	-149.25	6.47
900	1132				22.1	0.40	1.060 mS/cm uS/cm	7.33	-154.36	8.37
1200	1133				22.4	0.39	1.062 mS/cm uS/cm	7.34	-159.18	12.58
1500	1134				22.5	0.38	1.063 mS/cm uS/cm	7.34	-163.48	17.44
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

C.McDavid 07-10-24

Start Time: 11:29 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS - 22339A/43195

Stop Time: 11:34 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-10-24

SAMPLING DATA

Sample Date: 07-10-24 **Sample Time:** 11:40 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.Mcdavid, T.Jenkins

DATE: 07-10-24 **WEATHER:** Clear, 81°F

MONITORING WELL ID: P-57 **SAMPLE ID:** P57-ROX-071024

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): 47.53 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 50.96 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 44.19 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ____ ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 6.66 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	1240	48.10	clear	strong	22.4	0.56	0.989 mS/cm uS/cm	6.62	-104.03	0
300	1241	48.10	↓	↓	22.6	0.52	0.993 mS/cm uS/cm	6.63	-106.83	0
600	1242	48.10	↓	↓	22.6	0.48	0.995 mS/cm uS/cm	6.63	-108.59	0
900	1243	↓	↓	↓	22.6	0.44	0.997 mS/cm uS/cm	6.63	-110.36	0
1200	1244	↓	↓	↓	22.7	0.41	0.999 mS/cm uS/cm	6.63	-111.50	0
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-10-24

Start Time: 12:40 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 22339A / 43195

Stop Time: 12:44 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 07-10-24

SAMPLING DATA

Sample Date: 07-10-24 **Sample Time:** 12:50 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] **Initials:** CM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.McDavid, E.Chalfant

DATE: 07-17-24 WEATHER: clear, 74°F

MONITORING WELL ID: P-58 SAMPLE ID: P58-ROX-071724

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): 65.21 ft	
Depth to Water (btoc): 45.12 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): 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): 50.12 ft btoc
Screen Length: 25 ft	
Water Column Height (not including NAPL): 20.09 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	0820	45.35	grey	strong	23.7	2.98	1.772 (mS/cm) uS/cm	6.60	-141.34	31.04
300	0821	45.35			23.8	2.77	1.771 mS/cm uS/cm	6.61	-143.10	30.74
600	0822	45.35			23.9	2.59	1.774 (mS/cm) uS/cm	6.61	-144.40	31.90
900	0823				23.9	2.46	1.766 (mS/cm) uS/cm	6.61	-145.50	32.78
1200	0824				23.9	2.34	1.764 (mS/cm) uS/cm	6.62	-146.19	36.04
1500	0825				23.9	2.24	1.770 (mS/cm) uS/cm	6.62	-146.57	38.41
1800	0826				24.1	2.15	1.773 (mS/cm) uS/cm	6.62	-146.95	40.39
2100	0827				24.3	2.07	1.764 (mS/cm) uS/cm	6.62	-147.36	32.55
2400	0828				24.3	2.00	1.752 (mS/cm) uS/cm	6.63	-147.47	21.47
2700	0829				24.1	1.93	1.750 mS/cm uS/cm	6.63	-147.53	20.50
3000	0830				24.2	1.87	1.747 mS/cm uS/cm	6.64	-147.76	19.46
3300	0831				24.3	1.82	1.746 mS/cm uS/cm	6.64	-148.20	16.29
							mS/cm uS/cm			
			CMcDavid 07-17-24				mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 08:20 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS - 21368/19391

Stop Time: 08:31 Average Purge Rate (mL/min): 300 Date Calibrated: 07-15-24

SAMPLING DATA

Sample Date: 07-17-24 Sample Time: 08:40 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: CM

COMMENTS:

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

Estimated Total Purge Volume: 3300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-15-2024 WEATHER: 88°F Clear

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-071524

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): 48.28 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 53.28 ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 24.63 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	0929	48.30	Clear	Slight	26.7	1.34	1.549	mS/cm uS/cm	6.60	-83.1	14.22
300	0930	↓	↓	↓	26.6	0.79	1.544	mS/cm uS/cm	6.62	-99.2	11.73
600	0931				26.6	0.61	1.540	mS/cm uS/cm	6.63	-107.5	10.85
900	0932				26.7	0.51	1.536	mS/cm uS/cm	6.64	-112.9	13.94
1200	0933				26.8	0.46	1.535	mS/cm uS/cm	6.65	-117.0	16.86
1500 JM	0934				26.8	0.42	1.536	mS/cm uS/cm	6.66	-120.1	17.52
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

7-15-24

Start Time: 0929 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 4395/223344

Stop Time: 0934 Average Purge Rate (mL/min): 300 Date Calibrated: 7-15-2024

SAMPLING DATA

Sample Date: 7-15-2024 Sample Time: ~~1345~~ JM 0940 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: 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 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, E.Chalfant

DATE: 07-08-24 **WEATHER:** partly cloudy, 83°F

MONITORING WELL ID: P-66 **SAMPLE ID:** P66-ROX-070824

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): 37.36 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 36.53 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: 3.6 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 22.36 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

CMcDavid 07-08-24

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ Initials: —

COMMENTS:

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

Not sampled due to presence of LNAPL

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C.McDavid, E.Chalfant

DATE: 07-17-24 09:25 **WEATHER:** Clear, 74°F

MONITORING WELL ID: P-68 **SAMPLE ID:** —

INITIAL DATA

Well Diameter: 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 68.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 45.52 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): 46.45 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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 285.6 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 23.24 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

C.McDavid 07-17-24

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

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

SAMPLING DATA

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

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

VOA Vials, No Headspace ☐ **Initials:** —

COMMENTS:

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

Not sampled due to presence of LNAPL

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer, T. Jenkins

DATE: 7-12-2024 WEATHER: 84° F Cloudy

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-071224

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): 49.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 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): 49.68 ft btoc	Wellbore PID/FID Reading: 46.8 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 24.15 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	1119	49.95	Clear	Strong	23.9	1.22	0.296 mS/cm uS/cm	5.89	-19.3	6.63
300	1120				23.4	0.75	0.288 mS/cm uS/cm	5.84	-19.5	6.50
600	1121				23.3	0.62	0.287 mS/cm uS/cm	5.88	-32.8	6.99
900	1122				23.2	0.55	0.285 mS/cm uS/cm	5.89	-34.7	7.89
1200	1123				23.7	0.49	0.284 mS/cm uS/cm	5.89	-36.3	6.83
1500	1124				23.9	0.46	0.285 mS/cm uS/cm	5.89	-37.8	6.25
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

7-12-24

Start Time: 1119 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 41395/22334

Stop Time: 1124 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-24

SAMPLING DATA

Sample Date: 7-12-2024 Sample Time: 1130 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: SM

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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-12-2024 WEATHER: 85°F Cloudy

MONITORING WELL ID: P-93A SAMPLE ID: P93A-ROX-071224

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): 45.70 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 49.39 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 43.07 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.37 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	

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	1313	45.88	Clear	Strong	22.8	1.02	1.241 mS/cm uS/cm	6.69	-111.7	0.00
300	1314	45.84			22.7	0.67	1.235 mS/cm uS/cm	6.73	-120.9	
600	1315	45.80			22.7	0.60	1.236 mS/cm uS/cm	6.74	-123.8	
900	1316	45.85			22.7	0.51	1.234 mS/cm uS/cm	6.76	-128.5	
1200	1317	45.85			22.5	0.45	1.235 mS/cm uS/cm	6.78	-132.2	
1500	1318	45.90			22.4	0.41	1.235 mS/cm uS/cm	6.80	-135.1	
							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			

7-12-24

Start Time: 1313 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 23195/22334

Stop Time: 1318 Average Purge Rate (mL/min): 300 Date Calibrated: 7-12-2024

SAMPLING DATA

Sample Date: 7-12-24 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: 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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-17-2024 WEATHER: 78° Clear

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX-071724

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): 47.00 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): 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): 29.78 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ~ ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 75.78 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	0900	47.03	Clear	Strong	19.6	0.58	1.318 mS/cm uS/cm	6.74	-94.4	0.00
300	0901				19.6	0.53	1.326 mS/cm uS/cm	6.74	-96.9	
600	0902				19.6	0.44	1.342 mS/cm uS/cm	6.75	-102.4	
900	0903				19.5	0.39	1.355 mS/cm uS/cm	6.76	-108.7	
1200	0904				19.5	0.37	1.364 mS/cm uS/cm	6.76	-109.7	
1500	0905				19.6	0.33	1.367 mS/cm uS/cm	6.77	-112.4	
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 7-17-24

Start Time: 0909 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 4/1395/223344

Stop Time: 0905 Average Purge Rate (mL/min): 300 Date Calibrated: 7-16-2024

SAMPLING DATA

Sample Date: 7-17-24 Sample Time: 0910 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ 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 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** J. Mayer T. Jenkins

DATE: 7-15-2024 **WEATHER:** 88°F Clear

MONITORING WELL ID: P-93C **SAMPLE ID:** P93C-ROX-071524

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
Total Well Depth (btoc): 97.88 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 46.78 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
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 92.88 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 5 ft	
Water Column Height (not including NAPL): 51.10 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	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	1213	46.83	Clear	None	22.4	1.03	0.978 mS/cm uS/cm	6.98	-100.8	9.45
300	1214	↓	↓	↓	22.4	0.79	0.983 mS/cm uS/cm	7.00	-108.1	10.88
600	1215				22.2	0.67	0.986 mS/cm uS/cm	7.00	-112.9	14.02
900	1216				22.2	0.60	0.989 mS/cm uS/cm	7.00	-116.2	16.42
1200	1217				21.8	0.54	0.993 mS/cm uS/cm	7.01	-118.4	20.76
1500	1218				21.6	0.49	0.992 mS/cm uS/cm	7.01	-120.4	26.16
							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			

7-15-24

Start Time: 1213 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS - 41895/223344

Stop Time: 1218 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 7-15-2024

SAMPLING DATA

Sample Date: 7-15-2024 **Sample Time:** 1225 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace: ☑ **Initials:** 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 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** J Mayer T. Jenkins

DATE: 7-12-2024 **WEATHER:** 84°F Cloudy

MONITORING WELL ID: P-93D **SAMPLE ID:** P93D-ROX-071224

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): 47.23 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 125.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 80.68 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: 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	1235	47.23	Clear	none	20.5	0.60	1.094 mS/cm uS/cm	7.03	-111.8	2.24
300	1236	↓	↓	↓	20.3	0.52	1.104 mS/cm uS/cm	7.03	-116.8	0.00
600	1237				20.4	0.45	1.105 mS/cm uS/cm	7.03	-119.6	0.00
900	1238				20.3	0.40	1.108 mS/cm uS/cm	7.03	-120.5	0.00
1200	1239				20.3	0.39	1.109 mS/cm uS/cm	7.03	-120.6	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			

7-12-24

Start Time: 1235 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS 43195/223344

Stop Time: 1239 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 7-12-24

SAMPLING DATA

Sample Date: 7-12-24 **Sample Time:** 1245 **Lab Analysis:** VOC, SVOC, PAH

Sample Method: Bladder 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: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 07-11-24 **WEATHER:** Clear, 79°F

MONITORING WELL ID: P-114R **SAMPLE ID:** P114R-ROX-071124

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): 33.31 ft	
Depth to Water (btoc): 27.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 30.33 ft btoc
Depth to LNAPL/DNAPL (btoc): NE 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 5.96 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	1120	27.43	Clear	Strong	23.7	3.24	1.058 mS/cm uS/cm	6.77	-133.61	15.38
300	1121	27.43			23.5	3.03	1.050 mS/cm uS/cm	6.77	-135.32	13.80
600	1122	27.43			23.5	2.85	1.037 mS/cm uS/cm	6.77	-136.75	12.76
900	1123				23.4	2.70	1.027 mS/cm uS/cm	6.77	-137.89	12.56
1200	1124				23.5	2.56	1.017 mS/cm uS/cm	6.77	-139.11	11.62
1500	1125				23.8	2.44	1.008 mS/cm uS/cm	6.77	-140.20	10.28
1800	1126				23.9	2.34	1.002 mS/cm uS/cm	6.78	-141.22	8.98
2100	1127				23.9	2.24	0.997 mS/cm uS/cm	6.78	-142.27	8.02
2400	1128				23.9	2.17	0.992 mS/cm uS/cm	6.78	-143.07	7.60
2700	1129				24.0	2.09	0.988 mS/cm uS/cm	6.78	-143.71	6.60
3000	1130				24.0	2.02	0.984 mS/cm uS/cm	6.78	-144.54	6.10
3300	1131				24.0	1.96	0.980 mS/cm uS/cm	6.78	-145.16	5.37
3600	1132				24.0	1.91	0.976 mS/cm uS/cm	6.78	-145.90	4.94
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 07-11-24

Start Time: 11:20 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS -- 21136B/49391

Stop Time: 1:32 Average Purge Rate (mL/min): 300 Date Calibrated: 07-11-24

SAMPLING DATA

Sample Date: 07-11-24 Sample Time: 11:40 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: cm

COMMENTS:

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

Estimated Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW **PROJECT NUMBER:** 60721927 - 3.3.1/2/3 **FIELD PERSONNEL:** Mmasa Tonkins

DATE: 7-9-24 **WEATHER:** rain 71°

MONITORING WELL ID: ROST-3-MW **SAMPLE ID:** ROST3MW-POX-070924

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): 42.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.30 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 37.81 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ___ ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 5.36 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	1028	42.90	clear	Mod. HC	18.9	0.80	1.305 mS/cm uS/cm	6.75	-110.20	11.6
300	1029	42.88			18.9	0.65	1.199 mS/cm uS/cm	6.75	-114.20	12.7
600	1030	42.88			19.0	0.55	1.196 mS/cm uS/cm	6.75	-117.76	14.9
900	1031	42.88			19.1	0.48	1.191 mS/cm uS/cm	6.75	-121.87	15.6
1200	1032				19.1	0.43	1.188 mS/cm uS/cm	6.75	-123.87	15.6
1500	1033				19.1	0.40	1.185 mS/cm uS/cm	6.76	-125.73	13.8
1800	1034				19.2	0.37	1.183 mS/cm uS/cm	6.76	-127.40	13.5
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

7/9/24

Start Time: 1028 **Elapsed Time (min):** 6 **Water Quality Meter ID & SN:** YSI ProDSS -- 41395/223344

Stop Time: 1034 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 7-9-24

SAMPLING DATA

Sample Date: 7-9-24 **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:** none

VOA Vials, No Headspace ☒ **Initials:** m

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 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-9-2024 WEATHER: 69°F Rain

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-070924

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 45.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.02 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 34.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 2.37 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		

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	1341	43.10	Clear	Moderate	20.0	0.99	1.586 mS/cm uS/cm	6.90	-93.57	21.66
300	1342	43.12	↓	↓	20.1	0.54	1.587 mS/cm uS/cm	6.90	-100.9	14.76
600	1343	43.15			20.4	0.42	1.592 mS/cm uS/cm	6.90	-104.3	10.47
900	1344	43.18			20.2	0.35	1.593 mS/cm uS/cm	6.90	-107.6	16.39
1200	1345	43.18			20.2	0.30	1.588 mS/cm uS/cm	6.90	-110.3	13.20
1500	1346	43.18			20.3	0.28	1.583 mS/cm uS/cm	6.90	-112.7	8.64
							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			

JM 7-9-24

Start Time: 1341 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 41395/223344

Stop Time: 1346 Average Purge Rate (mL/min): 300 Date Calibrated: 7-9-2024

SAMPLING DATA

Sample Date: 7-9-24 Sample Time: 1350 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 Water came out Pure black w/ Strong odor. Purged until clear (5 min).

Estimated Total Purge Volume: 3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 07-10-24 WEATHER: Clear, 68°F

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-071024

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): 41.78 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.39 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): 3.72 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0928	42.12	Clear	V.Slight	20.2	4.40	1.584 mS/cm uS/cm	6.83	111.61	18.87
300	0929	42.12			20.2	3.95	1.585 mS/cm uS/cm	6.83	107.88	23.07
600	0930	42.12			20.3	3.58	1.588 mS/cm uS/cm	6.84	104.96	37.65
900	0931				20.3	3.23	1.588 mS/cm uS/cm	6.85	101.82	22.74
1200	0932				20.2	2.83	1.590 mS/cm uS/cm	6.85	98.07	10.58
1500	0933				20.1	2.46	1.591 mS/cm uS/cm	6.85	93.52	10.27
1800	0934				20.1	2.17	1.592 mS/cm uS/cm	6.86	88.95	4.51
2100	0935				20.1	1.91	1.592 mS/cm uS/cm	6.86	82.14	1.16
2400	0936				20.1	1.71	1.592 mS/cm uS/cm	6.86	74.45	0
2700	0937				20.1	1.54	1.592 mS/cm uS/cm	6.86	65.97	0
3000	0938				20.1	1.40	1.591 mS/cm uS/cm	6.86	58.35	0
3300	0939				20.1	1.28	1.590 mS/cm uS/cm	6.87	51.26	0
3600	0940				20.1	1.19	1.590 mS/cm uS/cm	6.87	44.72	0
3900	0941				20.1	1.11	1.589 mS/cm uS/cm	6.87	38.72	0
4200	0942				20.1	1.07	1.588 mS/cm uS/cm	6.87	32.97	0
4500	0943				20.2	1.02	1.588 mS/cm uS/cm	6.87	27.70	0

Start Time: 09:28 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 22334/43195

Stop Time: 09:43 Average Purge Rate (mL/min): 300 Date Calibrated: 07-10-24

SAMPLING DATA

Sample Date: 07-10-24 Sample Time: 09:50 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 3Q24 GW PROJECT NUMBER: 60721927 - 3.3.1/2/3 FIELD PERSONNEL: MMazza TJenkins

DATE: 7-9-24 WEATHER: rain 70°

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG-ROX-070924

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): 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): ND 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): 1.50 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): 44.03 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	0913	43.05	clear	mod. HC	20.6	0.61	1.303 mS/cm uS/cm	7.01	-134.47	17.8
300	0914	43.05			20.6	0.51	1.301 mS/cm uS/cm	7.02	-142.06	11.0
600	0915	43.05			20.7	0.48	1.301 mS/cm uS/cm	7.03	-145.99	8.5
900	0916				20.8	0.44	1.301 mS/cm uS/cm	7.04	-148.91	10.9
1200	0917				20.8	0.42	1.302 mS/cm uS/cm	7.05	-152.20	9.3
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			

7/9/24

Start Time: 0913 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 41395/323344

Stop Time: 0917 Average Purge Rate (mL/min): 300 Date Calibrated: 7-9-24

SAMPLING DATA

Sample Date: 7-9-24 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 (Y) 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 3Q24 GW | PROJECT NUMBER: 60721927 - 3.3.1/2/3 | FIELD PERSONNEL: J. Mayer T. Jenkins

DATE: 7-15-2024 | WEATHER: 88°F Clear

MONITORING WELL ID: T-12 | SAMPLE ID: T12-ROX-071524

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): 46.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 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: 0.0 ppm
Screen Length: 26 ft		
Water Column Height (not including NAPL): 26.33 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)	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	1036	46.55	Clear	Strong	24.3	1.39	1.424 mS/cm uS/cm	6.72	-108.8	14.35
300	1037				24.8	0.83	1.415 mS/cm uS/cm	6.74	-115.9	16.97
600	1038				25.4	0.58	1.411 mS/cm uS/cm	6.75	-122.4	24.25
900	1039				25.3	0.53	1.416 mS/cm uS/cm	6.75	-124.2	30.40
1200	1040				25.2	2.47	1.421 mS/cm uS/cm	6.71	-126.2	41.77
1500	1041				25.3	0.43	1.424 mS/cm uS/cm	6.76	-127.9	6.54
							mS/cm uS/cm			
							mS/cm uS/cm			
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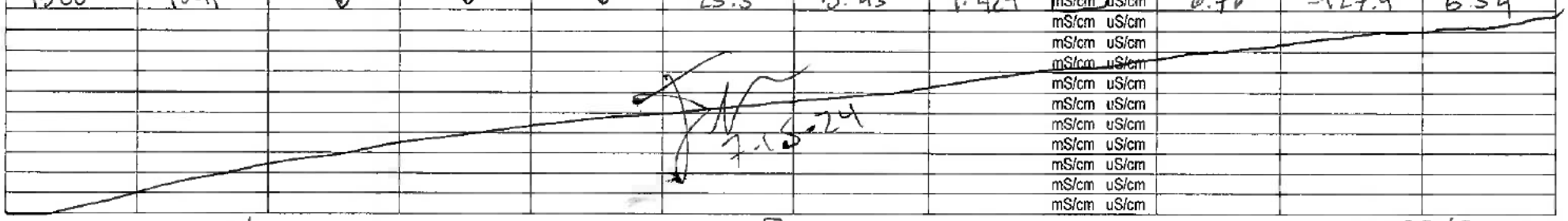

Start Time: 1036 | Elapsed Time (min): 5 | Water Quality Meter ID & SN: YSI ProDSS -- 41395/223344

Stop Time: 1041 | Average Purge Rate (mL/min): 300 | Date Calibrated: 7-15-2024

SAMPLING DATA

Sample Date: 7-15-24 | Sample Time: 1050 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QC Samples: 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: 1,320 mL

Appendix C

Data Review/Validation Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-258746-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Delaine Austin

Date Reviewed: 8/19/2024

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

Sample Identification	Sample Identification
TB-ROX-070524-8260-B	TB-ROX-070524-8011-B
MW3-ROX-070524-EB	MW3-ROX-070524
MW26-ROX-070524	MW9-ROX-070524
TB-ROX-070524-8260-A	TB-ROX-070524-8011-A
MW11-ROX-070524-EB	MW11-ROX-070524
MW12-ROX-070524	MW16-ROX-070524
MW1-ROX-070524	--

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 recovery for acetone was outside the evaluation criteria. Several VOC and SVOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in sample MW12-ROX-070524. The continuing calibration verification (CCV) for several analytes, were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-677229/1002	VOCs	Acetone	**154**	NA	43-150

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW12-ROX-070524 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
MW12-ROX-070524 MS/MSD	VOCs	Acetone	**36/40**	10	43-150/30
MW12-ROX-070524 MS/MSD	VOCs	2-Butanone (MEK)	**50**/56	11	55-150/30
MW12-ROX-070524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW12-ROX-070524 MS/MSD	VOCs	Dichlorodifluoromethane	105/61	**52**	16-150/31
MW12-ROX-070524 MS/MSD	VOCs	2-Hexanone	**51/57**	11	65-140/30
MW12-ROX-070524 MS/MSD	SVOCs	Aniline	**28/24**	19	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	Benzoic acid	**48**/52	6	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	Benzyl alcohol	**17/19**	10	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	4-Chloroaniline	**33/34**	1	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	3,3'-Dichlorobenzidine	**39/35**	11	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	2,4-Dimethylphenol	**42/47**	8	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	1,4-Dioxane	**39/43**	8	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	Hexachlorocyclopentadiene	**42**/55	24	50-150/40

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW12-ROX-070524 MS/MSD	SVOCs	Phenol	**39/43**	7	50-150/40
MW12-ROX-070524 MS/MSD	SVOCs	Pyridine	**34/36**	4	50-150/40

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject 2-chloroethyl vinyl ether due to acceptable LCS recoveries and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-070524	VOCs	Acetone	**UJ**
MW12-ROX-070524	VOCs	2-Butanone (MEK)	**UJ**
MW12-ROX-070524	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW12-ROX-070524	VOCs	2-Hexanone	**UJ**
MW12-ROX-070524	SVOCs	Aniline	**UJ**
MW12-ROX-070524	SVOCs	Benzoic acid	**UJ**
MW12-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW12-ROX-070524	SVOCs	4-Chloroaniline	**UJ**
MW12-ROX-070524	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW12-ROX-070524	SVOCs	2,4-Dimethylphenol	**UJ**
MW12-ROX-070524	SVOCs	1,4-Dioxane	**UJ**
MW12-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW12-ROX-070524	SVOCs	Phenol	**UJ**
MW12-ROX-070524	SVOCs	Pyridine	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for benzyl alcohol and hexachlorocyclopentadiene, were outside evaluation criteria, biased low. Benzyl alcohol and hexachlorocyclopentadiene in sample MW12-ROX-070524 were previously qualified in Section 7.0 of this data review due to MS/MSD outside evaluation criteria; no further qualification of these analytes was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW3-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW26-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW26-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW9-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW9-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW11-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW11-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW16-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW16-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW1-ROX-070524	SVOCs	Benzyl alcohol	**UJ**
MW1-ROX-070524	SVOCs	Hexachlorocyclopentadiene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/12/2024 9:26:31 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-258746-1

Reviewed 08/26/2024
VA

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

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Job Narrative
400-258746-1

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 7/6/2024 8:31 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.4°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-070524-8260-B (400-258746-1), MW3-ROX-070524-EB (400-258746-3), MW3-ROX-070524 (400-258746-4), MW26-ROX-070524 (400-258746-5), MW9-ROX-070524 (400-258746-6), TB-ROX-070524-8260-A (400-258746-7), MW11-ROX-070524-EB (400-258746-9), MW11-ROX-070524 (400-258746-10) and MW16-ROX-070524 (400-258746-12). 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 400-674014 was outside method criteria for the following analyte(s): Bromomethane and Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-677229 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-677229 recovered above the upper control limit for Acetone and Acrolein. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-677352 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 400-677352 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) recoveries for analytical batch 400-677352 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-677352 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: MW12-ROX-070524 (400-258746-11) and MW1-ROX-070524 (400-258746-13). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA

Job ID: 400-258746-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-677378 recovered above the upper control limit for 1,2-Diphenylhydrazine (as Azobenzene), 2-Methylphenol, 3 & 4 Methylphenol, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Nitrobenzene, N-Nitrosodimethylamine and N-Nitrosodi-n-propylamine. 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 400-677378 recovered outside acceptance criteria, low biased, for Benzyl alcohol 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 400-677247 and analytical batch 400-677378 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.

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 400-677152 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: 400-258746-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-258746-1	TB-ROX-070524-8260-B	Water	07/05/24 12:00	07/06/24 08:31
400-258746-2	TB-ROX-070524-8011-B	Water	07/05/24 12:00	07/06/24 08:31
400-258746-3	MW3-ROX-070524-EB	Water	07/05/24 08:55	07/06/24 08:31
400-258746-4	MW3-ROX-070524	Water	07/05/24 10:10	07/06/24 08:31
400-258746-5	MW26-ROX-070524	Water	07/05/24 11:15	07/06/24 08:31
400-258746-6	MW9-ROX-070524	Water	07/05/24 13:00	07/06/24 08:31
400-258746-7	TB-ROX-070524-8260-A	Water	07/05/24 12:00	07/06/24 08:31
400-258746-8	TB-ROX-070524-8011-A	Water	07/05/24 12:00	07/06/24 08:31
400-258746-9	MW11-ROX-070524-EB	Water	07/05/24 08:30	07/06/24 08:31
400-258746-10	MW11-ROX-070524	Water	07/05/24 09:25	07/06/24 08:31
400-258746-11	MW12-ROX-070524	Water	07/05/24 10:30	07/06/24 08:31
400-258746-12	MW16-ROX-070524	Water	07/05/24 12:55	07/06/24 08:31
400-258746-13	MW1-ROX-070524	Water	07/05/24 13:45	07/06/24 08:31

Detection Summary

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-B — Lab Sample ID: 400-258746-1

No Detections.

Client Sample ID: TB-ROX-070524-8011-B — Lab Sample ID: 400-258746-2

No Detections.

Client Sample ID: MW3-ROX-070524-EB — Lab Sample ID: 400-258746-3

No Detections.

Client Sample ID: MW3-ROX-070524 — Lab Sample ID: 400-258746-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.25	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: MW26-ROX-070524 — Lab Sample ID: 400-258746-5

No Detections.

Client Sample ID: MW9-ROX-070524 — Lab Sample ID: 400-258746-6

No Detections.

Client Sample ID: TB-ROX-070524-8260-A — Lab Sample ID: 400-258746-7

No Detections.

Client Sample ID: TB-ROX-070524-8011-A — Lab Sample ID: 400-258746-8

No Detections.

Client Sample ID: MW11-ROX-070524-EB — Lab Sample ID: 400-258746-9

No Detections.

Client Sample ID: MW11-ROX-070524 — Lab Sample ID: 400-258746-10

No Detections.

Client Sample ID: MW12-ROX-070524 — Lab Sample ID: 400-258746-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	0.052	J	0.19	0.036	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.045	J	0.19	0.026	ug/L	1		8270E SIM	Total/NA
Chrysene	0.038	J	0.19	0.032	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.048	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW16-ROX-070524 — Lab Sample ID: 400-258746-12

No Detections.

Client Sample ID: MW1-ROX-070524 — Lab Sample ID: 400-258746-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.22	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: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-B
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-1
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			07/09/24 12:05	1
Acrolein	ND		20	3.3	ug/L			07/09/24 12:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 12:05	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 12:05	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 12:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 12:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 12:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 12:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 12:05	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 12:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 12:05	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 12:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 12:05	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 12:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 12:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 12:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 12:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 12:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 12:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 12:05	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 12:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 12:05	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 12:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 12:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 12:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 12:05	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 12:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 12:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 12:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 12:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 12:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 12:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 12:05	1

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-B
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-1
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			07/09/24 12:05	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 12:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 12:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 12:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 12:05	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 12:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 12:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 12:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 12:05	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 12:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 12:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 12:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 12:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 12:05	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 12:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 12:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 12:05*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/09/24 12:05*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/09/24 12:05*	*1*

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8011-B
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/08/24 09:40	07/08/24 18:40	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/08/24 09:40	07/08/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*128*		*51 - 149*	*07/08/24 09:40*	*07/08/24 18:40*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524-EB
Date Collected: 07/05/24 08:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-3
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			07/09/24 12:30	1
Acrolein	ND		20	3.3	ug/L			07/09/24 12:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 12:30	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 12:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 12:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 12:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 12:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 12:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 12:30	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 12:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 12:30	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 12:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 12:30	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 12:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 12:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 12:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 12:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 12:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 12:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 12:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 12:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 12:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 12:30	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 12:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 12:30	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 12:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 12:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 12:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 12:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 12:30	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 12:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 12:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 12:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 12:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 12:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 12:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 12:30	1

Client Sample ID: MW3-ROX-070524-EB
Date Collected: 07/05/24 08:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-3
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			07/09/24 12:30	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 12:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 12:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 12:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 12:30	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 12:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 12:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 12:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 12:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 12:30	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 12:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 12:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 12:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 12:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 12:30	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 12:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 12:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 12:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 12:30*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/09/24 12:30*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/09/24 12:30*	*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		07/09/24 09:54	07/10/24 17:58	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/09/24 09:54	07/10/24 17:58	1
Anthracene	ND		0.20	0.046	ug/L		07/09/24 09:54	07/10/24 17:58	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 17:58	1
Benzo[a]pyrene	ND		0.20	0.062	ug/L		07/09/24 09:54	07/10/24 17:58	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/09/24 09:54	07/10/24 17:58	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/09/24 09:54	07/10/24 17:58	1
Benzo[k]fluoranthene	ND		0.20	0.060	ug/L		07/09/24 09:54	07/10/24 17:58	1
Chrysene	ND		0.20	0.032	ug/L		07/09/24 09:54	07/10/24 17:58	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 17:58	1
Fluoranthene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 17:58	1
Fluorene	ND		0.20	0.087	ug/L		07/09/24 09:54	07/10/24 17:58	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 17:58	1
Phenanthrene	ND		0.20	0.088	ug/L		07/09/24 09:54	07/10/24 17:58	1
Pyrene	ND		0.20	0.038	ug/L		07/09/24 09:54	07/10/24 17:58	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		07/09/24 09:54	07/10/24 17:58	1
2-Methylnaphthalene	ND		0.20	0.064	ug/L		07/09/24 09:54	07/10/24 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*18 - 147*	*07/09/24 09:54*	*07/10/24 17:58*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*07/09/24 09:54*	*07/10/24 17:58*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524-EB

Date Collected: 07/05/24 08:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-3

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*	*07/09/24 09:54*	*07/10/24 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
Benzenethiol	ND		9.8	9.7	ug/L		07/09/24 09:54	07/10/24 16:21	1
Benzoic acid	ND		29	23	ug/L		07/09/24 09:54	07/10/24 16:21	1
Benzyl alcohol	ND		9.8	7.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 16:21	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/09/24 09:54	07/10/24 16:21	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/09/24 09:54	07/10/24 16:21	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/09/24 09:54	07/10/24 16:21	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/09/24 09:54	07/10/24 16:21	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 16:21	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/09/24 09:54	07/10/24 16:21	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 16:21	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 16:21	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 16:21	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/09/24 09:54	07/10/24 16:21	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 16:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 16:21	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		07/09/24 09:54	07/10/24 16:21	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
Indene	ND		9.8	3.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
Isophorone	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/09/24 09:54	07/10/24 16:21	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 16:21	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:21	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:21	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 16:21	1
N-Nitrosodimethylamine	ND		9.8	2.1	ug/L		07/09/24 09:54	07/10/24 16:21	1

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524-EB

Date Collected: 07/05/24 08:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		07/09/24 09:54	07/10/24 16:21	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 16:21	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 16:21	1
Phenol	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 16:21	1
Pyridine	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 16:21	1
Quinoline	ND		9.8	2.3	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 16:21	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/09/24 09:54	07/10/24 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*21 - 114*	*07/09/24 09:54*	*07/10/24 16:21*	*1*
2-Fluorophenol	*49*		*10 - 105*	*07/09/24 09:54*	*07/10/24 16:21*	*1*
Nitrobenzene-d5	*72*		*16 - 127*	*07/09/24 09:54*	*07/10/24 16:21*	*1*
Phenol-d5	*37*		*10 - 129*	*07/09/24 09:54*	*07/10/24 16:21*	*1*
Terphenyl-d14	*90*		*13 - 150*	*07/09/24 09:54*	*07/10/24 16:21*	*1*
2,4,6-Tribromophenol	*47*		*10 - 150*	*07/09/24 09:54*	*07/10/24 16:21*	*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		0.035	0.020	ug/L		07/08/24 09:40	07/08/24 19:01	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/08/24 09:40	07/08/24 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*07/08/24 09:40*	*07/08/24 19:01*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524
Date Collected: 07/05/24 10:10
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-4
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			07/09/24 16:58	1
Acrolein	ND		20	3.3	ug/L			07/09/24 16:58	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 16:58	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 16:58	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 16:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 16:58	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 16:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 16:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 16:58	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 16:58	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 16:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 16:58	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 16:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 16:58	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 16:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 16:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 16:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 16:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 16:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 16:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 16:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 16:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 16:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 16:58	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 16:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 16:58	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 16:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 16:58	1
Methyl tert-butyl ether	**0.25**	**J**	1.0	0.22	ug/L			07/09/24 16:58	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 16:58	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 16:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 16:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 16:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 16:58	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 16:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 16:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 16:58	1

Client Sample ID: MW3-ROX-070524
Date Collected: 07/05/24 10:10
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-4
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			07/09/24 16:58	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 16:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 16:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 16:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 16:58	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 16:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 16:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 16:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 16:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 16:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 16:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 16:58	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 16:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 16:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 16:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 16:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 16:58	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 16:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 16:58	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*72 - 130*		*07/09/24 16:58*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/09/24 16:58*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/09/24 16:58*	*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	0.097	ug/L		07/09/24 09:54	07/10/24 18:19	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/09/24 09:54	07/10/24 18:19	1
Anthracene	ND		0.20	0.046	ug/L		07/09/24 09:54	07/10/24 18:19	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 18:19	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/09/24 09:54	07/10/24 18:19	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/09/24 09:54	07/10/24 18:19	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/09/24 09:54	07/10/24 18:19	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/09/24 09:54	07/10/24 18:19	1
Chrysene	ND		0.20	0.032	ug/L		07/09/24 09:54	07/10/24 18:19	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 18:19	1
Fluoranthene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 18:19	1
Fluorene	ND		0.20	0.087	ug/L		07/09/24 09:54	07/10/24 18:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 18:19	1
Phenanthrene	ND		0.20	0.088	ug/L		07/09/24 09:54	07/10/24 18:19	1
Pyrene	ND		0.20	0.038	ug/L		07/09/24 09:54	07/10/24 18:19	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		07/09/24 09:54	07/10/24 18:19	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/09/24 09:54	07/10/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*07/09/24 09:54*	*07/10/24 18:19*	*1*
2-Fluorobiphenyl	*73*		*15 - 128*	*07/09/24 09:54*	*07/10/24 18:19*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524
Date Collected: 07/05/24 10:10
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-4
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	07/09/24 09:54	07/10/24 18:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
Benzenethiol	ND		9.8	9.7	ug/L		07/09/24 09:54	07/10/24 16:46	1
Benzoic acid	ND		29	23	ug/L		07/09/24 09:54	07/10/24 16:46	1
Benzyl alcohol	ND	UJ	9.8	7.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 16:46	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/09/24 09:54	07/10/24 16:46	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/09/24 09:54	07/10/24 16:46	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/09/24 09:54	07/10/24 16:46	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/09/24 09:54	07/10/24 16:46	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 16:46	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/09/24 09:54	07/10/24 16:46	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 16:46	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 16:46	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 16:46	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/09/24 09:54	07/10/24 16:46	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 16:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 16:46	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/09/24 09:54	07/10/24 16:46	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
Indene	ND		9.8	3.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
Isophorone	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/09/24 09:54	07/10/24 16:46	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 16:46	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 16:46	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 16:46	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 16:46	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		07/09/24 09:54	07/10/24 16:46	1

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

Job ID: 400-258746-1

Client Sample ID: MW3-ROX-070524

Lab Sample ID: 400-258746-4

Date Collected: 07/05/24 10:10

Matrix: Water

Date Received: 07/06/24 08:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		07/09/24 09:54	07/10/24 16:46	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 16:46	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 16:46	1
Phenol	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 16:46	1
Pyridine	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 16:46	1
Quinoline	ND		9.8	2.3	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 16:46	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/09/24 09:54	07/10/24 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*07/09/24 09:54*	*07/10/24 16:46*	*1*
2-Fluorophenol	*47*		*10 - 105*	*07/09/24 09:54*	*07/10/24 16:46*	*1*
Nitrobenzene-d5	*68*		*16 - 127*	*07/09/24 09:54*	*07/10/24 16:46*	*1*
Phenol-d5	*35*		*10 - 129*	*07/09/24 09:54*	*07/10/24 16:46*	*1*
Terphenyl-d14	*91*		*13 - 150*	*07/09/24 09:54*	*07/10/24 16:46*	*1*
2,4,6-Tribromophenol	*49*		*10 - 150*	*07/09/24 09:54*	*07/10/24 16:46*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 19:23	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/08/24 09:40	07/08/24 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*116*		*51 - 149*	*07/08/24 09:40*	*07/08/24 19:23*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW26-ROX-070524
Date Collected: 07/05/24 11:15
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-5
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			07/09/24 17:23	1
Acrolein	ND		20	3.3	ug/L			07/09/24 17:23	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 17:23	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 17:23	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 17:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 17:23	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 17:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 17:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 17:23	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 17:23	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 17:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 17:23	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 17:23	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 17:23	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 17:23	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 17:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 17:23	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 17:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 17:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 17:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 17:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 17:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 17:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 17:23	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 17:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 17:23	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 17:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 17:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 17:23	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 17:23	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 17:23	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 17:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 17:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 17:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 17:23	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 17:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 17:23	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 17:23	1

Client Sample ID: MW26-ROX-070524
Date Collected: 07/05/24 11:15
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-5
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			07/09/24 17:23	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 17:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 17:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 17:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 17:23	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 17:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 17:23	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 17:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 17:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 17:23	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 17:23	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 17:23	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 17:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 17:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 17:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 17:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 17:23	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 17:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 17:23	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 17:23*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/09/24 17:23*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/09/24 17:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/09/24 09:54	07/10/24 18:40	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/09/24 09:54	07/10/24 18:40	1
Anthracene	ND		0.19	0.046	ug/L		07/09/24 09:54	07/10/24 18:40	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 18:40	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/09/24 09:54	07/10/24 18:40	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/09/24 09:54	07/10/24 18:40	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/09/24 09:54	07/10/24 18:40	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/09/24 09:54	07/10/24 18:40	1
Chrysene	ND		0.19	0.032	ug/L		07/09/24 09:54	07/10/24 18:40	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/09/24 09:54	07/10/24 18:40	1
Fluoranthene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 18:40	1
Fluorene	ND		0.19	0.087	ug/L		07/09/24 09:54	07/10/24 18:40	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 18:40	1
Phenanthrene	ND		0.19	0.087	ug/L		07/09/24 09:54	07/10/24 18:40	1
Pyrene	ND		0.19	0.038	ug/L		07/09/24 09:54	07/10/24 18:40	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/09/24 09:54	07/10/24 18:40	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/09/24 09:54	07/10/24 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*18 - 147*	*07/09/24 09:54*	*07/10/24 18:40*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*07/09/24 09:54*	*07/10/24 18:40*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW26-ROX-070524

Date Collected: 07/05/24 11:15
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-5

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*10 - 144*	*07/09/24 09:54*	*07/10/24 18:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
Benzenethiol	ND		9.7	9.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
Benzoic acid	ND		29	23	ug/L		07/09/24 09:54	07/10/24 17:12	1
Benzyl alcohol	ND	UJ	9.7	7.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 17:12	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Bromophenyl phenyl ether	ND		9.7	8.4	ug/L		07/09/24 09:54	07/10/24 17:12	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Chloroaniline	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Chloro-3-methylphenol	ND		9.7	5.2	ug/L		07/09/24 09:54	07/10/24 17:12	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 17:12	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/09/24 09:54	07/10/24 17:12	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4-Dimethylphenol	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4-Dinitrotoluene	ND		9.7	5.0	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 17:12	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/09/24 09:54	07/10/24 17:12	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/09/24 09:54	07/10/24 17:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 17:12	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/09/24 09:54	07/10/24 17:12	1
Hexachlorocyclopentadiene	ND	UJ	19	4.4	ug/L		07/09/24 09:54	07/10/24 17:12	1
Hexachloroethane	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
Indene	ND		9.7	3.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
Isophorone	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
2-Nitroaniline	ND		9.7	4.9	ug/L		07/09/24 09:54	07/10/24 17:12	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Nitroaniline	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 17:12	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 17:12	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 17:12	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/09/24 09:54	07/10/24 17:12	1

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

Job ID: 400-258746-1

Client Sample ID: MW26-ROX-070524
Date Collected: 07/05/24 11:15
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-5
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	2.4	ug/L		07/09/24 09:54	07/10/24 17:12	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 17:12	1
Pentachlorophenol	ND		19	12	ug/L		07/09/24 09:54	07/10/24 17:12	1
Phenol	ND		9.7	4.1	ug/L		07/09/24 09:54	07/10/24 17:12	1
Pyridine	ND		9.7	9.7	ug/L		07/09/24 09:54	07/10/24 17:12	1
Quinoline	ND		9.7	2.3	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 17:12	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/09/24 09:54	07/10/24 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*07/09/24 09:54*	*07/10/24 17:12*	*1*
2-Fluorophenol	*37*		*10 - 105*	*07/09/24 09:54*	*07/10/24 17:12*	*1*
Nitrobenzene-d5	*71*		*16 - 127*	*07/09/24 09:54*	*07/10/24 17:12*	*1*
Phenol-d5	*26*		*10 - 129*	*07/09/24 09:54*	*07/10/24 17:12*	*1*
Terphenyl-d14	*94*		*13 - 150*	*07/09/24 09:54*	*07/10/24 17:12*	*1*
2,4,6-Tribromophenol	*50*		*10 - 150*	*07/09/24 09:54*	*07/10/24 17:12*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 19:45	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/08/24 09:40	07/08/24 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*128*		*51 - 149*	*07/08/24 09:40*	*07/08/24 19:45*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW9-ROX-070524
Date Collected: 07/05/24 13:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-6
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			07/09/24 17:47	1
Acrolein	ND		20	3.3	ug/L			07/09/24 17:47	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 17:47	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 17:47	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 17:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 17:47	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 17:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 17:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 17:47	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 17:47	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 17:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 17:47	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 17:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 17:47	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 17:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 17:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 17:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 17:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 17:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 17:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 17:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 17:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 17:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 17:47	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 17:47	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 17:47	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 17:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 17:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 17:47	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 17:47	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 17:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 17:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 17:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 17:47	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 17:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 17:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 17:47	1

Client Sample ID: MW9-ROX-070524

Date Collected: 07/05/24 13:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-6
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			07/09/24 17:47	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 17:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 17:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 17:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 17:47	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 17:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 17:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 17:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 17:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 17:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 17:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 17:47	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 17:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 17:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 17:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 17:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 17:47	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 17:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 17:47	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*07/09/24 17:47*	*1*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/11/24 17:03*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/09/24 17:47*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/11/24 17:03*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/09/24 17:47*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/11/24 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	0.097	ug/L		07/09/24 09:54	07/10/24 19:01	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/09/24 09:54	07/10/24 19:01	1
Anthracene	ND		0.20	0.046	ug/L		07/09/24 09:54	07/10/24 19:01	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 19:01	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/09/24 09:54	07/10/24 19:01	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/09/24 09:54	07/10/24 19:01	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/09/24 09:54	07/10/24 19:01	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/09/24 09:54	07/10/24 19:01	1
Chrysene	ND		0.20	0.032	ug/L		07/09/24 09:54	07/10/24 19:01	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 19:01	1
Fluoranthene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 19:01	1
Fluorene	ND		0.20	0.087	ug/L		07/09/24 09:54	07/10/24 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 19:01	1
Phenanthrene	ND		0.20	0.088	ug/L		07/09/24 09:54	07/10/24 19:01	1
Pyrene	ND		0.20	0.038	ug/L		07/09/24 09:54	07/10/24 19:01	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/09/24 09:54	07/10/24 19:01	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/09/24 09:54	07/10/24 19:01	1

Client Sample ID: MW9-ROX-070524

Date Collected: 07/05/24 13:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*18 - 147*	*07/09/24 09:54*	*07/10/24 19:01*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/09/24 09:54*	*07/10/24 19:01*	*1*
Nitrobenzene-d5	*81*		*10 - 144*	*07/09/24 09:54*	*07/10/24 19:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
Benzenethiol	ND		9.8	9.7	ug/L		07/09/24 09:54	07/10/24 17:37	1
Benzoic acid	ND		29	24	ug/L		07/09/24 09:54	07/10/24 17:37	1
Benzyl alcohol	ND	UJ	9.8	7.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Bromophenyl phenyl ether	ND		9.8	8.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/09/24 09:54	07/10/24 17:37	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 17:37	1
Dibenz[a,h]acridine	ND		9.8	2.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 17:37	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/09/24 09:54	07/10/24 17:37	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/09/24 09:54	07/10/24 17:37	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
Indene	ND		9.8	3.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
Isophorone	ND		9.8	5.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/09/24 09:54	07/10/24 17:37	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/09/24 09:54	07/10/24 17:37	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/09/24 09:54	07/10/24 17:37	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/09/24 09:54	07/10/24 17:37	1

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

Job ID: 400-258746-1

Client Sample ID: MW9-ROX-070524

Date Collected: 07/05/24 13:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-6

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		9.8	2.2	ug/L		07/09/24 09:54	07/10/24 17:37	1
N-Nitrosodi-n-propylamine	ND		9.8	2.5	ug/L		07/09/24 09:54	07/10/24 17:37	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/09/24 09:54	07/10/24 17:37	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 17:37	1
Phenol	ND		9.8	4.1	ug/L		07/09/24 09:54	07/10/24 17:37	1
Pyridine	ND		9.8	9.8	ug/L		07/09/24 09:54	07/10/24 17:37	1
Quinoline	ND		9.8	2.4	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/09/24 09:54	07/10/24 17:37	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/09/24 09:54	07/10/24 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*07/09/24 09:54*	*07/10/24 17:37*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/09/24 09:54*	*07/10/24 17:37*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*07/09/24 09:54*	*07/10/24 17:37*	*1*
Phenol-d5	*35*		*10 - 129*	*07/09/24 09:54*	*07/10/24 17:37*	*1*
Terphenyl-d14	*95*		*13 - 150*	*07/09/24 09:54*	*07/10/24 17:37*	*1*
2,4,6-Tribromophenol	*49*		*10 - 150*	*07/09/24 09:54*	*07/10/24 17:37*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.037	0.021	ug/L		07/08/24 09:40	07/08/24 20:06	1
1,2-Dibromoethane	ND		0.025	0.019	ug/L		07/08/24 09:40	07/08/24 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*51 - 149*	*07/08/24 09:40*	*07/08/24 20:06*	*1*

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-A
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-7
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			07/09/24 12:54	1
Acrolein	ND		20	3.3	ug/L			07/09/24 12:54	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 12:54	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 12:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 12:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 12:54	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 12:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 12:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 12:54	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:54	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 12:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 12:54	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 12:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 12:54	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 12:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 12:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 12:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 12:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 12:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 12:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 12:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 12:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 12:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 12:54	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 12:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 12:54	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 12:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 12:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 12:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 12:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 12:54	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 12:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 12:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 12:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 12:54	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 12:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 12:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 12:54	1

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-A
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-7
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			07/09/24 12:54	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 12:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 12:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 12:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 12:54	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 12:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 12:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 12:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 12:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 12:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 12:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 12:54	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 12:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 12:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 12:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 12:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 12:54	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 12:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 12:54	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 130*		*07/09/24 12:54*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/09/24 12:54*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/09/24 12:54*	*1*

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8011-A
Date Collected: 07/05/24 12:00
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-8
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 20:28	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/08/24 09:40	07/08/24 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*121*		*51 - 149*	*07/08/24 09:40*	*07/08/24 20:28*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524-EB
Date Collected: 07/05/24 08:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-9
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			07/09/24 11:41	1
Acrolein	ND		20	3.3	ug/L			07/09/24 11:41	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 11:41	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 11:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 11:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 11:41	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 11:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 11:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 11:41	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 11:41	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 11:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 11:41	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 11:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 11:41	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 11:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 11:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 11:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 11:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 11:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 11:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 11:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 11:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 11:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 11:41	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 11:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 11:41	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 11:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 11:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 11:41	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 11:41	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 11:41	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 11:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 11:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 11:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 11:41	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 11:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 11:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 11:41	1

Client Sample ID: MW11-ROX-070524-EB

Lab Sample ID: 400-258746-9

Date Collected: 07/05/24 08:30

Matrix: Water

Date Received: 07/06/24 08:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/09/24 11:41	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 11:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 11:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 11:41	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 11:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 11:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 11:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 11:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 11:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 11:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 11:41	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 11:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 11:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 11:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 11:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 11:41	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 11:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 11:41	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 11:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 11:41*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/09/24 11:41*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/09/24 11:41*	*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	0.098	ug/L		07/09/24 09:54	07/10/24 19:22	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/09/24 09:54	07/10/24 19:22	1
Anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 19:22	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 19:22	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/09/24 09:54	07/10/24 19:22	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/09/24 09:54	07/10/24 19:22	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/09/24 09:54	07/10/24 19:22	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/09/24 09:54	07/10/24 19:22	1
Chrysene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 19:22	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/09/24 09:54	07/10/24 19:22	1
Fluoranthene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 19:22	1
Fluorene	ND		0.20	0.088	ug/L		07/09/24 09:54	07/10/24 19:22	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 19:22	1
Phenanthrene	ND		0.20	0.089	ug/L		07/09/24 09:54	07/10/24 19:22	1
Pyrene	ND		0.20	0.039	ug/L		07/09/24 09:54	07/10/24 19:22	1
1-Methylnaphthalene	ND		0.20	0.079	ug/L		07/09/24 09:54	07/10/24 19:22	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/09/24 09:54	07/10/24 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*18 - 147*	*07/09/24 09:54*	*07/10/24 19:22*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*07/09/24 09:54*	*07/10/24 19:22*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524-EB

Date Collected: 07/05/24 08:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-9

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*10 - 144*	*07/09/24 09:54*	*07/10/24 19:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
Benzenethiol	ND		9.9	9.8	ug/L		07/09/24 09:54	07/10/24 18:04	1
Benzoic acid	ND		30	24	ug/L		07/09/24 09:54	07/10/24 18:04	1
Benzyl alcohol	ND		9.9	7.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
Bis(2-chloroethoxy)methane	ND		9.9	4.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		07/09/24 09:54	07/10/24 18:04	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		07/09/24 09:54	07/10/24 18:04	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		07/09/24 09:54	07/10/24 18:04	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Chloroaniline	ND		9.9	4.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		07/09/24 09:54	07/10/24 18:04	1
2-Chlorophenol	ND		9.9	4.1	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		07/09/24 09:54	07/10/24 18:04	1
Dibenzofuran	ND		9.9	4.0	ug/L		07/09/24 09:54	07/10/24 18:04	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4-Dichlorophenol	ND		9.9	4.3	ug/L		07/09/24 09:54	07/10/24 18:04	1
Diethyl phthalate	ND		9.9	4.4	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4-Dimethylphenol	ND		9.9	5.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
Di-n-butyl phthalate	ND		9.9	4.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4-Dinitrotoluene	ND		9.9	5.1	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		07/09/24 09:54	07/10/24 18:04	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		07/09/24 09:54	07/10/24 18:04	1
1,4-Dioxane	ND		9.9	4.3	ug/L		07/09/24 09:54	07/10/24 18:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		07/09/24 09:54	07/10/24 18:04	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/09/24 09:54	07/10/24 18:04	1
Hexachloroethane	ND		9.9	5.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
Indene	ND		9.9	3.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
Isophorone	ND		9.9	5.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
2-Methylphenol	ND		9.9	3.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
2-Nitroaniline	ND		9.9	5.0	ug/L		07/09/24 09:54	07/10/24 18:04	1
3-Nitroaniline	ND		9.9	4.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Nitroaniline	ND		9.9	4.1	ug/L		07/09/24 09:54	07/10/24 18:04	1
Nitrobenzene	ND		9.9	4.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
2-Nitrophenol	ND		9.9	4.6	ug/L		07/09/24 09:54	07/10/24 18:04	1
4-Nitrophenol	ND		9.9	3.3	ug/L		07/09/24 09:54	07/10/24 18:04	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		07/09/24 09:54	07/10/24 18:04	1

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524-EB

Date Collected: 07/05/24 08:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-9

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		9.9	2.5	ug/L		07/09/24 09:54	07/10/24 18:04	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		07/09/24 09:54	07/10/24 18:04	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 18:04	1
Phenol	ND		9.9	4.2	ug/L		07/09/24 09:54	07/10/24 18:04	1
Pyridine	ND		9.9	9.9	ug/L		07/09/24 09:54	07/10/24 18:04	1
Quinoline	ND		9.9	2.4	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		07/09/24 09:54	07/10/24 18:04	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/09/24 09:54	07/10/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*07/09/24 09:54*	*07/10/24 18:04*	*1*
2-Fluorophenol	*47*		*10 - 105*	*07/09/24 09:54*	*07/10/24 18:04*	*1*
Nitrobenzene-d5	*68*		*16 - 127*	*07/09/24 09:54*	*07/10/24 18:04*	*1*
Phenol-d5	*36*		*10 - 129*	*07/09/24 09:54*	*07/10/24 18:04*	*1*
Terphenyl-d14	*91*		*13 - 150*	*07/09/24 09:54*	*07/10/24 18:04*	*1*
2,4,6-Tribromophenol	*46*		*10 - 150*	*07/09/24 09:54*	*07/10/24 18:04*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 20:49	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/08/24 09:40	07/08/24 20:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*07/08/24 09:40*	*07/08/24 20:49*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524
Date Collected: 07/05/24 09:25
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-10
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			07/09/24 16:34	1
Acrolein	ND		20	3.3	ug/L			07/09/24 16:34	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 16:34	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 16:34	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 16:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 16:34	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 16:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 16:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 16:34	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 16:34	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 16:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 16:34	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 16:34	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 16:34	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 16:34	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 16:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 16:34	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 16:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 16:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 16:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 16:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 16:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 16:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 16:34	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 16:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 16:34	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 16:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 16:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 16:34	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 16:34	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 16:34	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 16:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 16:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 16:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 16:34	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 16:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 16:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 16:34	1

Client Sample ID: MW11-ROX-070524
Date Collected: 07/05/24 09:25
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-10
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			07/09/24 16:34	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 16:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 16:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 16:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 16:34	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 16:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 16:34	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 16:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 16:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 16:34	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 16:34	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 16:34	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 16:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 16:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 16:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 16:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 16:34	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 16:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 16:34	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*07/09/24 16:34*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/09/24 16:34*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/09/24 16:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/09/24 09:54	07/10/24 19:43	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/09/24 09:54	07/10/24 19:43	1
Anthracene	ND		0.19	0.046	ug/L		07/09/24 09:54	07/10/24 19:43	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 19:43	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/09/24 09:54	07/10/24 19:43	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/09/24 09:54	07/10/24 19:43	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/09/24 09:54	07/10/24 19:43	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/09/24 09:54	07/10/24 19:43	1
Chrysene	ND		0.19	0.032	ug/L		07/09/24 09:54	07/10/24 19:43	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/09/24 09:54	07/10/24 19:43	1
Fluoranthene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 19:43	1
Fluorene	ND		0.19	0.086	ug/L		07/09/24 09:54	07/10/24 19:43	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 19:43	1
Phenanthrene	ND		0.19	0.087	ug/L		07/09/24 09:54	07/10/24 19:43	1
Pyrene	ND		0.19	0.038	ug/L		07/09/24 09:54	07/10/24 19:43	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/09/24 09:54	07/10/24 19:43	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/09/24 09:54	07/10/24 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*07/09/24 09:54*	*07/10/24 19:43*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*07/09/24 09:54*	*07/10/24 19:43*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524
Date Collected: 07/05/24 09:25
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-10
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*79*		*10 - 144*	*07/09/24 09:54*	*07/10/24 19:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/09/24 09:54	07/10/24 18:29	1
Benzenethiol	ND		9.7	9.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
Benzoic acid	ND		29	23	ug/L		07/09/24 09:54	07/10/24 18:29	1
Benzyl alcohol	ND	UJ	9.7	7.1	ug/L		07/09/24 09:54	07/10/24 18:29	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 18:29	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/09/24 09:54	07/10/24 18:29	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/09/24 09:54	07/10/24 18:29	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Chloroaniline	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 18:29	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/09/24 09:54	07/10/24 18:29	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/09/24 09:54	07/10/24 18:29	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 18:29	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/09/24 09:54	07/10/24 18:29	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		07/09/24 09:54	07/10/24 18:29	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/09/24 09:54	07/10/24 18:29	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 18:29	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/09/24 09:54	07/10/24 18:29	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/09/24 09:54	07/10/24 18:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 18:29	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/09/24 09:54	07/10/24 18:29	1
Hexachlorocyclopentadiene	ND	UJ	19	4.4	ug/L		07/09/24 09:54	07/10/24 18:29	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/09/24 09:54	07/10/24 18:29	1
Indene	ND		9.7	3.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
Isophorone	ND		9.7	5.0	ug/L		07/09/24 09:54	07/10/24 18:29	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/09/24 09:54	07/10/24 18:29	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
2-Nitroaniline	ND		9.7	4.8	ug/L		07/09/24 09:54	07/10/24 18:29	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Nitroaniline	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 18:29	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 18:29	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 18:29	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/09/24 09:54	07/10/24 18:29	1

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

Job ID: 400-258746-1

Client Sample ID: MW11-ROX-070524
Date Collected: 07/05/24 09:25
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-10
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		9.7	2.4	ug/L		07/09/24 09:54	07/10/24 18:29	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 18:29	1
Pentachlorophenol	ND		19	12	ug/L		07/09/24 09:54	07/10/24 18:29	1
Phenol	ND		9.7	4.1	ug/L		07/09/24 09:54	07/10/24 18:29	1
Pyridine	ND		9.7	9.7	ug/L		07/09/24 09:54	07/10/24 18:29	1
Quinoline	ND		9.7	2.3	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 18:29	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/09/24 09:54	07/10/24 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*07/09/24 09:54*	*07/10/24 18:29*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/09/24 09:54*	*07/10/24 18:29*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*07/09/24 09:54*	*07/10/24 18:29*	*1*
Phenol-d5	*35*		*10 - 129*	*07/09/24 09:54*	*07/10/24 18:29*	*1*
Terphenyl-d14	*93*		*13 - 150*	*07/09/24 09:54*	*07/10/24 18:29*	*1*
2,4,6-Tribromophenol	*47*		*10 - 150*	*07/09/24 09:54*	*07/10/24 18:29*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 21:11	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/08/24 09:40	07/08/24 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*07/08/24 09:40*	*07/08/24 21:11*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW12-ROX-070524
Date Collected: 07/05/24 10:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			07/10/24 11:57	1
Acrolein	ND		20	3.3	ug/L			07/10/24 11:57	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 11:57	1
Benzene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 11:57	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/10/24 11:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 11:57	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 11:57	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			07/10/24 11:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 11:57	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/10/24 11:57	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 11:57	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/10/24 11:57	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 11:57	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 11:57	1
Chloromethane	ND		1.0	0.90	ug/L			07/10/24 11:57	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 11:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 11:57	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 11:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 11:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 11:57	1
Dichlorodifluoromethane	ND	F2	1.0	0.85	ug/L			07/10/24 11:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/10/24 11:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 11:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 11:57	1
2-Hexanone	ND	F1 UJ	25	1.4	ug/L			07/10/24 11:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 11:57	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 11:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 12:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 11:57	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 11:57	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 11:57	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 11:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 11:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 11:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 11:57	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 11:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 11:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 11:57	1

Client Sample ID: MW12-ROX-070524
Date Collected: 07/05/24 10:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-11
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			07/10/24 11:57	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 11:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 11:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/10/24 11:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/10/24 11:57	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 11:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 11:57	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 11:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 11:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 11:57	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 11:57	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 11:57	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 11:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/10/24 11:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 11:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 11:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 11:57	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 11:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 11:57	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 11:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/10/24 11:57*	*1*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/11/24 12:07*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/10/24 11:57*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/11/24 12:07*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/10/24 11:57*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/11/24 12:07*	*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	0.096	ug/L		07/09/24 09:54	07/10/24 20:04	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/09/24 09:54	07/10/24 20:04	1
Anthracene	ND		0.19	0.046	ug/L		07/09/24 09:54	07/10/24 20:04	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 20:04	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/09/24 09:54	07/10/24 20:04	1
Benzo[b]fluoranthene	**0.052**	**J**	0.19	0.036	ug/L		07/09/24 09:54	07/10/24 20:04	1
Benzo[g,h,i]perylene	**0.045**	**J**	0.19	0.026	ug/L		07/09/24 09:54	07/10/24 20:04	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/09/24 09:54	07/10/24 20:04	1
Chrysene	**0.038**	**J**	0.19	0.032	ug/L		07/09/24 09:54	07/10/24 20:04	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		07/09/24 09:54	07/10/24 20:04	1
Fluoranthene	**0.048**	**J**	0.19	0.033	ug/L		07/09/24 09:54	07/10/24 20:04	1
Fluorene	ND		0.19	0.087	ug/L		07/09/24 09:54	07/10/24 20:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/09/24 09:54	07/10/24 20:04	1
Phenanthrene	ND		0.19	0.087	ug/L		07/09/24 09:54	07/10/24 20:04	1
Pyrene	ND		0.19	0.038	ug/L		07/09/24 09:54	07/10/24 20:04	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/09/24 09:54	07/10/24 20:04	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/09/24 09:54	07/10/24 20:04	1

Client Sample ID: MW12-ROX-070524

Date Collected: 07/05/24 10:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*07/09/24 09:54*	*07/10/24 20:04*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*07/09/24 09:54*	*07/10/24 20:04*	*1*
Nitrobenzene-d5	*79*		*10 - 144*	*07/09/24 09:54*	*07/10/24 20:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F1 UJ	9.7	8.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
Benzenethiol	ND		9.7	9.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
Benzoic acid	ND	F1 UJ	29	23	ug/L		07/09/24 09:54	07/10/24 15:56	1
Benzyl alcohol	ND	F1 UJ	9.7	7.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 15:56	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Bromophenyl phenyl ether	ND		9.7	8.4	ug/L		07/09/24 09:54	07/10/24 15:56	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Chloroaniline	ND	F1 UJ	9.7	4.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Chloro-3-methylphenol	ND		9.7	5.2	ug/L		07/09/24 09:54	07/10/24 15:56	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 15:56	1
3,3'-Dichlorobenzidine	ND	F1 UJ	11	11	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/09/24 09:54	07/10/24 15:56	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4-Dimethylphenol	ND	F1 UJ	9.7	5.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4-Dinitrotoluene	ND		9.7	5.0	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/09/24 09:54	07/10/24 15:56	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/09/24 09:54	07/10/24 15:56	1
1,4-Dioxane	ND	F1 UJ	9.7	4.2	ug/L		07/09/24 09:54	07/10/24 15:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 15:56	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/09/24 09:54	07/10/24 15:56	1
Hexachlorocyclopentadiene	ND	F1 UJ	19	4.4	ug/L		07/09/24 09:54	07/10/24 15:56	1
Hexachloroethane	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
Indene	ND		9.7	3.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
Isophorone	ND		9.7	5.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
2-Nitroaniline	ND		9.7	4.9	ug/L		07/09/24 09:54	07/10/24 15:56	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Nitroaniline	ND		9.7	4.0	ug/L		07/09/24 09:54	07/10/24 15:56	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/09/24 09:54	07/10/24 15:56	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/09/24 09:54	07/10/24 15:56	1

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

Job ID: 400-258746-1

Client Sample ID: MW12-ROX-070524
Date Collected: 07/05/24 10:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-11
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		9.7	2.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		07/09/24 09:54	07/10/24 15:56	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/09/24 09:54	07/10/24 15:56	1
Pentachlorophenol	ND		19	12	ug/L		07/09/24 09:54	07/10/24 15:56	1
Phenol	ND	F1 UJ	9.7	4.1	ug/L		07/09/24 09:54	07/10/24 15:56	1
Pyridine	ND	F1 UJ	9.7	9.7	ug/L		07/09/24 09:54	07/10/24 15:56	1
Quinoline	ND		9.7	2.3	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/09/24 09:54	07/10/24 15:56	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/09/24 09:54	07/10/24 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*07/09/24 09:54*	*07/10/24 15:56*	*1*
2-Fluorophenol	*20*		*10 - 105*	*07/09/24 09:54*	*07/10/24 15:56*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*07/09/24 09:54*	*07/10/24 15:56*	*1*
Phenol-d5	*12*		*10 - 129*	*07/09/24 09:54*	*07/10/24 15:56*	*1*
Terphenyl-d14	*98*		*13 - 150*	*07/09/24 09:54*	*07/10/24 15:56*	*1*
2,4,6-Tribromophenol	*43*		*10 - 150*	*07/09/24 09:54*	*07/10/24 15:56*	*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		0.031	0.017	ug/L		07/08/24 09:40	07/08/24 21:32	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		07/08/24 09:40	07/08/24 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*133*		*51 - 149*	*07/08/24 09:40*	*07/08/24 21:32*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW16-ROX-070524
Date Collected: 07/05/24 12:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-12
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			07/09/24 18:11	1
Acrolein	ND		20	3.3	ug/L			07/09/24 18:11	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 18:11	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 18:11	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 18:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 18:11	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 18:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 18:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 18:11	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 18:11	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 18:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 18:11	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 18:11	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 18:11	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 18:11	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 18:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 18:11	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 18:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 18:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 18:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 18:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 18:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 18:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 18:11	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 18:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 18:11	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 18:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 18:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 18:11	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 18:11	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 18:11	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 18:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 18:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 18:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 18:11	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 18:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 18:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/09/24 18:11	1

Client Sample ID: MW16-ROX-070524
Date Collected: 07/05/24 12:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-12
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			07/09/24 18:11	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 18:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 18:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 18:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 18:11	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 18:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 18:11	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 18:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 18:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 18:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 18:11	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 18:11	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 18:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 18:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 18:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 18:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 18:11	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 18:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 18:11	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 18:11*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*07/09/24 18:11*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/09/24 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/09/24 09:54	07/10/24 20:25	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/09/24 09:54	07/10/24 20:25	1
Anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 20:25	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:25	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/09/24 09:54	07/10/24 20:25	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/09/24 09:54	07/10/24 20:25	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/09/24 09:54	07/10/24 20:25	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/09/24 09:54	07/10/24 20:25	1
Chrysene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 20:25	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/09/24 09:54	07/10/24 20:25	1
Fluoranthene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:25	1
Fluorene	ND		0.20	0.089	ug/L		07/09/24 09:54	07/10/24 20:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:25	1
Phenanthrene	ND		0.20	0.090	ug/L		07/09/24 09:54	07/10/24 20:25	1
Pyrene	ND		0.20	0.039	ug/L		07/09/24 09:54	07/10/24 20:25	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/09/24 09:54	07/10/24 20:25	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/09/24 09:54	07/10/24 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*07/09/24 09:54*	*07/10/24 20:25*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/09/24 09:54*	*07/10/24 20:25*	*1*

Client Sample ID: MW16-ROX-070524
Date Collected: 07/05/24 12:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-12
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*	*07/09/24 09:54*	*07/10/24 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	8.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
Benzenethiol	ND		10	9.9	ug/L		07/09/24 09:54	07/10/24 18:54	1
Benzoic acid	ND		30	24	ug/L		07/09/24 09:54	07/10/24 18:54	1
Benzyl alcohol	ND	UJ	10	7.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 18:54	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/09/24 09:54	07/10/24 18:54	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Chloroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/09/24 09:54	07/10/24 18:54	1
2-Chlorophenol	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/09/24 09:54	07/10/24 18:54	1
Dibenzofuran	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 18:54	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
Diethyl phthalate	ND		10	4.4	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 18:54	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/09/24 09:54	07/10/24 18:54	1
1,4-Dioxane	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/09/24 09:54	07/10/24 18:54	1
Hexachloroethane	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
Indene	ND		10	3.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
Isophorone	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
2-Methylphenol	ND		10	3.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
2-Nitroaniline	ND		10	5.0	ug/L		07/09/24 09:54	07/10/24 18:54	1
3-Nitroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Nitroaniline	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 18:54	1
Nitrobenzene	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
2-Nitrophenol	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 18:54	1
4-Nitrophenol	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 18:54	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/09/24 09:54	07/10/24 18:54	1

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

Job ID: 400-258746-1

Client Sample ID: MW16-ROX-070524
Date Collected: 07/05/24 12:55
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/09/24 09:54	07/10/24 18:54	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 18:54	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 18:54	1
Phenol	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 18:54	1
Pyridine	ND		10	10	ug/L		07/09/24 09:54	07/10/24 18:54	1
Quinoline	ND		10	2.4	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 18:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/09/24 09:54	07/10/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*21 - 114*	*07/09/24 09:54*	*07/10/24 18:54*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/09/24 09:54*	*07/10/24 18:54*	*1*
Nitrobenzene-d5	*68*		*16 - 127*	*07/09/24 09:54*	*07/10/24 18:54*	*1*
Phenol-d5	*32*		*10 - 129*	*07/09/24 09:54*	*07/10/24 18:54*	*1*
Terphenyl-d14	*90*		*13 - 150*	*07/09/24 09:54*	*07/10/24 18:54*	*1*
2,4,6-Tribromophenol	*46*		*10 - 150*	*07/09/24 09:54*	*07/10/24 18:54*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/08/24 09:40	07/08/24 22:58	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/08/24 09:40	07/08/24 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/08/24 09:40*	*07/08/24 22:58*	*1*

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

Job ID: 400-258746-1

Client Sample ID: MW1-ROX-070524
Date Collected: 07/05/24 13:45
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-13
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			07/10/24 14:39	1
Acrolein	ND		20	3.3	ug/L			07/10/24 14:39	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 14:39	1
Benzene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 14:39	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/10/24 14:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 14:39	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 14:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/10/24 14:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 14:39	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/10/24 14:39	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 14:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 14:39	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 14:39	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 14:39	1
Chloromethane	ND		1.0	0.90	ug/L			07/10/24 14:39	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 14:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 14:39	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 14:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 14:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 14:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 14:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/10/24 14:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 14:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 14:39	1
2-Hexanone	ND		25	1.4	ug/L			07/10/24 14:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 14:39	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 14:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 17:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 14:39	1
Methyl tert-butyl ether	**0.22**	**J**	1.0	0.22	ug/L			07/10/24 14:39	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 14:39	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 14:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 14:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 14:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 14:39	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 14:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 14:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 14:39	1

Client Sample ID: MW1-ROX-070524
Date Collected: 07/05/24 13:45
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-13
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			07/10/24 14:39	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 14:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 14:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/10/24 14:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/10/24 14:39	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 14:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:39	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 14:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 14:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 14:39	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 14:39	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 14:39	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 14:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/10/24 14:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 14:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 14:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 14:39	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 14:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 14:39	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/10/24 14:39*	*1*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/11/24 17:26*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/10/24 14:39*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/11/24 17:26*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/10/24 14:39*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/11/24 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	0.099	ug/L		07/09/24 09:54	07/10/24 20:46	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/09/24 09:54	07/10/24 20:46	1
Anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 20:46	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:46	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/09/24 09:54	07/10/24 20:46	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/09/24 09:54	07/10/24 20:46	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/09/24 09:54	07/10/24 20:46	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/09/24 09:54	07/10/24 20:46	1
Chrysene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 20:46	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/09/24 09:54	07/10/24 20:46	1
Fluoranthene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:46	1
Fluorene	ND		0.20	0.089	ug/L		07/09/24 09:54	07/10/24 20:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 20:46	1
Phenanthrene	ND		0.20	0.090	ug/L		07/09/24 09:54	07/10/24 20:46	1
Pyrene	ND		0.20	0.039	ug/L		07/09/24 09:54	07/10/24 20:46	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/09/24 09:54	07/10/24 20:46	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/09/24 09:54	07/10/24 20:46	1

Client Sample ID: MW1-ROX-070524

Date Collected: 07/05/24 13:45
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-13

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*86*		*18 - 147*	*07/09/24 09:54*	*07/10/24 20:46*	*1*
2-Fluorobiphenyl	*66*		*15 - 128*	*07/09/24 09:54*	*07/10/24 20:46*	*1*
Nitrobenzene-d5	*69*		*10 - 144*	*07/09/24 09:54*	*07/10/24 20:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
Benzenethiol	ND		10	9.9	ug/L		07/09/24 09:54	07/10/24 19:18	1
Benzoic acid	ND		30	24	ug/L		07/09/24 09:54	07/10/24 19:18	1
Benzyl alcohol	ND	UJ	10	7.3	ug/L		07/09/24 09:54	07/10/24 19:18	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 19:18	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/09/24 09:54	07/10/24 19:18	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Chloroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/09/24 09:54	07/10/24 19:18	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/09/24 09:54	07/10/24 19:18	1
2-Chlorophenol	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/09/24 09:54	07/10/24 19:18	1
Dibenzofuran	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 19:18	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 19:18	1
Diethyl phthalate	ND		10	4.4	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 19:18	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/09/24 09:54	07/10/24 19:18	1
1,4-Dioxane	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 19:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 19:18	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/09/24 09:54	07/10/24 19:18	1
Hexachloroethane	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
Indene	ND		10	3.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
Isophorone	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
2-Methylphenol	ND		10	3.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
2-Nitroaniline	ND		10	5.0	ug/L		07/09/24 09:54	07/10/24 19:18	1
3-Nitroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Nitroaniline	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 19:18	1
Nitrobenzene	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
2-Nitrophenol	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 19:18	1
4-Nitrophenol	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 19:18	1

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

Job ID: 400-258746-1

Client Sample ID: MW1-ROX-070524
Date Collected: 07/05/24 13:45
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-13
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	2.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/09/24 09:54	07/10/24 19:18	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 19:18	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 19:18	1
Phenol	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 19:18	1
Pyridine	ND		10	10	ug/L		07/09/24 09:54	07/10/24 19:18	1
Quinoline	ND		10	2.4	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 19:18	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/09/24 09:54	07/10/24 19:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*07/09/24 09:54*	*07/10/24 19:18*	*1*
2-Fluorophenol	*44*		*10 - 105*	*07/09/24 09:54*	*07/10/24 19:18*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*07/09/24 09:54*	*07/10/24 19:18*	*1*
Phenol-d5	*27*		*10 - 129*	*07/09/24 09:54*	*07/10/24 19:18*	*1*
Terphenyl-d14	*86*		*13 - 150*	*07/09/24 09:54*	*07/10/24 19:18*	*1*
2,4,6-Tribromophenol	*43*		*10 - 150*	*07/09/24 09:54*	*07/10/24 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-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/08/24 09:40	07/08/24 23:20	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/08/24 09:40	07/08/24 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*147*		*51 - 149*	*07/08/24 09:40*	*07/08/24 23:20*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
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.

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: 400-258746-1

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)
400-258746-1	TB-ROX-070524-8260-B	90	107	92
400-258746-3	MW3-ROX-070524-EB	90	104	94
400-258746-4	MW3-ROX-070524	86	110	91
400-258746-5	MW26-ROX-070524	90	108	94
400-258746-6	MW9-ROX-070524	91	108	95
400-258746-6	MW9-ROX-070524	104	103	97
400-258746-7	TB-ROX-070524-8260-A	88	111	94
400-258746-9	MW11-ROX-070524-EB	90	107	94
400-258746-10	MW11-ROX-070524	92	112	95
400-258746-11	MW12-ROX-070524	97	103	97
400-258746-11	MW12-ROX-070524	106	104	96
400-258746-11 MS	MW12-ROX-070524	99	97	101
400-258746-11 MS	MW12-ROX-070524	103	96	96
400-258746-11 MSD	MW12-ROX-070524	98	98	101
400-258746-11 MSD	MW12-ROX-070524	103	95	97
400-258746-12	MW16-ROX-070524	90	109	92
400-258746-13	MW1-ROX-070524	98	102	97
400-258746-13	MW1-ROX-070524	105	105	96
LCS 400-677229/1002	Lab Control Sample	98	105	98
LCS 400-677352/1002	Lab Control Sample	98	97	100
LCS 400-677477/1002	Lab Control Sample	103	98	100
MB 400-677229/6	Method Blank	90	107	94
MB 400-677352/6	Method Blank	99	103	96
MB 400-677477/4	Method Blank	105	105	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-258746-3	MW3-ROX-070524-EB	72	49	72	37	90	47
400-258746-4	MW3-ROX-070524	70	47	68	35	91	49
400-258746-5	MW26-ROX-070524	70	37	71	26	94	50
400-258746-6	MW9-ROX-070524	69	46	69	35	95	49
400-258746-9	MW11-ROX-070524-EB	69	47	68	36	91	46
400-258746-10	MW11-ROX-070524	70	46	69	35	93	47
400-258746-11	MW12-ROX-070524	67	20	66	12	98	43
400-258746-11 MS	MW12-ROX-070524	64	39	65	33	86	43
400-258746-11 MSD	MW12-ROX-070524	76	44	76	37	93	47
400-258746-12	MW16-ROX-070524	69	46	68	32	90	46
400-258746-13	MW1-ROX-070524	62	44	63	27	86	43
LCS 400-677247/2-A	Lab Control Sample	70	54	71	49	86	50
LCS 400-677247/4-A	Lab Control Sample	67	52	67	45	91	46
LCSD 400-677247/3-A	Lab Control Sample Dup	75	57	77	51	91	52

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
LCSD 400-677247/5-A	Lab Control Sample Dup	67	52	68	44	94	50
MB 400-677247/1-A	Method Blank	45	40	44	31	58	30

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)
400-258746-3	MW3-ROX-070524-EB	98	77	82
400-258746-4	MW3-ROX-070524	86	73	81
400-258746-5	MW26-ROX-070524	99	78	84
400-258746-6	MW9-ROX-070524	101	76	81
400-258746-9	MW11-ROX-070524-EB	105	79	84
400-258746-10	MW11-ROX-070524	96	77	79
400-258746-11	MW12-ROX-070524	97	75	79
400-258746-11 MS	MW12-ROX-070524	82	64	55
400-258746-11 MSD	MW12-ROX-070524	83	75	66
400-258746-12	MW16-ROX-070524	100	76	81
400-258746-13	MW1-ROX-070524	86	66	69
LCS 400-677247/2-A	Lab Control Sample	81	65	60
LCSD 400-677247/3-A	Lab Control Sample Dup	89	78	72
MB 400-677247/1-A	Method Blank	62	49	52

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)
400-258746-2	TB-ROX-070524-8011-B	128
400-258746-3	MW3-ROX-070524-EB	88
400-258746-4	MW3-ROX-070524	116
400-258746-5	MW26-ROX-070524	128
400-258746-6	MW9-ROX-070524	83
400-258746-8	TB-ROX-070524-8011-A	121
400-258746-9	MW11-ROX-070524-EB	109
400-258746-10	MW11-ROX-070524	113
400-258746-11	MW12-ROX-070524	133

Surrogate Summary

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

Job ID: 400-258746-1

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	BFB1 (51-149)						
400-258746-11 MS	MW12-ROX-070524	104						
400-258746-11 MSD	MW12-ROX-070524	108						
400-258746-12	MW16-ROX-070524	89						
400-258746-13	MW1-ROX-070524	147						
LCS 400-677086/2-A	Lab Control Sample	107						
LCSD 400-677086/3-A	Lab Control Sample Dup	111						
MB 400-677086/1-A	Method Blank	106						

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-258746-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-258746-1

Client Sample ID: TB-ROX-070524-8260-B
Lab Sample ID: 400-258746-1
Date Collected: 07/05/24 12:00
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 12:05	LSS	EET PEN

Client Sample ID: TB-ROX-070524-8011-B
Lab Sample ID: 400-258746-2
Date Collected: 07/05/24 12:00
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31.9 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 18:40	S1K	EET PEN

Client Sample ID: MW3-ROX-070524-EB
Lab Sample ID: 400-258746-3
Date Collected: 07/05/24 08:55
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 12:30	LSS	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 16:21	S1B	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 17:58	KJA	EET PEN
Total/NA	Prep	8011			30.1 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 19:01	S1K	EET PEN

Client Sample ID: MW3-ROX-070524
Lab Sample ID: 400-258746-4
Date Collected: 07/05/24 10:10
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 16:58	LSS	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 16:46	S1B	EET PEN
Total/NA	Prep	3510C			255.6 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 18:19	KJA	EET PEN
Total/NA	Prep	8011			32.9 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 19:23	S1K	EET PEN

Client Sample ID: MW26-ROX-070524
Lab Sample ID: 400-258746-5
Date Collected: 07/05/24 11:15
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 17:23	LSS	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 17:12	S1B	EET PEN

Client Sample ID: MW26-ROX-070524

Lab Sample ID: 400-258746-5

Date Collected: 07/05/24 11:15

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			257.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 18:40	KJA	EET PEN
Total/NA	Prep	8011			32.4 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 19:45	S1K	EET PEN

Client Sample ID: MW9-ROX-070524

Lab Sample ID: 400-258746-6

Date Collected: 07/05/24 13:00

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 17:03	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 17:47	LSS	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 17:37	S1B	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 19:01	KJA	EET PEN
Total/NA	Prep	8011			28.3 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 20:06	S1K	EET PEN

Client Sample ID: TB-ROX-070524-8260-A

Lab Sample ID: 400-258746-7

Date Collected: 07/05/24 12:00

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 12:54	LSS	EET PEN

Client Sample ID: TB-ROX-070524-8011-A

Lab Sample ID: 400-258746-8

Date Collected: 07/05/24 12:00

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.9 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 20:28	S1K	EET PEN

Client Sample ID: MW11-ROX-070524-EB

Lab Sample ID: 400-258746-9

Date Collected: 07/05/24 08:30

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 11:41	LSS	EET PEN
Total/NA	Prep	3510C			252.4 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 18:04	S1B	EET PEN
Total/NA	Prep	3510C			252.4 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 19:22	KJA	EET PEN

Client Sample ID: MW11-ROX-070524-EB

Lab Sample ID: 400-258746-9

Date Collected: 07/05/24 08:30

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 20:49	S1K	EET PEN

Client Sample ID: MW11-ROX-070524

Lab Sample ID: 400-258746-10

Date Collected: 07/05/24 09:25

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 16:34	LSS	EET PEN
Total/NA	Prep	3510C			257.8 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 18:29	S1B	EET PEN
Total/NA	Prep	3510C			257.8 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 19:43	KJA	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 21:11	S1K	EET PEN

Client Sample ID: MW12-ROX-070524

Lab Sample ID: 400-258746-11

Date Collected: 07/05/24 10:30

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 12:07	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677352	07/10/24 11:57	IMC	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 15:56	S1B	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 20:04	KJA	EET PEN
Total/NA	Prep	8011			34.1 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 21:32	S1K	EET PEN

Client Sample ID: MW16-ROX-070524

Lab Sample ID: 400-258746-12

Date Collected: 07/05/24 12:55

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677229	07/09/24 18:11	LSS	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 18:54	S1B	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 20:25	KJA	EET PEN
Total/NA	Prep	8011			33.5 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 22:58	S1K	EET PEN

Lab Chronicle

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

Job ID: 400-258746-1

Client Sample ID: MW1-ROX-070524

Lab Sample ID: 400-258746-13

Date Collected: 07/05/24 13:45

Matrix: Water

Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 17:26	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677352	07/10/24 14:39	IMC	EET PEN
Total/NA	Prep	3510C			251 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 19:18	S1B	EET PEN
Total/NA	Prep	3510C			251 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 20:46	KJA	EET PEN
Total/NA	Prep	8011			32.4 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 23:20	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677086/1-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	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 14:43	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677229/6

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	677229	07/09/24 09:15	LSS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677247/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 13:00	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677451	07/10/24 16:13	KJA	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677352/6

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	677352	07/10/24 11:30	IMC	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677477/4

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	677477	07/11/24 11:21	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677086/2-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	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 15:04	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677229/1002

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	677229	07/09/24 07:18	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677247/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 13:25	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677451	07/10/24 16:34	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677247/4-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 14:16	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677352/1002

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	677352	07/10/24 09:57	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677477/1002
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	677477	07/11/24 10:17	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677086/3-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	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 15:25	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677247/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 13:50	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677451	07/10/24 16:55	KJA	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677247/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 14:41	S1B	EET PEN

Client Sample ID: MW12-ROX-070524
Lab Sample ID: 400-258746-11 MS
Date Collected: 07/05/24 10:30
Matrix: Water
Date Received: 07/06/24 08:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 14:23	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677352	07/10/24 12:51	IMC	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 15:06	S1B	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677451	07/10/24 17:16	KJA	EET PEN
Total/NA	Prep	8011			33.1 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 21:54	S1K	EET PEN

Lab Chronicle

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

Job ID: 400-258746-1

Client Sample ID: MW12-ROX-070524
Date Collected: 07/05/24 10:30
Date Received: 07/06/24 08:31

Lab Sample ID: 400-258746-11 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	677477	07/11/24 14:46	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677352	07/10/24 13:18	IMC	EET PEN
Total/NA	Prep	3510C			256 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677378	07/10/24 15:31	S1B	EET PEN
Total/NA	Prep	3510C			256 mL	1 mL	677247	07/09/24 09:54	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677451	07/10/24 17:37	KJA	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	677086	07/08/24 09:40	KR	EET PEN
Total/NA	Analysis	8011		1			677152	07/08/24 22:37	S1K	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 677229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-1	TB-ROX-070524-8260-B	Total/NA	Water	8260D	
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	8260D	
400-258746-4	MW3-ROX-070524	Total/NA	Water	8260D	
400-258746-5	MW26-ROX-070524	Total/NA	Water	8260D	
400-258746-6	MW9-ROX-070524	Total/NA	Water	8260D	
400-258746-7	TB-ROX-070524-8260-A	Total/NA	Water	8260D	
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	8260D	
400-258746-10	MW11-ROX-070524	Total/NA	Water	8260D	
400-258746-12	MW16-ROX-070524	Total/NA	Water	8260D	
MB 400-677229/6	Method Blank	Total/NA	Water	8260D	
LCS 400-677229/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 677352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-11	MW12-ROX-070524	Total/NA	Water	8260D	
400-258746-13	MW1-ROX-070524	Total/NA	Water	8260D	
MB 400-677352/6	Method Blank	Total/NA	Water	8260D	
LCS 400-677352/1002	Lab Control Sample	Total/NA	Water	8260D	
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8260D	
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8260D	

Analysis Batch: 677477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-6	MW9-ROX-070524	Total/NA	Water	8260D	
400-258746-11	MW12-ROX-070524	Total/NA	Water	8260D	
400-258746-13	MW1-ROX-070524	Total/NA	Water	8260D	
MB 400-677477/4	Method Blank	Total/NA	Water	8260D	
LCS 400-677477/1002	Lab Control Sample	Total/NA	Water	8260D	
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8260D	
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 677247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	3510C	
400-258746-4	MW3-ROX-070524	Total/NA	Water	3510C	
400-258746-5	MW26-ROX-070524	Total/NA	Water	3510C	
400-258746-6	MW9-ROX-070524	Total/NA	Water	3510C	
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	3510C	
400-258746-10	MW11-ROX-070524	Total/NA	Water	3510C	
400-258746-11	MW12-ROX-070524	Total/NA	Water	3510C	
400-258746-12	MW16-ROX-070524	Total/NA	Water	3510C	
400-258746-13	MW1-ROX-070524	Total/NA	Water	3510C	
MB 400-677247/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-677247/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-677247/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-677247/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-677247/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	3510C	
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	3510C	

GC/MS Semi VOA

Analysis Batch: 677378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	8270E	677247
400-258746-4	MW3-ROX-070524	Total/NA	Water	8270E	677247
400-258746-5	MW26-ROX-070524	Total/NA	Water	8270E	677247
400-258746-6	MW9-ROX-070524	Total/NA	Water	8270E	677247
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	8270E	677247
400-258746-10	MW11-ROX-070524	Total/NA	Water	8270E	677247
400-258746-11	MW12-ROX-070524	Total/NA	Water	8270E	677247
400-258746-12	MW16-ROX-070524	Total/NA	Water	8270E	677247
400-258746-13	MW1-ROX-070524	Total/NA	Water	8270E	677247
MB 400-677247/1-A	Method Blank	Total/NA	Water	8270E	677247
LCS 400-677247/2-A	Lab Control Sample	Total/NA	Water	8270E	677247
LCS 400-677247/4-A	Lab Control Sample	Total/NA	Water	8270E	677247
LCSD 400-677247/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	677247
LCSD 400-677247/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	677247
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8270E	677247
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8270E	677247

Analysis Batch: 677451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	8270E SIM	677247
400-258746-4	MW3-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-5	MW26-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-6	MW9-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	8270E SIM	677247
400-258746-10	MW11-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-11	MW12-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-12	MW16-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-13	MW1-ROX-070524	Total/NA	Water	8270E SIM	677247
MB 400-677247/1-A	Method Blank	Total/NA	Water	8270E SIM	677247
LCS 400-677247/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	677247
LCSD 400-677247/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	677247
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8270E SIM	677247
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8270E SIM	677247

GC Semi VOA

Prep Batch: 677086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-2	TB-ROX-070524-8011-B	Total/NA	Water	8011	
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	8011	
400-258746-4	MW3-ROX-070524	Total/NA	Water	8011	
400-258746-5	MW26-ROX-070524	Total/NA	Water	8011	
400-258746-6	MW9-ROX-070524	Total/NA	Water	8011	
400-258746-8	TB-ROX-070524-8011-A	Total/NA	Water	8011	
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	8011	
400-258746-10	MW11-ROX-070524	Total/NA	Water	8011	
400-258746-11	MW12-ROX-070524	Total/NA	Water	8011	
400-258746-12	MW16-ROX-070524	Total/NA	Water	8011	
400-258746-13	MW1-ROX-070524	Total/NA	Water	8011	
MB 400-677086/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677086/2-A	Lab Control Sample	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 677086 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-677086/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8011	
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8011	

Analysis Batch: 677152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258746-2	TB-ROX-070524-8011-B	Total/NA	Water	8011	677086
400-258746-3	MW3-ROX-070524-EB	Total/NA	Water	8011	677086
400-258746-4	MW3-ROX-070524	Total/NA	Water	8011	677086
400-258746-5	MW26-ROX-070524	Total/NA	Water	8011	677086
400-258746-6	MW9-ROX-070524	Total/NA	Water	8011	677086
400-258746-8	TB-ROX-070524-8011-A	Total/NA	Water	8011	677086
400-258746-9	MW11-ROX-070524-EB	Total/NA	Water	8011	677086
400-258746-10	MW11-ROX-070524	Total/NA	Water	8011	677086
400-258746-11	MW12-ROX-070524	Total/NA	Water	8011	677086
400-258746-12	MW16-ROX-070524	Total/NA	Water	8011	677086
400-258746-13	MW1-ROX-070524	Total/NA	Water	8011	677086
MB 400-677086/1-A	Method Blank	Total/NA	Water	8011	677086
LCS 400-677086/2-A	Lab Control Sample	Total/NA	Water	8011	677086
LCSD 400-677086/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677086
400-258746-11 MS	MW12-ROX-070524	Total/NA	Water	8011	677086
400-258746-11 MSD	MW12-ROX-070524	Total/NA	Water	8011	677086

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

Lab Sample ID: MB 400-677229/6
Matrix: Water
Analysis Batch: 677229

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			07/09/24 09:15	1
Acrolein	ND		20	3.3	ug/L			07/09/24 09:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/09/24 09:15	1
Benzene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/09/24 09:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/09/24 09:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Bromoform	ND		5.0	0.25	ug/L			07/09/24 09:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/09/24 09:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/09/24 09:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/09/24 09:15	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/09/24 09:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/09/24 09:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/09/24 09:15	1
Chloroform	ND		1.0	0.90	ug/L			07/09/24 09:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/09/24 09:15	1
Chloromethane	ND		1.0	0.90	ug/L			07/09/24 09:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/09/24 09:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/09/24 09:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/09/24 09:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/09/24 09:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/09/24 09:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/09/24 09:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/09/24 09:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/09/24 09:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/09/24 09:15	1
2-Hexanone	ND		25	1.4	ug/L			07/09/24 09:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/09/24 09:15	1
Methylene bromide	ND		5.0	0.22	ug/L			07/09/24 09:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/09/24 09:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/09/24 09:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/09/24 09:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/09/24 09:15	1
Naphthalene	ND		5.0	3.0	ug/L			07/09/24 09:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/09/24 09:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/09/24 09:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/09/24 09:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/09/24 09:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/09/24 09:15	1

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

Lab Sample ID: MB 400-677229/6
Matrix: Water
Analysis Batch: 677229

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			07/09/24 09:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/09/24 09:15	1
Styrene	ND		1.0	1.0	ug/L			07/09/24 09:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/09/24 09:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/09/24 09:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/09/24 09:15	1
Toluene	ND		1.0	0.90	ug/L			07/09/24 09:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/09/24 09:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/09/24 09:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/09/24 09:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/09/24 09:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/09/24 09:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/09/24 09:15	1
Trichloroethene	ND		1.0	0.15	ug/L			07/09/24 09:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/09/24 09:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/09/24 09:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/09/24 09:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/09/24 09:15	1
Vinyl acetate	ND		25	0.93	ug/L			07/09/24 09:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/09/24 09:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/09/24 09:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/09/24 09:15*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/09/24 09:15*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/09/24 09:15*	*1*

Lab Sample ID: LCS 400-677229/1002
Matrix: Water
Analysis Batch: 677229

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	307	*+	ug/L		154	43 - 150
Acrolein	500	643		ug/L		129	38 - 150
Acrylonitrile	500	472		ug/L		94	64 - 142
Benzene	50.0	45.1		ug/L		90	70 - 130
Bromobenzene	50.0	46.4		ug/L		93	70 - 132
Bromochloromethane	50.0	50.2		ug/L		100	70 - 130
Bromodichloromethane	50.0	47.8		ug/L		96	67 - 133
Bromoform	50.0	49.0		ug/L		98	57 - 140
Bromomethane	50.0	51.4		ug/L		103	10 - 150
2-Butanone (MEK)	200	259		ug/L		130	61 - 145
Carbon disulfide	50.0	41.7		ug/L		83	61 - 137
Carbon tetrachloride	50.0	48.5		ug/L		97	61 - 137
Chlorobenzene	50.0	47.3		ug/L		95	70 - 130
Chloroethane	50.0	54.5		ug/L		109	55 - 141
2-Chloroethyl vinyl ether	50.0	46.9		ug/L		94	10 - 150

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

Lab Sample ID: LCS 400-677229/1002
Matrix: Water
Analysis Batch: 677229

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	44.3		ug/L		89	69 - 130
1-Chlorohexane	50.0	47.7		ug/L		95	69 - 130
Chloromethane	50.0	50.6		ug/L		101	58 - 137
cis-1,2-Dichloroethene	50.0	45.4		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	49.0		ug/L		98	69 - 132
Dibromochloromethane	50.0	52.4		ug/L		105	67 - 135
1,2-Dichlorobenzene	50.0	47.7		ug/L		95	67 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	50.6		ug/L		101	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	45.7		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
1,3-Dichloropropane	50.0	46.4		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	44.5		ug/L		89	52 - 135
1,1-Dichloropropene	50.0	45.7		ug/L		91	70 - 130
Ethylbenzene	50.0	44.2		ug/L		88	70 - 130
Ethyl methacrylate	50.0	43.1		ug/L		86	68 - 130
Hexachlorobutadiene	50.0	51.6		ug/L		103	53 - 140
2-Hexanone	200	200		ug/L		100	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	47.9		ug/L		96	70 - 130
Methylene Chloride	50.0	44.3		ug/L		89	66 - 135
4-Methyl-2-pentanone (MIBK)	200	183		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	44.8		ug/L		90	66 - 130
m-Xylene & p-Xylene	50.0	44.9		ug/L		90	70 - 130
Naphthalene	50.0	41.3		ug/L		83	47 - 149
n-Butylbenzene	50.0	47.1		ug/L		94	67 - 130
N-Propylbenzene	50.0	48.5		ug/L		97	70 - 130
o-Chlorotoluene	50.0	44.2		ug/L		88	70 - 130
o-Xylene	50.0	45.9		ug/L		92	70 - 130
p-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	47.1		ug/L		94	65 - 130
sec-Butylbenzene	50.0	47.4		ug/L		95	66 - 130
Styrene	50.0	45.6		ug/L		91	70 - 130
tert-Butylbenzene	50.0	44.8		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.6		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.7		ug/L		87	70 - 131
Tetrachloroethene	50.0	47.2		ug/L		94	65 - 130
Toluene	50.0	45.0		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	44.8		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	46.8		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	47.4		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	48.2		ug/L		96	60 - 140
1,1,1-Trichloroethane	50.0	46.7		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	46.9		ug/L		94	70 - 130
Trichloroethene	50.0	51.4		ug/L		103	70 - 130
Trichlorofluoromethane	50.0	49.1		ug/L		98	65 - 138

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

Lab Sample ID: LCS 400-677229/1002
Matrix: Water
Analysis Batch: 677229

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	46.8		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	50.0	45.7		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	45.1		ug/L		90	69 - 130
Vinyl acetate	100	97.6		ug/L		98	26 - 150
Vinyl chloride	50.0	48.8		ug/L		98	59 - 136
Xylenes, Total	100	90.8		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-677352/6
Matrix: Water
Analysis Batch: 677352

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			07/10/24 11:30	1
Acrolein	ND		20	3.3	ug/L			07/10/24 11:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 11:30	1
Benzene	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 11:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			07/10/24 11:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 11:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 11:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/10/24 11:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 11:30	1
Chlorobenzene	ND		1.0	0.90	ug/L			07/10/24 11:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 11:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 11:30	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 11:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 11:30	1
Chloromethane	ND		1.0	0.90	ug/L			07/10/24 11:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 11:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 11:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 11:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 11:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 11:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 11:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 11:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 11:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			07/10/24 11:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 11:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 11:30	1

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

Lab Sample ID: MB 400-677352/6
Matrix: Water
Analysis Batch: 677352

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			07/10/24 11:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 11:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 11:30	1
2-Hexanone	ND		25	1.4	ug/L			07/10/24 11:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 11:30	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 11:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 11:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 11:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 11:30	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 11:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 11:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 11:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 11:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 11:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 11:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 11:30	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/10/24 11:30	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 11:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 11:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			07/10/24 11:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Tetrachloroethene	ND		1.0	0.90	ug/L			07/10/24 11:30	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 11:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 11:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 11:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 11:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 11:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 11:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 11:30	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 11:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			07/10/24 11:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 11:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 11:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 11:30	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 11:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 11:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 11:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/10/24 11:30*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/10/24 11:30*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 11:30*	*1*

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

Lab Sample ID: LCS 400-677352/1002
Matrix: Water
Analysis Batch: 677352

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	157		ug/L		79	43 - 150
Acrolein	500	500		ug/L		100	38 - 150
Acrylonitrile	500	426		ug/L		85	64 - 142
Benzene	50.0	43.3		ug/L		87	70 - 130
Bromobenzene	50.0	48.6		ug/L		97	70 - 132
Bromochloromethane	50.0	45.4		ug/L		91	70 - 130
Bromodichloromethane	50.0	44.5		ug/L		89	67 - 133
Bromoform	50.0	46.2		ug/L		92	57 - 140
Bromomethane	50.0	50.6		ug/L		101	10 - 150
2-Butanone (MEK)	200	173		ug/L		86	61 - 145
Carbon disulfide	50.0	38.5		ug/L		77	61 - 137
Carbon tetrachloride	50.0	43.9		ug/L		88	61 - 137
Chlorobenzene	50.0	47.2		ug/L		94	70 - 130
Chloroethane	50.0	40.1		ug/L		80	55 - 141
2-Chloroethyl vinyl ether	50.0	51.8		ug/L		104	10 - 150
Chloroform	50.0	44.0		ug/L		88	69 - 130
1-Chlorohexane	50.0	47.0		ug/L		94	69 - 130
Chloromethane	50.0	56.1		ug/L		112	58 - 137
cis-1,2-Dichloroethene	50.0	44.0		ug/L		88	68 - 130
cis-1,3-Dichloropropene	50.0	45.6		ug/L		91	69 - 132
Dibromochloromethane	50.0	47.4		ug/L		95	67 - 135
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.2		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	33.3		ug/L		67	41 - 146
1,1-Dichloroethane	50.0	42.6		ug/L		85	70 - 130
1,2-Dichloroethane	50.0	43.3		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	43.6		ug/L		87	63 - 134
1,2-Dichloropropane	50.0	45.6		ug/L		91	70 - 130
1,3-Dichloropropane	50.0	45.4		ug/L		91	70 - 130
2,2-Dichloropropane	50.0	41.1		ug/L		82	52 - 135
1,1-Dichloropropene	50.0	43.1		ug/L		86	70 - 130
Ethylbenzene	50.0	46.3		ug/L		93	70 - 130
Ethyl methacrylate	50.0	45.2		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	52.4		ug/L		105	53 - 140
2-Hexanone	200	157		ug/L		79	65 - 137
Isopropylbenzene	50.0	47.7		ug/L		95	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
4-Methyl-2-pentanone (MIBK)	200	174		ug/L		87	69 - 138
Methyl tert-butyl ether	50.0	43.5		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	46.4		ug/L		93	70 - 130
Naphthalene	50.0	47.2		ug/L		94	47 - 149
n-Butylbenzene	50.0	50.3		ug/L		101	67 - 130
N-Propylbenzene	50.0	50.3		ug/L		101	70 - 130
o-Chlorotoluene	50.0	47.5		ug/L		95	70 - 130
o-Xylene	50.0	46.2		ug/L		92	70 - 130
p-Chlorotoluene	50.0	47.9		ug/L		96	70 - 130
p-Isopropyltoluene	50.0	50.2		ug/L		100	65 - 130

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

Lab Sample ID: LCS 400-677352/1002
Matrix: Water
Analysis Batch: 677352

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
sec-Butylbenzene	50.0	49.8		ug/L		100	66 - 130
Styrene	50.0	47.3		ug/L		95	70 - 130
tert-Butylbenzene	50.0	48.5		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.7		ug/L		93	70 - 131
Tetrachloroethene	50.0	45.0		ug/L		90	65 - 130
Toluene	50.0	45.0		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	42.8		ug/L		86	70 - 130
trans-1,3-Dichloropropene	50.0	46.0		ug/L		92	63 - 130
1,2,3-Trichlorobenzene	50.0	50.7		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	51.5		ug/L		103	60 - 140
1,1,1-Trichloroethane	50.0	43.1		ug/L		86	68 - 130
1,1,2-Trichloroethane	50.0	45.2		ug/L		90	70 - 130
Trichloroethene	50.0	45.7		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	51.4		ug/L		103	65 - 138
1,2,3-Trichloropropane	50.0	46.6		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	50.0	48.2		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	48.9		ug/L		98	69 - 130
Vinyl acetate	100	89.0		ug/L		89	26 - 150
Vinyl chloride	50.0	46.4		ug/L		93	59 - 136
Xylenes, Total	100	92.6		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677352

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	72.6	F1	ug/L		36	43 - 150
Acrolein	ND		500	463		ug/L		93	38 - 150
Acrylonitrile	ND		500	402		ug/L		80	62 - 149
Benzene	ND		50.0	37.9		ug/L		76	56 - 142
Bromobenzene	ND		50.0	38.5		ug/L		77	59 - 136
Bromochloromethane	ND		50.0	40.6		ug/L		81	64 - 140
Bromodichloromethane	ND		50.0	39.2		ug/L		78	59 - 143
Bromoform	ND		50.0	39.4		ug/L		79	50 - 140
Bromomethane	ND		50.0	42.3		ug/L		85	10 - 150
2-Butanone (MEK)	ND	F1	200	99.9	F1	ug/L		50	55 - 150
Carbon disulfide	ND		50.0	33.5		ug/L		67	48 - 150
Carbon tetrachloride	ND		50.0	38.6		ug/L		77	55 - 145
Chlorobenzene	ND		50.0	37.7		ug/L		75	64 - 130
Chloroethane	ND		50.0	31.5		ug/L		63	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	38.8		ug/L		78	60 - 141

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

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677352

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1-Chlorohexane	ND		50.0	36.1		ug/L		72	56 - 136
Chloromethane	ND		50.0	50.1		ug/L		100	49 - 148
cis-1,2-Dichloroethene	ND		50.0	38.9		ug/L		78	59 - 143
cis-1,3-Dichloropropene	ND		50.0	38.6		ug/L		77	57 - 140
Dibromochloromethane	ND		50.0	41.2		ug/L		82	56 - 143
1,2-Dichlorobenzene	ND		50.0	37.6		ug/L		75	52 - 137
1,3-Dichlorobenzene	ND		50.0	36.3		ug/L		73	54 - 135
1,4-Dichlorobenzene	ND		50.0	35.9		ug/L		72	53 - 135
Dichlorodifluoromethane	ND	F2	50.0	52.3		ug/L		105	16 - 150
1,1-Dichloroethane	ND		50.0	38.0		ug/L		76	61 - 144
1,2-Dichloroethane	ND		50.0	39.0		ug/L		78	60 - 141
1,1-Dichloroethene	ND		50.0	36.7		ug/L		73	54 - 147
1,2-Dichloropropane	ND		50.0	39.3		ug/L		79	66 - 137
1,3-Dichloropropane	ND		50.0	40.0		ug/L		80	66 - 133
2,2-Dichloropropane	ND		50.0	36.2		ug/L		72	42 - 144
1,1-Dichloropropene	ND		50.0	37.2		ug/L		74	65 - 136
Ethylbenzene	ND		50.0	36.6		ug/L		73	58 - 131
Ethyl methacrylate	ND		50.0	39.6		ug/L		79	64 - 130
Hexachlorobutadiene	ND		50.0	33.0		ug/L		66	31 - 149
2-Hexanone	ND	F1	200	102	F1	ug/L		51	65 - 140
Isopropylbenzene	ND		50.0	36.2		ug/L		72	56 - 133
Methylene bromide	ND		50.0	39.7		ug/L		79	63 - 138
4-Methyl-2-pentanone (MIBK)	ND		200	149		ug/L		75	63 - 146
Methyl tert-butyl ether	ND		50.0	38.6		ug/L		77	59 - 137
m-Xylene & p-Xylene	ND		50.0	36.4		ug/L		73	57 - 130
Naphthalene	ND		50.0	37.8		ug/L		76	25 - 150
n-Butylbenzene	ND		50.0	33.5		ug/L		67	41 - 142
N-Propylbenzene	ND		50.0	35.7		ug/L		71	51 - 138
o-Chlorotoluene	ND		50.0	35.5		ug/L		71	53 - 134
o-Xylene	ND		50.0	36.7		ug/L		73	61 - 130
p-Chlorotoluene	ND		50.0	35.3		ug/L		71	54 - 133
p-Isopropyltoluene	ND		50.0	35.0		ug/L		70	48 - 139
sec-Butylbenzene	ND		50.0	35.7		ug/L		71	50 - 138
Styrene	ND		50.0	36.9		ug/L		74	58 - 131
tert-Butylbenzene	ND		50.0	35.9		ug/L		72	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	39.8		ug/L		80	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	40.1		ug/L		80	66 - 135
Tetrachloroethene	ND		50.0	35.9		ug/L		72	52 - 133
Toluene	ND		50.0	37.6		ug/L		75	65 - 130
trans-1,2-Dichloroethene	ND		50.0	37.0		ug/L		74	61 - 143
trans-1,3-Dichloropropene	ND		50.0	38.8		ug/L		78	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	36.2		ug/L		72	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	35.9		ug/L		72	39 - 148
1,1,1-Trichloroethane	ND		50.0	38.1		ug/L		76	57 - 142
1,1,2-Trichloroethane	ND		50.0	40.8		ug/L		82	66 - 131
Trichloroethene	ND		50.0	39.1		ug/L		78	64 - 136
Trichlorofluoromethane	ND		50.0	44.7		ug/L		89	54 - 150
1,2,3-Trichloropropane	ND		50.0	41.8		ug/L		84	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	34.9		ug/L		70	50 - 139

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

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677352

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	ND		50.0	35.7		ug/L		71	52 - 135
Vinyl acetate	ND		100	77.5		ug/L		78	26 - 150
Vinyl chloride	ND		50.0	39.9		ug/L		80	46 - 150
Xylenes, Total	ND		100	73.2		ug/L		73	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677352

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND	F1	200	80.3	F1	ug/L		40	43 - 150	10	30
Acrolein	ND		500	451		ug/L		90	38 - 150	3	31
Acrylonitrile	ND		500	443		ug/L		89	62 - 149	10	30
Benzene	ND		50.0	38.3		ug/L		77	56 - 142	1	30
Bromobenzene	ND		50.0	36.7		ug/L		73	59 - 136	5	30
Bromochloromethane	ND		50.0	42.5		ug/L		85	64 - 140	5	30
Bromodichloromethane	ND		50.0	39.9		ug/L		80	59 - 143	2	30
Bromoform	ND		50.0	41.1		ug/L		82	50 - 140	4	30
Bromomethane	ND		50.0	41.3		ug/L		83	10 - 150	2	50
2-Butanone (MEK)	ND	F1	200	112		ug/L		56	55 - 150	11	30
Carbon disulfide	ND		50.0	34.0		ug/L		68	48 - 150	2	30
Carbon tetrachloride	ND		50.0	38.7		ug/L		77	55 - 145	0	30
Chlorobenzene	ND		50.0	36.7		ug/L		73	64 - 130	3	30
Chloroethane	ND		50.0	41.0		ug/L		82	50 - 150	26	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	39.5		ug/L		79	60 - 141	2	30
1-Chlorohexane	ND		50.0	32.6		ug/L		65	56 - 136	10	30
Chloromethane	ND		50.0	44.7		ug/L		89	49 - 148	11	31
cis-1,2-Dichloroethene	ND		50.0	39.3		ug/L		79	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	38.9		ug/L		78	57 - 140	1	30
Dibromochloromethane	ND		50.0	42.6		ug/L		85	56 - 143	3	30
1,2-Dichlorobenzene	ND		50.0	35.0		ug/L		70	52 - 137	7	30
1,3-Dichlorobenzene	ND		50.0	33.3		ug/L		67	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	32.6		ug/L		65	53 - 135	9	30
Dichlorodifluoromethane	ND	F2	50.0	30.7	F2	ug/L		61	16 - 150	52	31
1,1-Dichloroethane	ND		50.0	38.8		ug/L		78	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	40.1		ug/L		80	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	39.2		ug/L		78	54 - 147	7	30
1,2-Dichloropropane	ND		50.0	40.9		ug/L		82	66 - 137	4	30
1,3-Dichloropropane	ND		50.0	41.3		ug/L		83	66 - 133	3	30
2,2-Dichloropropane	ND		50.0	36.8		ug/L		74	42 - 144	1	31
1,1-Dichloropropene	ND		50.0	37.0		ug/L		74	65 - 136	1	30
Ethylbenzene	ND		50.0	34.5		ug/L		69	58 - 131	6	30

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

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677352

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethyl methacrylate	ND		50.0	42.2		ug/L		84	64 - 130	6	30
Hexachlorobutadiene	ND		50.0	27.8		ug/L		56	31 - 149	17	36
2-Hexanone	ND	F1	200	115	F1	ug/L		57	65 - 140	11	30
Isopropylbenzene	ND		50.0	33.4		ug/L		67	56 - 133	8	30
Methylene bromide	ND		50.0	42.3		ug/L		85	63 - 138	6	30
4-Methyl-2-pentanone (MIBK)	ND		200	162		ug/L		81	63 - 146	8	30
Methyl tert-butyl ether	ND		50.0	40.8		ug/L		82	59 - 137	6	30
m-Xylene & p-Xylene	ND		50.0	34.1		ug/L		68	57 - 130	7	30
Naphthalene	ND		50.0	39.1		ug/L		78	25 - 150	3	30
n-Butylbenzene	ND		50.0	27.6		ug/L		55	41 - 142	19	31
N-Propylbenzene	ND		50.0	31.7		ug/L		63	51 - 138	12	30
o-Chlorotoluene	ND		50.0	32.0		ug/L		64	53 - 134	11	30
o-Xylene	ND		50.0	34.9		ug/L		70	61 - 130	5	30
p-Chlorotoluene	ND		50.0	31.5		ug/L		63	54 - 133	11	30
p-Isopropyltoluene	ND		50.0	29.5		ug/L		59	48 - 139	17	30
sec-Butylbenzene	ND		50.0	30.8		ug/L		62	50 - 138	15	30
Styrene	ND		50.0	35.3		ug/L		71	58 - 131	5	30
tert-Butylbenzene	ND		50.0	31.5		ug/L		63	54 - 146	13	30
1,1,1,2-Tetrachloroethane	ND		50.0	39.5		ug/L		79	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	42.0		ug/L		84	66 - 135	5	30
Tetrachloroethene	ND		50.0	33.7		ug/L		67	52 - 133	6	30
Toluene	ND		50.0	37.0		ug/L		74	65 - 130	2	30
trans-1,2-Dichloroethene	ND		50.0	37.6		ug/L		75	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	39.7		ug/L		79	53 - 133	2	30
1,2,3-Trichlorobenzene	ND		50.0	35.6		ug/L		71	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	33.4		ug/L		67	39 - 148	7	30
1,1,1-Trichloroethane	ND		50.0	38.5		ug/L		77	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	42.2		ug/L		84	66 - 131	3	30
Trichloroethene	ND		50.0	38.8		ug/L		78	64 - 136	1	30
Trichlorofluoromethane	ND		50.0	38.0		ug/L		76	54 - 150	16	30
1,2,3-Trichloropropane	ND		50.0	42.6		ug/L		85	65 - 133	2	30
1,2,4-Trimethylbenzene	ND		50.0	31.2		ug/L		62	50 - 139	11	30
1,3,5-Trimethylbenzene	ND		50.0	31.7		ug/L		63	52 - 135	12	30
Vinyl acetate	ND		100	78.4		ug/L		78	26 - 150	1	33
Vinyl chloride	ND		50.0	38.8		ug/L		78	46 - 150	3	30
Xylenes, Total	ND		100	69.0		ug/L		69	59 - 130	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*101*		*64 - 132*

Lab Sample ID: MB 400-677477/4
Matrix: Water
Analysis Batch: 677477

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 11:21	1

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

Lab Sample ID: MB 400-677477/4
Matrix: Water
Analysis Batch: 677477

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		72 - 130		07/11/24 11:21	1
Dibromofluoromethane	105		75 - 126		07/11/24 11:21	1
Toluene-d8 (Surr)	97		64 - 132		07/11/24 11:21	1

Lab Sample ID: LCS 400-677477/1002
Matrix: Water
Analysis Batch: 677477

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methylene Chloride			50.0	49.8		ug/L		100	66 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	103		72 - 130
Dibromofluoromethane	98		75 - 126
Toluene-d8 (Surr)	100		64 - 132

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Methylene Chloride	ND		50.0	51.9		ug/L		104	60 - 146		

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

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Methylene Chloride	ND		50.0	50.1		ug/L		100	60 - 146	4	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	103		72 - 130
Dibromofluoromethane	95		75 - 126
Toluene-d8 (Surr)	97		64 - 132

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

Lab Sample ID: MB 400-677247/1-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/09/24 09:54	07/10/24 13:00	1

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

Lab Sample ID: MB 400-677247/1-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		10	9.9	ug/L		07/09/24 09:54	07/10/24 13:00	1
Benzoic acid	ND		30	24	ug/L		07/09/24 09:54	07/10/24 13:00	1
Benzyl alcohol	ND		10	7.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 13:00	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/09/24 09:54	07/10/24 13:00	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Chloroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/09/24 09:54	07/10/24 13:00	1
2-Chlorophenol	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/09/24 09:54	07/10/24 13:00	1
Dibenzofuran	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 13:00	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
Diethyl phthalate	ND		10	4.4	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/09/24 09:54	07/10/24 13:00	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/09/24 09:54	07/10/24 13:00	1
1,4-Dioxane	ND		10	4.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/09/24 09:54	07/10/24 13:00	1
Hexachloroethane	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
Indene	ND		10	3.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
Isophorone	ND		10	5.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
2-Methylphenol	ND		10	3.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
2-Nitroaniline	ND		10	5.0	ug/L		07/09/24 09:54	07/10/24 13:00	1
3-Nitroaniline	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Nitroaniline	ND		10	4.1	ug/L		07/09/24 09:54	07/10/24 13:00	1
Nitrobenzene	ND		10	4.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
2-Nitrophenol	ND		10	4.6	ug/L		07/09/24 09:54	07/10/24 13:00	1
4-Nitrophenol	ND		10	3.3	ug/L		07/09/24 09:54	07/10/24 13:00	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/09/24 09:54	07/10/24 13:00	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/09/24 09:54	07/10/24 13:00	1
Pentachlorophenol	ND		20	12	ug/L		07/09/24 09:54	07/10/24 13:00	1
Phenol	ND		10	4.2	ug/L		07/09/24 09:54	07/10/24 13:00	1
Pyridine	ND		10	10	ug/L		07/09/24 09:54	07/10/24 13:00	1

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

Lab Sample ID: MB 400-677247/1-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Quinoline	ND		10	2.4	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/09/24 09:54	07/10/24 13:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/09/24 09:54	07/10/24 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*45*		*21 - 114*	*07/09/24 09:54*	*07/10/24 13:00*	*1*
2-Fluorophenol	*40*		*10 - 105*	*07/09/24 09:54*	*07/10/24 13:00*	*1*
Nitrobenzene-d5	*44*		*16 - 127*	*07/09/24 09:54*	*07/10/24 13:00*	*1*
Phenol-d5	*31*		*10 - 129*	*07/09/24 09:54*	*07/10/24 13:00*	*1*
Terphenyl-d14	*58*		*13 - 150*	*07/09/24 09:54*	*07/10/24 13:00*	*1*
2,4,6-Tribromophenol	*30*		*10 - 150*	*07/09/24 09:54*	*07/10/24 13:00*	*1*

Lab Sample ID: LCS 400-677247/2-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	55.1		ug/L		46	10 - 127
Benzoic acid	492	236		ug/L		48	19 - 126
Benzyl alcohol	120	25.6		ug/L		21	17 - 109
Bis(2-chloroethoxy)methane	120	83.7		ug/L		70	24 - 125
Bis(2-chloroethyl)ether	120	92.9		ug/L		77	10 - 121
bis (2-chloroisopropyl) ether	120	103		ug/L		86	14 - 123
Bis(2-ethylhexyl) phthalate	120	105		ug/L		87	16 - 150
4-Bromophenyl phenyl ether	120	90.5		ug/L		75	17 - 150
Butyl benzyl phthalate	120	107		ug/L		89	21 - 150
4-Chloroaniline	120	47.3		ug/L		39	10 - 124
4-Chloro-3-methylphenol	120	89.9		ug/L		75	37 - 131
2-Chloronaphthalene	120	81.6		ug/L		68	24 - 132
2-Chlorophenol	120	79.1		ug/L		66	27 - 124
4-Chlorophenyl phenyl ether	120	90.2		ug/L		75	27 - 147
Dibenz[a,h]acridine	59.9	50.5		ug/L		84	40 - 140
Dibenzofuran	120	87.6		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	117		ug/L		73	10 - 150
2,4-Dichlorophenol	120	78.4		ug/L		65	33 - 132
Diethyl phthalate	120	94.8		ug/L		79	37 - 145
2,4-Dimethylphenol	120	69.7		ug/L		58	38 - 132
Dimethyl phthalate	120	86.9		ug/L		72	32 - 137
Di-n-butyl phthalate	120	101		ug/L		84	27 - 150
4,6-Dinitro-ortho-cresol	240	189		ug/L		79	14 - 150
2,4-Dinitrophenol	240	213		ug/L		89	15 - 150
2,4-Dinitrotoluene	120	95.2		ug/L		79	35 - 136
2,6-Dinitrotoluene	120	87.9		ug/L		73	29 - 140
Di-n-octyl phthalate	120	102		ug/L		85	26 - 150
1,4-Dioxane	120	52.5		ug/L		44	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	96.6		ug/L		80	23 - 138
Hexachlorobenzene	120	93.5		ug/L		78	10 - 150
Hexachlorocyclopentadiene	120	55.4		ug/L		46	10 - 124

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

Lab Sample ID: LCS 400-677247/2-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachloroethane			120	77.3		ug/L		64	10 - 127		
Indene			120	86.9		ug/L		72	18 - 150		
Isophorone			120	87.2		ug/L		73	28 - 127		
2-Methylphenol			120	99.7		ug/L		83	34 - 124		
3 & 4 Methylphenol			120	84.3		ug/L		70	32 - 122		
2-Nitroaniline			120	96.8		ug/L		81	24 - 139		
3-Nitroaniline			120	90.2		ug/L		75	10 - 128		
4-Nitroaniline			120	127		ug/L		105	28 - 118		
Nitrobenzene			120	82.9		ug/L		69	29 - 120		
2-Nitrophenol			120	80.0		ug/L		67	25 - 148		
4-Nitrophenol			240	183		ug/L		76	12 - 129		
N-Nitrosodimethylamine			120	73.7		ug/L		61	10 - 115		
N-Nitrosodi-n-propylamine			120	94.0		ug/L		78	24 - 142		
N-Nitrosodiphenylamine			119	89.0		ug/L		75	29 - 138		
Pentachlorophenol			240	159		ug/L		66	19 - 150		
Phenol			120	57.4		ug/L		48	11 - 95		
Pyridine			240	72.9		ug/L		30	10 - 82		
Quinoline			59.9	47.5		ug/L		79	10 - 141		
2,4,5-Trichlorophenol			120	90.2		ug/L		75	30 - 144		
2,4,6-Trichlorophenol			120	70.9		ug/L		59	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*70*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*71*		*16 - 127*
Phenol-d5	*49*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*50*		*10 - 150*

Lab Sample ID: LCS 400-677247/4-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	103		ug/L		86	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*91*		*13 - 150*
2,4,6-Tribromophenol	*46*		*10 - 150*

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

Lab Sample ID: LCSD 400-677247/3-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	65.5		ug/L		55	10 - 127	17	40
Benzoic acid			492	247		ug/L		50	19 - 126	4	40
Benzyl alcohol			120	27.2		ug/L		23	17 - 109	6	40
Bis(2-chloroethoxy)methane			120	91.1		ug/L		76	24 - 125	8	40
Bis(2-chloroethyl)ether			120	101		ug/L		84	10 - 121	8	40
bis (2-chloroisopropyl) ether			120	109		ug/L		91	14 - 123	6	40
Bis(2-ethylhexyl) phthalate			120	111		ug/L		92	16 - 150	6	40
4-Bromophenyl phenyl ether			120	98.6		ug/L		82	17 - 150	9	40
Butyl benzyl phthalate			120	113		ug/L		95	21 - 150	6	40
4-Chloroaniline			120	51.4		ug/L		43	10 - 124	8	40
4-Chloro-3-methylphenol			120	94.5		ug/L		79	37 - 131	5	40
2-Chloronaphthalene			120	87.8		ug/L		73	24 - 132	7	40
2-Chlorophenol			120	88.2		ug/L		73	27 - 124	11	40
4-Chlorophenyl phenyl ether			120	96.3		ug/L		80	27 - 147	7	40
Dibenz[a,h]acridine			59.9	50.1		ug/L		84	40 - 140	1	40
Dibenzofuran			120	93.8		ug/L		78	30 - 135	7	40
3,3'-Dichlorobenzidine			160	120		ug/L		75	10 - 150	2	40
2,4-Dichlorophenol			120	83.7		ug/L		70	33 - 132	7	40
Diethyl phthalate			120	100		ug/L		83	37 - 145	5	40
2,4-Dimethylphenol			120	76.1		ug/L		63	38 - 132	9	40
Dimethyl phthalate			120	92.6		ug/L		77	32 - 137	6	40
Di-n-butyl phthalate			120	106		ug/L		88	27 - 150	5	40
4,6-Dinitro-ortho-cresol			240	207		ug/L		86	14 - 150	9	40
2,4-Dinitrophenol			240	228		ug/L		95	15 - 150	7	40
2,4-Dinitrotoluene			120	101		ug/L		84	35 - 136	6	40
2,6-Dinitrotoluene			120	93.4		ug/L		78	29 - 140	6	40
Di-n-octyl phthalate			120	107		ug/L		89	26 - 150	4	40
1,4-Dioxane			120	56.1		ug/L		47	10 - 87	7	40
1,2-Diphenylhydrazine (as Azobenzene)			120	104		ug/L		86	23 - 138	7	40
Hexachlorobenzene			120	100		ug/L		84	10 - 150	7	40
Hexachlorocyclopentadiene			120	59.4		ug/L		50	10 - 124	7	40
Hexachloroethane			120	82.7		ug/L		69	10 - 127	7	40
Indene			120	94.5		ug/L		79	18 - 150	8	40
Isophorone			120	93.6		ug/L		78	28 - 127	7	40
2-Methylphenol			120	106		ug/L		89	34 - 124	6	40
3 & 4 Methylphenol			120	120		ug/L		100	32 - 122	35	40
2-Nitroaniline			120	105		ug/L		87	24 - 139	8	40
3-Nitroaniline			120	92.3		ug/L		77	10 - 128	2	40
4-Nitroaniline			120	128		ug/L		107	28 - 118	2	40
Nitrobenzene			120	90.4		ug/L		75	29 - 120	9	40
2-Nitrophenol			120	87.7		ug/L		73	25 - 148	9	40
4-Nitrophenol			240	190		ug/L		79	12 - 129	4	40
N-Nitrosodimethylamine			120	77.8		ug/L		65	10 - 115	5	40
N-Nitrosodi-n-propylamine			120	101		ug/L		84	24 - 142	7	40
N-Nitrosodiphenylamine			119	96.1		ug/L		81	29 - 138	8	40
Pentachlorophenol			240	183		ug/L		76	19 - 150	14	40
Phenol			120	61.0		ug/L		51	11 - 95	6	40
Pyridine			240	97.1		ug/L		40	10 - 82	28	40

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

Lab Sample ID: LCSD 400-677247/3-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			59.9	49.9		ug/L		83	10 - 141	5	40
2,4,5-Trichlorophenol			120	92.9		ug/L		77	30 - 144	3	40
2,4,6-Trichlorophenol			120	76.2		ug/L		63	27 - 147	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*21 - 114*
2-Fluorophenol	*57*		*10 - 105*
Nitrobenzene-d5	*77*		*16 - 127*
Phenol-d5	*51*		*10 - 129*
Terphenyl-d14	*91*		*13 - 150*
2,4,6-Tribromophenol	*52*		*10 - 150*

Lab Sample ID: LCSD 400-677247/5-A
Matrix: Water
Analysis Batch: 677378

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	99.5		ug/L		83	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*68*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*
2,4,6-Tribromophenol	*50*		*10 - 150*

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677378

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND	F1	119	33.8	F1	ug/L		28	50 - 150
Benzoic acid	ND	F1	490	234	F1	ug/L		48	50 - 150
Benzyl alcohol	ND	F1	119	19.8	F1	ug/L		17	50 - 150
Bis(2-chloroethoxy)methane	ND		119	75.1		ug/L		63	50 - 150
Bis(2-chloroethyl)ether	ND		119	82.9		ug/L		69	50 - 150
bis (2-chloroisopropyl) ether	ND		119	93.5		ug/L		78	50 - 150
Bis(2-ethylhexyl) phthalate	ND		119	101		ug/L		85	50 - 150
4-Bromophenyl phenyl ether	ND		119	87.6		ug/L		73	50 - 150
Butyl benzyl phthalate	ND		119	105		ug/L		88	50 - 150
4-Chloroaniline	ND	F1	119	39.4	F1	ug/L		33	50 - 150
4-Chloro-3-methylphenol	ND		119	76.2		ug/L		64	50 - 150
2-Chloronaphthalene	ND		119	73.7		ug/L		62	50 - 150
2-Chlorophenol	ND		119	65.6		ug/L		55	50 - 150
4-Chlorophenyl phenyl ether	ND		119	85.0		ug/L		71	50 - 150
Dibenz[a,h]acridine	ND		59.6	45.1		ug/L		76	50 - 150
Dibenzofuran	ND		119	81.3		ug/L		68	50 - 150

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

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677378

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
3,3'-Dichlorobenzidine	ND	F1	159	61.4	F1	ug/L		39	50 - 150
2,4-Dichlorophenol	ND		119	65.8		ug/L		55	50 - 150
Diethyl phthalate	ND		119	90.5		ug/L		76	50 - 150
2,4-Dimethylphenol	ND	F1	119	50.5	F1	ug/L		42	50 - 150
Dimethyl phthalate	ND		119	83.3		ug/L		70	50 - 150
Di-n-butyl phthalate	ND		119	95.6		ug/L		80	50 - 150
4,6-Dinitro-ortho-cresol	ND		239	184		ug/L		77	50 - 150
2,4-Dinitrophenol	ND		239	204		ug/L		85	50 - 150
2,4-Dinitrotoluene	ND		119	91.1		ug/L		76	50 - 150
2,6-Dinitrotoluene	ND		119	83.9		ug/L		70	50 - 150
Di-n-octyl phthalate	ND		119	96.5		ug/L		81	50 - 150
1,4-Dioxane	ND	F1	119	47.1	F1	ug/L		39	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		119	92.4		ug/L		77	50 - 150
Hexachlorobenzene	ND		119	89.8		ug/L		75	50 - 150
Hexachlorocyclopentadiene	ND	F1	119	50.2	F1	ug/L		42	50 - 150
Hexachloroethane	ND		119	69.7		ug/L		58	50 - 150
Indene	ND		119	76.7		ug/L		64	50 - 150
Isophorone	ND		119	78.8		ug/L		66	50 - 150
2-Methylphenol	ND		119	69.0		ug/L		58	50 - 150
3 & 4 Methylphenol	ND		119	76.0		ug/L		64	50 - 150
2-Nitroaniline	ND		119	85.7		ug/L		72	50 - 150
3-Nitroaniline	ND		119	74.1		ug/L		62	50 - 150
4-Nitroaniline	ND		119	103		ug/L		86	50 - 150
Nitrobenzene	ND		119	76.7		ug/L		64	50 - 150
2-Nitrophenol	ND		119	71.9		ug/L		60	50 - 150
4-Nitrophenol	ND		239	165		ug/L		69	50 - 150
N-Nitrosodimethylamine	ND		119	66.6		ug/L		56	50 - 150
N-Nitrosodi-n-propylamine	ND		119	84.6		ug/L		71	50 - 150
N-Nitrosodiphenylamine	ND		118	72.3		ug/L		61	50 - 150
Pentachlorophenol	ND		239	151		ug/L		63	50 - 150
Phenol	ND	F1	119	47.2	F1	ug/L		39	50 - 150
Pyridine	ND	F1	239	81.3	F1	ug/L		34	50 - 150
Quinoline	ND		59.6	47.6		ug/L		80	50 - 150
2,4,5-Trichlorophenol	ND		119	79.1		ug/L		66	50 - 150
2,4,6-Trichlorophenol	ND		119	61.0		ug/L		51	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*21 - 114*
2-Fluorophenol	*39*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*33*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*43*		*10 - 150*

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

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677378

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F1	117	27.8	F1	ug/L		24	50 - 150	19	40
Benzoic acid	ND	F1	481	249		ug/L		52	50 - 150	6	40
Benzyl alcohol	ND	F1	117	21.9	F1	ug/L		19	50 - 150	10	40
Bis(2-chloroethoxy)methane	ND		117	87.5		ug/L		75	50 - 150	15	40
Bis(2-chloroethyl)ether	ND		117	100		ug/L		85	50 - 150	19	40
bis (2-chloroisopropyl) ether	ND		117	110		ug/L		93	50 - 150	16	40
Bis(2-ethylhexyl) phthalate	ND		117	110		ug/L		93	50 - 150	8	40
4-Bromophenyl phenyl ether	ND		117	97.8		ug/L		83	50 - 150	11	40
Butyl benzyl phthalate	ND		117	114		ug/L		97	50 - 150	8	40
4-Chloroaniline	ND	F1	117	39.8	F1	ug/L		34	50 - 150	1	40
4-Chloro-3-methylphenol	ND		117	82.0		ug/L		70	50 - 150	7	40
2-Chloronaphthalene	ND		117	87.7		ug/L		75	50 - 150	17	40
2-Chlorophenol	ND		117	76.3		ug/L		65	50 - 150	15	40
4-Chlorophenyl phenyl ether	ND		117	94.7		ug/L		81	50 - 150	11	40
Dibenz[a,h]acridine	ND		58.4	49.1		ug/L		84	50 - 150	9	40
Dibenzofuran	ND		117	93.0		ug/L		79	50 - 150	13	40
3,3'-Dichlorobenzidine	ND	F1	156	55.0	F1	ug/L		35	50 - 150	11	40
2,4-Dichlorophenol	ND		117	74.7		ug/L		64	50 - 150	13	40
Diethyl phthalate	ND		117	97.9		ug/L		84	50 - 150	8	40
2,4-Dimethylphenol	ND	F1	117	54.8	F1	ug/L		47	50 - 150	8	40
Dimethyl phthalate	ND		117	90.6		ug/L		77	50 - 150	8	40
Di-n-butyl phthalate	ND		117	104		ug/L		89	50 - 150	8	40
4,6-Dinitro-ortho-cresol	ND		234	211		ug/L		90	50 - 150	13	40
2,4-Dinitrophenol	ND		234	231		ug/L		99	50 - 150	13	40
2,4-Dinitrotoluene	ND		117	98.8		ug/L		84	50 - 150	8	40
2,6-Dinitrotoluene	ND		117	92.3		ug/L		79	50 - 150	10	40
Di-n-octyl phthalate	ND		117	105		ug/L		89	50 - 150	8	40
1,4-Dioxane	ND	F1	117	50.9	F1	ug/L		43	50 - 150	8	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		117	104		ug/L		89	50 - 150	12	40
Hexachlorobenzene	ND		117	99.1		ug/L		85	50 - 150	10	40
Hexachlorocyclopentadiene	ND	F1	117	64.1		ug/L		55	50 - 150	24	40
Hexachloroethane	ND		117	84.8		ug/L		72	50 - 150	19	40
Indene	ND		117	90.5		ug/L		77	50 - 150	17	40
Isophorone	ND		117	90.3		ug/L		77	50 - 150	14	40
2-Methylphenol	ND		117	79.6		ug/L		68	50 - 150	14	40
3 & 4 Methylphenol	ND		117	95.5		ug/L		81	50 - 150	23	40
2-Nitroaniline	ND		117	93.7		ug/L		80	50 - 150	9	40
3-Nitroaniline	ND		117	71.1		ug/L		61	50 - 150	4	40
4-Nitroaniline	ND		117	103		ug/L		88	50 - 150	0	40
Nitrobenzene	ND		117	89.2		ug/L		76	50 - 150	15	40
2-Nitrophenol	ND		117	85.3		ug/L		73	50 - 150	17	40
4-Nitrophenol	ND		234	174		ug/L		74	50 - 150	5	40
N-Nitrosodimethylamine	ND		117	71.6		ug/L		61	50 - 150	7	40
N-Nitrosodi-n-propylamine	ND		117	99.3		ug/L		85	50 - 150	16	40
N-Nitrosodiphenylamine	ND		116	80.0		ug/L		69	50 - 150	10	40
Pentachlorophenol	ND		234	167		ug/L		71	50 - 150	11	40
Phenol	ND	F1	117	50.7	F1	ug/L		43	50 - 150	7	40
Pyridine	ND	F1	234	84.3	F1	ug/L		36	50 - 150	4	40

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

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677378

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline	ND		58.4	49.5		ug/L		85	50 - 150	4	40
2,4,5-Trichlorophenol	ND		117	89.4		ug/L		76	50 - 150	12	40
2,4,6-Trichlorophenol	ND		117	69.3		ug/L		59	50 - 150	13	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*21 - 114*
2-Fluorophenol	*44*		*10 - 105*
Nitrobenzene-d5	*76*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*93*		*13 - 150*
2,4,6-Tribromophenol	*47*		*10 - 150*

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

Lab Sample ID: MB 400-677247/1-A
Matrix: Water
Analysis Batch: 677451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677247

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/09/24 09:54	07/10/24 16:13	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/09/24 09:54	07/10/24 16:13	1
Anthracene	ND		0.20	0.047	ug/L		07/09/24 09:54	07/10/24 16:13	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 16:13	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/09/24 09:54	07/10/24 16:13	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/09/24 09:54	07/10/24 16:13	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/09/24 09:54	07/10/24 16:13	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/09/24 09:54	07/10/24 16:13	1
Chrysene	ND		0.20	0.033	ug/L		07/09/24 09:54	07/10/24 16:13	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/09/24 09:54	07/10/24 16:13	1
Fluoranthene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 16:13	1
Fluorene	ND		0.20	0.089	ug/L		07/09/24 09:54	07/10/24 16:13	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/09/24 09:54	07/10/24 16:13	1
Phenanthrene	ND		0.20	0.090	ug/L		07/09/24 09:54	07/10/24 16:13	1
Pyrene	ND		0.20	0.039	ug/L		07/09/24 09:54	07/10/24 16:13	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/09/24 09:54	07/10/24 16:13	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/09/24 09:54	07/10/24 16:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*18 - 147*	*07/09/24 09:54*	*07/10/24 16:13*	*1*
2-Fluorobiphenyl	*49*		*15 - 128*	*07/09/24 09:54*	*07/10/24 16:13*	*1*
Nitrobenzene-d5	*52*		*10 - 144*	*07/09/24 09:54*	*07/10/24 16:13*	*1*

Lab Sample ID: LCS 400-677247/2-A
Matrix: Water
Analysis Batch: 677451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	82.5		ug/L		69	10 - 140

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

Lab Sample ID: LCS 400-677247/2-A
Matrix: Water
Analysis Batch: 677451

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthylene			120	83.5		ug/L		70	10 - 140		
Anthracene			120	89.3		ug/L		74	19 - 140		
Benzo[a]anthracene			120	93.5		ug/L		78	25 - 140		
Benzo[a]pyrene			120	89.6		ug/L		75	24 - 140		
Benzo[b]fluoranthene			120	93.1		ug/L		78	34 - 140		
Benzo[g,h,i]perylene			120	86.1		ug/L		72	13 - 140		
Benzo[k]fluoranthene			120	100		ug/L		84	21 - 140		
Chrysene			120	98.0		ug/L		82	28 - 140		
Dibenz(a,h)anthracene			120	83.0		ug/L		69	10 - 140		
Fluoranthene			120	91.6		ug/L		76	18 - 140		
Fluorene			120	85.5		ug/L		71	16 - 140		
Indeno[1,2,3-cd]pyrene			120	82.6		ug/L		69	10 - 140		
Phenanthrene			120	91.4		ug/L		76	22 - 140		
Pyrene			120	104		ug/L		86	38 - 140		
1-Methylnaphthalene			120	79.6		ug/L		66	10 - 140		
2-Methylnaphthalene			120	79.1		ug/L		66	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*81*		*18 - 147*
2-Fluorobiphenyl	*65*		*15 - 128*
Nitrobenzene-d5	*60*		*10 - 144*

Lab Sample ID: LCSD 400-677247/3-A
Matrix: Water
Analysis Batch: 677451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677247

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	99.2		ug/L		83	10 - 140	18	40
Acenaphthylene			120	101		ug/L		84	10 - 140	19	40
Anthracene			120	108		ug/L		90	19 - 140	18	40
Benzo[a]anthracene			120	104		ug/L		87	25 - 140	11	40
Benzo[a]pyrene			120	104		ug/L		87	24 - 140	15	40
Benzo[b]fluoranthene			120	108		ug/L		90	34 - 140	15	40
Benzo[g,h,i]perylene			120	95.9		ug/L		80	13 - 140	11	40
Benzo[k]fluoranthene			120	116		ug/L		97	21 - 140	15	40
Chrysene			120	109		ug/L		91	28 - 140	10	40
Dibenz(a,h)anthracene			120	94.2		ug/L		79	10 - 140	13	40
Fluoranthene			120	109		ug/L		91	18 - 140	17	40
Fluorene			120	104		ug/L		87	16 - 140	20	40
Indeno[1,2,3-cd]pyrene			120	92.8		ug/L		77	10 - 140	12	40
Phenanthrene			120	109		ug/L		91	22 - 140	18	40
Pyrene			120	117		ug/L		97	38 - 140	12	40
1-Methylnaphthalene			120	96.3		ug/L		80	10 - 140	19	40
2-Methylnaphthalene			120	96.4		ug/L		80	10 - 140	20	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*89*		*18 - 147*
2-Fluorobiphenyl	*78*		*15 - 128*

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

Lab Sample ID: LCSD 400-677247/3-A
Matrix: Water
Analysis Batch: 677451

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677247

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Nitrobenzene-d5	72		10 - 144

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677451

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		119	82.6		ug/L		69	50 - 150
Acenaphthylene	ND		119	83.8		ug/L		70	50 - 150
Anthracene	ND		119	90.4		ug/L		76	50 - 150
Benzo[a]anthracene	ND		119	90.6		ug/L		76	50 - 150
Benzo[a]pyrene	ND		119	88.1		ug/L		74	50 - 150
Benzo[b]fluoranthene	0.052	J	119	93.9		ug/L		79	50 - 150
Benzo[g,h,i]perylene	0.045	J	119	86.7		ug/L		73	50 - 150
Benzo[k]fluoranthene	ND		119	101		ug/L		84	50 - 150
Chrysene	0.038	J	119	98.2		ug/L		82	50 - 150
Dibenz(a,h)anthracene	ND		119	85.1		ug/L		71	50 - 150
Fluoranthene	0.048	J	119	95.0		ug/L		79	50 - 150
Fluorene	ND		119	90.0		ug/L		75	50 - 150
Indeno[1,2,3-cd]pyrene	ND		119	83.2		ug/L		70	50 - 150
Phenanthrene	ND		119	94.3		ug/L		79	50 - 150
Pyrene	ND		119	101		ug/L		85	50 - 150
1-Methylnaphthalene	ND		119	76.9		ug/L		64	50 - 150
2-Methylnaphthalene	ND		119	76.8		ug/L		64	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	82		18 - 147
2-Fluorobiphenyl	64		15 - 128
Nitrobenzene-d5	55		10 - 144

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677451

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		117	92.2		ug/L		79	50 - 150	11	40
Acenaphthylene	ND		117	94.1		ug/L		80	50 - 150	12	40
Anthracene	ND		117	97.4		ug/L		83	50 - 150	7	40
Benzo[a]anthracene	ND		117	98.0		ug/L		84	50 - 150	8	40
Benzo[a]pyrene	ND		117	97.2		ug/L		83	50 - 150	10	40
Benzo[b]fluoranthene	0.052	J	117	100		ug/L		85	50 - 150	6	40
Benzo[g,h,i]perylene	0.045	J	117	96.2		ug/L		82	50 - 150	10	40
Benzo[k]fluoranthene	ND		117	112		ug/L		95	50 - 150	11	40
Chrysene	0.038	J	117	103		ug/L		88	50 - 150	5	40
Dibenz(a,h)anthracene	ND		117	101		ug/L		86	50 - 150	17	40
Fluoranthene	0.048	J	117	102		ug/L		87	50 - 150	7	40
Fluorene	ND		117	99.0		ug/L		84	50 - 150	10	40
Indeno[1,2,3-cd]pyrene	ND		117	94.7		ug/L		81	50 - 150	13	40

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

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677451

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677247

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Phenanthrene	ND		117	101		ug/L		86	50 - 150	7	40
Pyrene	ND		117	102		ug/L		87	50 - 150	1	40
1-Methylnaphthalene	ND		117	92.9		ug/L		79	50 - 150	19	40
2-Methylnaphthalene	ND		117	92.1		ug/L		79	50 - 150	18	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*83*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677086/1-A
Matrix: Water
Analysis Batch: 677152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677086

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		07/08/24 09:40	07/08/24 14:43	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/08/24 09:40	07/08/24 14:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*07/08/24 09:40*	*07/08/24 14:43*	*1*

Lab Sample ID: LCS 400-677086/2-A
Matrix: Water
Analysis Batch: 677152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677086

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.134		ug/L		133	60 - 140		
1,2-Dibromoethane			0.100	0.0918		ug/L		92	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*107*		*51 - 149*

Lab Sample ID: LCSD 400-677086/3-A
Matrix: Water
Analysis Batch: 677152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677086

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	5	30
1,2-Dibromoethane			0.100	0.100		ug/L		100	60 - 140	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-258746-11 MS
Matrix: Water
Analysis Batch: 677152

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677086

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.106	0.134		ug/L		126	10 - 150		
1,2-Dibromoethane	ND		0.106	0.0663		ug/L		63	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*51 - 149*

Lab Sample ID: 400-258746-11 MSD
Matrix: Water
Analysis Batch: 677152

Client Sample ID: MW12-ROX-070524
Prep Type: Total/NA
Prep Batch: 677086

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		0.102	0.123		ug/L		121	10 - 150	8	20
1,2-Dibromoethane	ND		0.101	0.0661		ug/L		65	39 - 150	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*108*		*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: 7/5/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-258746 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-070524-8260-B	7/5/2024	0000	Water	2					2	X			
	TB-ROX-070524-8011-B	7/5/2024	0000	Water	2					2		X		
	MW3-ROX-070524-EB	7/5/2024	0855	Water	6			2		8	X	X	X	X
	MW3-ROX-070524	7/5/2024	1010	Water	6			2		8	X	X	X	X
	MW26-ROX-070524	7/5/2024	1115	Water	6			2		8	X	X	X	X
	MW9-ROX-070524	7/5/2024	1300	Water	6			2		8	X	X	X	X

3-5-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 7252 0543 6414, 7252 0543 6403	7/5/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7/6/24	Time: 8:31

Version: 27Sept23

CUSTODY SEALS: 1717992, 1717993, 1717994, 1717995

2.4C IR8

Page 88 of 91

7/12/2024

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/5/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 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 60721927 – 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): C. McDavid, E. Chalfant

LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-070524-8260-A	7/5/2024	0000	Water	2					2	X			
	TB-ROX-070524-8011-A	7/5/2024	0000	Water	2					2		X		
	MW11-ROX-070524-EB	7/5/2024	0830	Water	6			2		8	X	X	X	X
	MW11-ROX-070524	7/5/2024	0925	Water	6			2		8	X	X	X	X
	MW12-ROX-070524	7/5/2024	1030	Water	6			2		8	X	X	X	X
	MW12-ROX-070524-MS	7/5/2024	1030	Water	6			2		8	X	X	X	X
	MW12-ROX-070524-MSD	7/5/2024	1030	Water	6			2		8	X	X	X	X
	MW16-ROX-070524	7/5/2024	1255	Water	6			2		8	X	X	X	X
	MW1-ROX-070524	7/5/2024	1345	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See pg 1	7/5/2024	1600
		7/6/24	8:31

Version: 27Sept23

CUSTODY SEALS: See pg 1

0.4°C, 2.4°C IR8

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7/12/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-258746-1

Login Number: 258746
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	2.4°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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-258746-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-258832-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Delaine Austin

Date Reviewed: 8/19/2024

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

Sample Identification	Sample Identification
TB-ROX-070824-8260-B	TB-ROX-070824-8011-B
MW10-ROX-070824	MW27-ROX-070824
MW28-ROX-070824	TB-ROX-070824-8260-A
TB-ROX-070824-8011-A	MW5-ROX-070824
MW14-ROX-070824	--

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-methylnaphthalene was detected in a PAH method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCSD recoveries, and/or PAH LCS/LCSD RPDs, were outside evaluation criteria. Several VOC and SVOC MS/MSD recoveries, and/or MS/MSD RPDs, were outside evaluation criteria in samples MW10-ROX-070824 and MW5-ROX-070824. 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 400-677673/1-A	PAHs	2-Methylnaphthalene	0.106 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
MW10-ROX-070824	PAHs	2-Methylnaphthalene	-	**U**
MW27-ROX-070824	PAHs	2-Methylnaphthalene	-	**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 400-677358/1002	VOCs	Acetone	**249**	NA	43-150
LCS 400-677358/1002	VOCs	2-Butanone (MEK)	**146**	NA	61-145
LCS/LCSD 400-677673/2-A/3-A	SVOCs	4-Nitroaniline	105/**125**	17	28-118/40
LCS/LCSD 400-677673/2-A/3-A	PAHs	Benzo[k]fluoranthene	76/116	**42**	21-140/40
LCS/LCSD 400-677673/2-A/3-A	PAHs	Dibenz(a,h)anthracene	65/100	**43**	10-140/40
LCS/LCSD 400-677353/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**147**/134	9	60-140/30

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, samples MW10-ROX-070824 and MW5-ROX-070824 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
MW10-ROX-070824 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW5-ROX-070824 MS/MSD	VOCs	Acetone	**41/41**	1	43-150/30
MW5-ROX-070824 MS/MSD	VOCs	Chloroethane	**177**/131	30	50-150/30
MW5-ROX-070824 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW10-ROX-070824 MS/MSD	SVOCs	4-Chloroaniline	**49/47**	1	50-150/40
MW10-ROX-070824 MS/MSD	SVOCs	Pyridine	**43/35**	15	50-150/40
MW5-ROX-070824 MS/MSD	SVOCs	Aniline	**42/50**	22	50-150/40
MW5-ROX-070824 MS/MSD	SVOCs	3,3'-Dichlorobenzidine	**39/47**	25	50-150/40
MW5-ROX-070824 MS/MSD	SVOCs	Pyridine	**25/39**	**48**	50-150/40
MW10-ROX-070824 MS/MSD	VOCs by 8011	1,2-Dibromo-3-Chloropropane	101/115	**22**	50-150/20
MW5-ROX-070824 MS/MSD	VOCs by 8011	1,2-Dibromo-3-Chloropropane	120/146	**21**	50-150/20

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgement was used to qualify; however, not reject 2-chloroethyl vinyl ether due to acceptable LCS recoveries and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW10-ROX-070824	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW5-ROX-070824	VOCs	Acetone	**UJ**
MW5-ROX-070824	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW10-ROX-070824	SVOCs	4-Chloroaniline	**UJ**
MW10-ROX-070824	SVOCs	Pyridine	**UJ**
MW5-ROX-070824	SVOCs	Aniline	**UJ**
MW5-ROX-070824	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW5-ROX-070824	SVOCs	Pyridine	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/16/2024 12:44:27 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-258832-1

Reviewed 08/26/2024
VA

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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(615)301-5038

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Job Narrative
400-258832-1

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 7/9/2024 10:17 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 5.0°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-677358 recovered above the upper control limit for Acetone, Hexachlorobutadiene, Trichlorofluoromethane 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 400-677358 recovered outside control limits for the following analytes: 2-Butanone (MEK) and Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 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-070824-8260-B (400-258832-1), MW10-ROX-070824 (400-258832-3), MW27-ROX-070824 (400-258832-4), MW28-ROX-070824 (400-258832-5) and TB-ROX-070824-8260-A (400-258832-6). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-677358 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 400-677358 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: MW14-ROX-070824 (400-258832-9). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-677477 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 400-677477 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 400-677477 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.

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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-677673 and analytical batch 400-677824 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix

interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8270E: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-677673 and analytical batch 400-677824 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-677673 and analytical batch 400-677824 recovered outside control limits for the following analytes: 4-Nitroaniline. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-677824 recovered above the upper control limit for 2-Methylphenol, 1,2-Diphenylhydrazine (as Azobenzene), N-Nitrosodi-n-propylamine, Butyl benzyl phthalate and N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E_SIM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-677673 and analytical batch 400-677828 recovered outside control limits for the following analytes: Benzo[k]fluoranthene and Dibenz(a,h)anthracene.

Method 8270E_SIM: The method blank for preparation batch 400-677673 and analytical batch 400-677828 contained 2-Methylnaphthalene 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: Sample was not sent for re-extract for verification of detects as historical data confirms results. MW10-ROX-070824 (400-258832-3) and MW27-ROX-070824 (400-258832-4)

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 laboratory control sample (LCS) for preparation batch 400-677353 and analytical batch 400-677421 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. 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) precision for preparation batch 400-677353 and analytical batch 400-677421 was outside control limits. Sample matrix interference is suspected.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-677421 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: 400-258832-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-258832-1	TB-ROX-070824-8260-B	Water	07/08/24 00:00	07/09/24 10:17
400-258832-2	TB-ROX-070824-8011-B	Water	07/08/24 00:00	07/09/24 10:17
400-258832-3	MW10-ROX-070824	Water	07/08/24 09:15	07/09/24 10:17
400-258832-4	MW27-ROX-070824	Water	07/08/24 11:10	07/09/24 10:17
400-258832-5	MW28-ROX-070824	Water	07/08/24 13:10	07/09/24 10:17
400-258832-6	TB-ROX-070824-8260-A	Water	07/08/24 00:00	07/09/24 10:17
400-258832-7	TB-ROX-070824-8011-A	Water	07/08/24 00:00	07/09/24 10:17
400-258832-8	MW5-ROX-070824	Water	07/08/24 09:50	07/09/24 10:17
400-258832-9	MW14-ROX-070824	Water	07/08/24 12:50	07/09/24 10:17

Detection Summary

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8260-B — Lab Sample ID: 400-258832-1

No Detections.

Client Sample ID: TB-ROX-070824-8011-B — Lab Sample ID: 400-258832-2

No Detections.

Client Sample ID: MW10-ROX-070824 — Lab Sample ID: 400-258832-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.064	J B U	0.19	0.064	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW27-ROX-070824 — Lab Sample ID: 400-258832-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	0.060	J	0.19	0.043	ug/L	1		8270E SIM	Total/NA
Anthracene	0.047	J	0.19	0.046	ug/L	1		8270E SIM	Total/NA
Fluorene	0.11	J	0.19	0.086	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.080	J	0.19	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.11	J B U	0.19	0.064	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW28-ROX-070824 — Lab Sample ID: 400-258832-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.0		1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-070824-8260-A — Lab Sample ID: 400-258832-6

No Detections.

Client Sample ID: TB-ROX-070824-8011-A — Lab Sample ID: 400-258832-7

No Detections.

Client Sample ID: MW5-ROX-070824 — Lab Sample ID: 400-258832-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.9		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	2.2		1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW14-ROX-070824 — Lab Sample ID: 400-258832-9

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8260-B
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-1
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			07/10/24 14:40	1
Acrolein	ND		20	3.3	ug/L			07/10/24 14:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 14:40	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 14:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 14:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 14:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 14:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 14:40	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 14:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 14:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 14:40	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 14:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 14:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 14:40	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 14:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 14:40	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 14:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 14:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 14:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 14:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 14:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 14:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 14:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 14:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 14:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 14:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 14:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 14:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 14:40	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 14:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 14:40	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 14:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 14:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 14:40	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 14:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 14:40	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 14:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 14:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 14:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 14:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 14:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 14:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 14:40	1

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8260-B
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-1
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			07/10/24 14:40	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 14:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 14:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 14:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 14:40	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 14:40	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 14:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 14:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 14:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 14:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 14:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 14:40	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 14:40	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 14:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 14:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 14:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 14:40	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 14:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 14:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 14:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/10/24 14:40*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/10/24 14:40*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/10/24 14:40*	*1*

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8011-B
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.034	0.019	ug/L		07/10/24 08:38	07/10/24 16:17	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/10/24 08:38	07/10/24 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*07/10/24 08:38*	*07/10/24 16:17*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW10-ROX-070824
Date Collected: 07/08/24 09:15
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-3
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			07/10/24 12:38	1
Acrolein	ND			20	3.3	ug/L			07/10/24 12:38	1
Acrylonitrile	ND			10	2.8	ug/L			07/10/24 12:38	1
Benzene	ND			1.0	0.24	ug/L			07/10/24 12:38	1
Bromobenzene	ND			1.0	0.54	ug/L			07/10/24 12:38	1
Bromochloromethane	ND			1.0	0.52	ug/L			07/10/24 12:38	1
Bromodichloromethane	ND			1.0	0.50	ug/L			07/10/24 12:38	1
Bromoform	ND			5.0	0.25	ug/L			07/10/24 12:38	1
Bromomethane	ND			1.0	0.98	ug/L			07/10/24 12:38	1
2-Butanone (MEK)	ND	*+		25	2.6	ug/L			07/10/24 12:38	1
Carbon disulfide	ND			1.0	0.50	ug/L			07/10/24 12:38	1
Carbon tetrachloride	ND			1.0	0.19	ug/L			07/10/24 12:38	1
Chlorobenzene	ND			1.0	0.42	ug/L			07/10/24 12:38	1
Chloroethane	ND			1.0	0.76	ug/L			07/10/24 12:38	1
2-Chloroethyl vinyl ether	ND	F1	UJ	5.0	2.0	ug/L			07/10/24 12:38	1
Chloroform	ND			1.0	0.90	ug/L			07/10/24 12:38	1
1-Chlorohexane	ND			1.0	0.32	ug/L			07/10/24 12:38	1
Chloromethane	ND			1.0	0.40	ug/L			07/10/24 12:38	1
cis-1,2-Dichloroethene	ND			1.0	0.20	ug/L			07/10/24 12:38	1
cis-1,3-Dichloropropene	ND			5.0	0.50	ug/L			07/10/24 12:38	1
Dibromochloromethane	ND			1.0	0.24	ug/L			07/10/24 12:38	1
1,2-Dichlorobenzene	ND			1.0	0.50	ug/L			07/10/24 12:38	1
1,3-Dichlorobenzene	ND			1.0	0.54	ug/L			07/10/24 12:38	1
1,4-Dichlorobenzene	ND			1.0	0.64	ug/L			07/10/24 12:38	1
Dichlorodifluoromethane	ND			1.0	0.85	ug/L			07/10/24 12:38	1
1,1-Dichloroethane	ND			1.0	0.50	ug/L			07/10/24 12:38	1
1,2-Dichloroethane	ND			1.0	0.55	ug/L			07/10/24 12:38	1
1,1-Dichloroethene	ND			1.0	0.50	ug/L			07/10/24 12:38	1
1,2-Dichloropropane	ND			1.0	0.50	ug/L			07/10/24 12:38	1
1,3-Dichloropropane	ND			1.0	0.50	ug/L			07/10/24 12:38	1
2,2-Dichloropropane	ND			1.0	0.50	ug/L			07/10/24 12:38	1
1,1-Dichloropropene	ND			1.0	0.090	ug/L			07/10/24 12:38	1
Ethylbenzene	ND			1.0	0.50	ug/L			07/10/24 12:38	1
Ethyl methacrylate	ND			1.0	0.60	ug/L			07/10/24 12:38	1
Hexachlorobutadiene	ND			5.0	0.90	ug/L			07/10/24 12:38	1
2-Hexanone	ND			25	4.3	ug/L			07/10/24 12:38	1
Isopropylbenzene	ND			1.0	0.53	ug/L			07/10/24 12:38	1
Methylene bromide	ND			5.0	0.22	ug/L			07/10/24 12:38	1
Methylene Chloride	ND			5.0	3.0	ug/L			07/10/24 12:38	1
4-Methyl-2-pentanone (MIBK)	ND			25	1.8	ug/L			07/10/24 12:38	1
Methyl tert-butyl ether	ND			1.0	0.22	ug/L			07/10/24 12:38	1
m-Xylene & p-Xylene	ND			5.0	0.63	ug/L			07/10/24 12:38	1
Naphthalene	ND			5.0	3.0	ug/L			07/10/24 12:38	1
n-Butylbenzene	ND			1.0	0.76	ug/L			07/10/24 12:38	1
N-Propylbenzene	ND			1.0	0.69	ug/L			07/10/24 12:38	1
o-Chlorotoluene	ND			1.0	0.57	ug/L			07/10/24 12:38	1
o-Xylene	ND			5.0	0.60	ug/L			07/10/24 12:38	1
p-Chlorotoluene	ND			1.0	0.56	ug/L			07/10/24 12:38	1
p-Isopropyltoluene	ND			1.0	0.71	ug/L			07/10/24 12:38	1

Client Sample ID: MW10-ROX-070824
Date Collected: 07/08/24 09:15
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-3
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			07/10/24 12:38	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 12:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 12:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 12:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 12:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 12:38	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 12:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 12:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 12:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 12:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 12:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 12:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 12:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 12:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 12:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 12:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 12:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 12:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 12:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 12:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*07/10/24 12:38*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/10/24 12:38*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/10/24 12:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/12/24 12:17	07/15/24 14:03	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/24 12:17	07/15/24 14:03	1
Anthracene	ND		0.19	0.046	ug/L		07/12/24 12:17	07/15/24 14:03	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:03	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/12/24 12:17	07/15/24 14:03	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/12/24 12:17	07/15/24 14:03	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/12/24 12:17	07/15/24 14:03	1
Benzo[k]fluoranthene	ND	*1	0.19	0.060	ug/L		07/12/24 12:17	07/15/24 14:03	1
Chrysene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 14:03	1
Dibenz(a,h)anthracene	ND	*1	0.19	0.047	ug/L		07/12/24 12:17	07/15/24 14:03	1
Fluoranthene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:03	1
Fluorene	ND		0.19	0.086	ug/L		07/12/24 12:17	07/15/24 14:03	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:03	1
Phenanthrene	ND		0.19	0.087	ug/L		07/12/24 12:17	07/15/24 14:03	1
Pyrene	ND		0.19	0.038	ug/L		07/12/24 12:17	07/15/24 14:03	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/12/24 12:17	07/15/24 14:03	1
2-Methylnaphthalene	**0.064**	**J B** U	0.19	0.064	ug/L		07/12/24 12:17	07/15/24 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*18 - 147*	*07/12/24 12:17*	*07/15/24 14:03*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*07/12/24 12:17*	*07/15/24 14:03*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW10-ROX-070824

Date Collected: 07/08/24 09:15
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-3

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*	*07/12/24 12:17*	*07/15/24 14:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/12/24 12:17	07/15/24 18:53	1
Benzenethiol	ND		9.7	9.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
Benzoic acid	ND		29	23	ug/L		07/12/24 12:17	07/15/24 18:53	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/12/24 12:17	07/15/24 18:53	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 18:53	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/12/24 12:17	07/15/24 18:53	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/12/24 12:17	07/15/24 18:53	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Chloroaniline	ND	F1 UJ	9.7	4.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/12/24 12:17	07/15/24 18:53	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/12/24 12:17	07/15/24 18:53	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/12/24 12:17	07/15/24 18:53	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 18:53	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 18:53	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 18:53	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 18:53	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 18:53	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/12/24 12:17	07/15/24 18:53	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 18:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 18:53	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/12/24 12:17	07/15/24 18:53	1
Hexachlorocyclopentadiene	ND		19	4.4	ug/L		07/12/24 12:17	07/15/24 18:53	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 18:53	1
Indene	ND		9.7	3.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
Isophorone	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 18:53	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/12/24 12:17	07/15/24 18:53	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
2-Nitroaniline	ND		9.7	4.9	ug/L		07/12/24 12:17	07/15/24 18:53	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Nitroaniline	ND	*+	9.7	4.0	ug/L		07/12/24 12:17	07/15/24 18:53	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 18:53	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 18:53	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/12/24 12:17	07/15/24 18:53	1

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

Job ID: 400-258832-1

Client Sample ID: MW10-ROX-070824

Lab Sample ID: 400-258832-3

Date Collected: 07/08/24 09:15

Matrix: Water

Date Received: 07/09/24 10:17

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		07/12/24 12:17	07/15/24 18:53	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 18:53	1
Pentachlorophenol	ND		19	12	ug/L		07/12/24 12:17	07/15/24 18:53	1
Phenol	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 18:53	1
Pyridine	ND	F1 UJ	9.7	9.7	ug/L		07/12/24 12:17	07/15/24 18:53	1
Quinoline	ND		9.7	2.3	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 18:53	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/12/24 12:17	07/15/24 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*21 - 114*	*07/12/24 12:17*	*07/15/24 18:53*	*1*
2-Fluorophenol	*57*		*10 - 105*	*07/12/24 12:17*	*07/15/24 18:53*	*1*
Nitrobenzene-d5	*84*		*16 - 127*	*07/12/24 12:17*	*07/15/24 18:53*	*1*
Phenol-d5	*43*		*10 - 129*	*07/12/24 12:17*	*07/15/24 18:53*	*1*
Terphenyl-d14	*99*		*13 - 150*	*07/12/24 12:17*	*07/15/24 18:53*	*1*
2,4,6-Tribromophenol	*61*		*10 - 150*	*07/12/24 12:17*	*07/15/24 18:53*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+ F2	0.031	0.018	ug/L		07/10/24 08:38	07/10/24 16:38	1
1,2-Dibromoethane	ND	F2	0.021	0.015	ug/L		07/10/24 08:38	07/10/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*07/10/24 08:38*	*07/10/24 16:38*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW27-ROX-070824
Date Collected: 07/08/24 11:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-4
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			07/10/24 17:54	1
Acrolein	ND		20	3.3	ug/L			07/10/24 17:54	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 17:54	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 17:54	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 17:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 17:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 17:54	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 17:54	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 17:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 17:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 17:54	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 17:54	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 17:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 17:54	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 17:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 17:54	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 17:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 17:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 17:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 17:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 17:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 17:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 17:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 17:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 17:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 17:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 17:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 17:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 17:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 17:54	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 17:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 17:54	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 17:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 17:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 17:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 17:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 17:54	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 17:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 17:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 17:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 17:54	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 17:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 17:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 17:54	1

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

Job ID: 400-258832-1

Client Sample ID: MW27-ROX-070824
Date Collected: 07/08/24 11:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-4
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			07/10/24 17:54	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 17:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 17:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 17:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 17:54	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 17:54	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 17:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 17:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 17:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 17:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 17:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 17:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 17:54	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 17:54	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 17:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 17:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 17:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 17:54	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 17:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 17:54	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/10/24 17:54*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/10/24 17:54*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 17:54*	*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	0.096	ug/L		07/12/24 12:17	07/15/24 14:24	1
Acenaphthylene	**0.060**	**J**	0.19	0.043	ug/L		07/12/24 12:17	07/15/24 14:24	1
Anthracene	**0.047**	**J**	0.19	0.046	ug/L		07/12/24 12:17	07/15/24 14:24	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:24	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/12/24 12:17	07/15/24 14:24	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/12/24 12:17	07/15/24 14:24	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/12/24 12:17	07/15/24 14:24	1
Benzo[k]fluoranthene	ND	*1	0.19	0.060	ug/L		07/12/24 12:17	07/15/24 14:24	1
Chrysene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 14:24	1
Dibenz(a,h)anthracene	ND	*1	0.19	0.047	ug/L		07/12/24 12:17	07/15/24 14:24	1
Fluoranthene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:24	1
Fluorene	**0.11**	**J**	0.19	0.086	ug/L		07/12/24 12:17	07/15/24 14:24	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:24	1
Phenanthrene	ND		0.19	0.087	ug/L		07/12/24 12:17	07/15/24 14:24	1
Pyrene	ND		0.19	0.038	ug/L		07/12/24 12:17	07/15/24 14:24	1
1-Methylnaphthalene	**0.080**	**J**	0.19	0.078	ug/L		07/12/24 12:17	07/15/24 14:24	1
2-Methylnaphthalene	**0.11**	**J B** U	0.19	0.064	ug/L		07/12/24 12:17	07/15/24 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*103*		*18 - 147*	*07/12/24 12:17*	*07/15/24 14:24*	*1*
2-Fluorobiphenyl	*83*		*15 - 128*	*07/12/24 12:17*	*07/15/24 14:24*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW27-ROX-070824

Date Collected: 07/08/24 11:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-4

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*	*07/12/24 12:17*	*07/15/24 14:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/12/24 12:17	07/15/24 20:30	1
Benzenethiol	ND		9.7	9.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
Benzoic acid	ND		29	23	ug/L		07/12/24 12:17	07/15/24 20:30	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/12/24 12:17	07/15/24 20:30	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 20:30	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/12/24 12:17	07/15/24 20:30	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/12/24 12:17	07/15/24 20:30	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Chloroaniline	ND		9.7	4.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/12/24 12:17	07/15/24 20:30	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/12/24 12:17	07/15/24 20:30	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/12/24 12:17	07/15/24 20:30	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 20:30	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 20:30	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:30	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 20:30	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 20:30	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/12/24 12:17	07/15/24 20:30	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 20:30	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 20:30	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/12/24 12:17	07/15/24 20:30	1
Hexachlorocyclopentadiene	ND		19	4.4	ug/L		07/12/24 12:17	07/15/24 20:30	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:30	1
Indene	ND		9.7	3.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
Isophorone	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:30	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/12/24 12:17	07/15/24 20:30	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
2-Nitroaniline	ND		9.7	4.8	ug/L		07/12/24 12:17	07/15/24 20:30	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Nitroaniline	ND	*+	9.7	4.0	ug/L		07/12/24 12:17	07/15/24 20:30	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:30	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 20:30	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/12/24 12:17	07/15/24 20:30	1

Client Sample ID: MW27-ROX-070824
Date Collected: 07/08/24 11:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		07/12/24 12:17	07/15/24 20:30	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 20:30	1
Pentachlorophenol	ND		19	12	ug/L		07/12/24 12:17	07/15/24 20:30	1
Phenol	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 20:30	1
Pyridine	ND		9.7	9.7	ug/L		07/12/24 12:17	07/15/24 20:30	1
Quinoline	ND		9.7	2.3	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 20:30	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/12/24 12:17	07/15/24 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*21 - 114*	*07/12/24 12:17*	*07/15/24 20:30*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/12/24 12:17*	*07/15/24 20:30*	*1*
Nitrobenzene-d5	*75*		*16 - 127*	*07/12/24 12:17*	*07/15/24 20:30*	*1*
Phenol-d5	*33*		*10 - 129*	*07/12/24 12:17*	*07/15/24 20:30*	*1*
Terphenyl-d14	*89*		*13 - 150*	*07/12/24 12:17*	*07/15/24 20:30*	*1*
2,4,6-Tribromophenol	*54*		*10 - 150*	*07/12/24 12:17*	*07/15/24 20:30*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.032	0.018	ug/L		07/10/24 08:38	07/10/24 17:42	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/10/24 08:38	07/10/24 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*07/10/24 08:38*	*07/10/24 17:42*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW28-ROX-070824
Date Collected: 07/08/24 13:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-5
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			07/10/24 18:19	1
Acrolein	ND		20	3.3	ug/L			07/10/24 18:19	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 18:19	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 18:19	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 18:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 18:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 18:19	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 18:19	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 18:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 18:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 18:19	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 18:19	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 18:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 18:19	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 18:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 18:19	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 18:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 18:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 18:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 18:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 18:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 18:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 18:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 18:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 18:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 18:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 18:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 18:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 18:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 18:19	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 18:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 18:19	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 18:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 18:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 18:19	1
Methyl tert-butyl ether	**2.0**		1.0	0.22	ug/L			07/10/24 18:19	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 18:19	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 18:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 18:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 18:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 18:19	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 18:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 18:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 18:19	1

Client Sample ID: MW28-ROX-070824
Date Collected: 07/08/24 13:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-5
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			07/10/24 18:19	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 18:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 18:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 18:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 18:19	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 18:19	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 18:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 18:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 18:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 18:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 18:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 18:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 18:19	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 18:19	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 18:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 18:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 18:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 18:19	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 18:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 18:19	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/10/24 18:19*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/10/24 18:19*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 18:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/12/24 12:17	07/15/24 14:45	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/12/24 12:17	07/15/24 14:45	1
Anthracene	ND		0.19	0.045	ug/L		07/12/24 12:17	07/15/24 14:45	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:45	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/12/24 12:17	07/15/24 14:45	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/12/24 12:17	07/15/24 14:45	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/12/24 12:17	07/15/24 14:45	1
Benzo[k]fluoranthene	ND	*1	0.19	0.060	ug/L		07/12/24 12:17	07/15/24 14:45	1
Chrysene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 14:45	1
Dibenz(a,h)anthracene	ND	*1	0.19	0.046	ug/L		07/12/24 12:17	07/15/24 14:45	1
Fluoranthene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:45	1
Fluorene	ND		0.19	0.086	ug/L		07/12/24 12:17	07/15/24 14:45	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/12/24 12:17	07/15/24 14:45	1
Phenanthrene	ND		0.19	0.087	ug/L		07/12/24 12:17	07/15/24 14:45	1
Pyrene	ND		0.19	0.038	ug/L		07/12/24 12:17	07/15/24 14:45	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		07/12/24 12:17	07/15/24 14:45	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/12/24 12:17	07/15/24 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*112*		*18 - 147*	*07/12/24 12:17*	*07/15/24 14:45*	*1*
2-Fluorobiphenyl	*89*		*15 - 128*	*07/12/24 12:17*	*07/15/24 14:45*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW28-ROX-070824

Date Collected: 07/08/24 13:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-5

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*10 - 144*	*07/12/24 12:17*	*07/15/24 14:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
Benzenethiol	ND		9.7	9.6	ug/L		07/12/24 12:17	07/15/24 20:55	1
Benzoic acid	ND		29	23	ug/L		07/12/24 12:17	07/15/24 20:55	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/12/24 12:17	07/15/24 20:55	1
Bis(2-chloroethoxy)methane	ND		9.7	4.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 20:55	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/12/24 12:17	07/15/24 20:55	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/12/24 12:17	07/15/24 20:55	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Chloroaniline	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/12/24 12:17	07/15/24 20:55	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/12/24 12:17	07/15/24 20:55	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 20:55	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/12/24 12:17	07/15/24 20:55	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 20:55	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 20:55	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:55	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 20:55	1
Di-n-butyl phthalate	ND		9.7	4.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/12/24 12:17	07/15/24 20:55	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/12/24 12:17	07/15/24 20:55	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/12/24 12:17	07/15/24 20:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 20:55	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		07/12/24 12:17	07/15/24 20:55	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:55	1
Indene	ND		9.7	3.5	ug/L		07/12/24 12:17	07/15/24 20:55	1
Isophorone	ND		9.7	5.0	ug/L		07/12/24 12:17	07/15/24 20:55	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/12/24 12:17	07/15/24 20:55	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
2-Nitroaniline	ND		9.7	4.8	ug/L		07/12/24 12:17	07/15/24 20:55	1
3-Nitroaniline	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Nitroaniline	ND	*+	9.7	4.0	ug/L		07/12/24 12:17	07/15/24 20:55	1
Nitrobenzene	ND		9.7	4.5	ug/L		07/12/24 12:17	07/15/24 20:55	1
2-Nitrophenol	ND		9.7	4.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/12/24 12:17	07/15/24 20:55	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/12/24 12:17	07/15/24 20:55	1

Client Sample ID: MW28-ROX-070824
Date Collected: 07/08/24 13:10
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-5
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	2.4	ug/L		07/12/24 12:17	07/15/24 20:55	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/12/24 12:17	07/15/24 20:55	1
Pentachlorophenol	ND		19	11	ug/L		07/12/24 12:17	07/15/24 20:55	1
Phenol	ND		9.7	4.1	ug/L		07/12/24 12:17	07/15/24 20:55	1
Pyridine	ND		9.7	9.7	ug/L		07/12/24 12:17	07/15/24 20:55	1
Quinoline	ND		9.7	2.3	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/12/24 12:17	07/15/24 20:55	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/12/24 12:17	07/15/24 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*07/12/24 12:17*	*07/15/24 20:55*	*1*
2-Fluorophenol	*56*		*10 - 105*	*07/12/24 12:17*	*07/15/24 20:55*	*1*
Nitrobenzene-d5	*84*		*16 - 127*	*07/12/24 12:17*	*07/15/24 20:55*	*1*
Phenol-d5	*42*		*10 - 129*	*07/12/24 12:17*	*07/15/24 20:55*	*1*
Terphenyl-d14	*97*		*13 - 150*	*07/12/24 12:17*	*07/15/24 20:55*	*1*
2,4,6-Tribromophenol	*64*		*10 - 150*	*07/12/24 12:17*	*07/15/24 20:55*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.032	0.018	ug/L		07/10/24 08:38	07/10/24 18:04	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/10/24 08:38	07/10/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*07/10/24 08:38*	*07/10/24 18:04*	*1*

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8260-A
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-6
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			07/10/24 15:04	1
Acrolein	ND		20	3.3	ug/L			07/10/24 15:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 15:04	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 15:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 15:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 15:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 15:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 15:04	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 15:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 15:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 15:04	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 15:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 15:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 15:04	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 15:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 15:04	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 15:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 15:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 15:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 15:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 15:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 15:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 15:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 15:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 15:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 15:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 15:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 15:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 15:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 15:04	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 15:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 15:04	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 15:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 15:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 15:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 15:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 15:04	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 15:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 15:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 15:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 15:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 15:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 15:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 15:04	1

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8260-A
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-6
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			07/10/24 15:04	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 15:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 15:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 15:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 15:04	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 15:04	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 15:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 15:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 15:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 15:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 15:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 15:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 15:04	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 15:04	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 15:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 15:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 15:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 15:04	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 15:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 15:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/10/24 15:04*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/10/24 15:04*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/10/24 15:04*	*1*

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

Job ID: 400-258832-1

Client Sample ID: TB-ROX-070824-8011-A
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-7
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.031	0.018	ug/L		07/10/24 08:38	07/10/24 18:25	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/10/24 08:38	07/10/24 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*07/10/24 08:38*	*07/10/24 18:25*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW5-ROX-070824
Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			07/11/24 12:29	1
Acrolein	ND		20	3.3	ug/L			07/11/24 12:29	1
Acrylonitrile	ND		10	2.8	ug/L			07/11/24 12:29	1
Benzene	ND		1.0	0.24	ug/L			07/11/24 12:29	1
Bromobenzene	ND		1.0	0.54	ug/L			07/11/24 12:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/11/24 12:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
Bromoform	ND		5.0	0.25	ug/L			07/11/24 12:29	1
Bromomethane	ND		1.0	0.98	ug/L			07/11/24 12:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/11/24 12:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/11/24 12:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/11/24 12:29	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/11/24 12:29	1
Chloroethane	ND	F1	1.0	0.76	ug/L			07/11/24 12:29	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			07/11/24 12:29	1
Chloroform	ND		1.0	0.90	ug/L			07/11/24 12:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/11/24 12:29	1
Chloromethane	ND		1.0	0.40	ug/L			07/11/24 12:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/11/24 12:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/11/24 12:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/11/24 12:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/11/24 12:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/11/24 12:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/11/24 12:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/11/24 12:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/11/24 12:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 12:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/11/24 12:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/11/24 12:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/11/24 12:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/11/24 12:29	1
2-Hexanone	ND		25	4.3	ug/L			07/11/24 12:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/11/24 12:29	1
Methylene bromide	ND		5.0	0.22	ug/L			07/11/24 12:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 12:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/11/24 12:29	1
Methyl tert-butyl ether	**2.9**		1.0	0.22	ug/L			07/11/24 12:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/11/24 12:29	1
Naphthalene	ND		5.0	3.0	ug/L			07/11/24 12:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/11/24 12:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/11/24 12:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/11/24 12:29	1
o-Xylene	ND		5.0	0.60	ug/L			07/11/24 12:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/11/24 12:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/11/24 12:29	1

Client Sample ID: MW5-ROX-070824
Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8
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			07/11/24 12:29	1
Styrene	ND		1.0	1.0	ug/L			07/11/24 12:29	1
tert-Butylbenzene	**2.2**		1.0	0.63	ug/L			07/11/24 12:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/11/24 12:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/11/24 12:29	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/11/24 12:29	1
Toluene	ND		1.0	0.90	ug/L			07/11/24 12:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 12:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/11/24 12:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/11/24 12:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 13:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/11/24 12:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/11/24 12:29	1
Trichloroethene	ND		1.0	0.15	ug/L			07/11/24 12:29	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/11/24 12:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/11/24 12:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/11/24 12:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/11/24 12:29	1
Vinyl acetate	ND		25	0.93	ug/L			07/11/24 12:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/11/24 12:29	1
Xylenes, Total	ND		10	1.6	ug/L			07/11/24 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/11/24 12:29*	*1*
4-Bromofluorobenzene	*107*		*72 - 130*		*07/12/24 13:55*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/11/24 12:29*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/12/24 13:55*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/11/24 12:29*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/12/24 13:55*	*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		07/12/24 12:17	07/15/24 15:06	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/12/24 12:17	07/15/24 15:06	1
Anthracene	ND		0.19	0.044	ug/L		07/12/24 12:17	07/15/24 15:06	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 15:06	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		07/12/24 12:17	07/15/24 15:06	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/12/24 12:17	07/15/24 15:06	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		07/12/24 12:17	07/15/24 15:06	1
Benzo[k]fluoranthene	ND	*1	0.19	0.059	ug/L		07/12/24 12:17	07/15/24 15:06	1
Chrysene	ND		0.19	0.031	ug/L		07/12/24 12:17	07/15/24 15:06	1
Dibenz(a,h)anthracene	ND	*1	0.19	0.045	ug/L		07/12/24 12:17	07/15/24 15:06	1
Fluoranthene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 15:06	1
Fluorene	ND		0.19	0.084	ug/L		07/12/24 12:17	07/15/24 15:06	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		07/12/24 12:17	07/15/24 15:06	1
Phenanthrene	ND		0.19	0.085	ug/L		07/12/24 12:17	07/15/24 15:06	1
Pyrene	ND		0.19	0.037	ug/L		07/12/24 12:17	07/15/24 15:06	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		07/12/24 12:17	07/15/24 15:06	1
2-Methylnaphthalene	ND		0.19	0.062	ug/L		07/12/24 12:17	07/15/24 15:06	1

Client Sample ID: MW5-ROX-070824

Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*18 - 147*	*07/12/24 12:17*	*07/15/24 15:06*	*1*
2-Fluorobiphenyl	*78*		*15 - 128*	*07/12/24 12:17*	*07/15/24 15:06*	*1*
Nitrobenzene-d5	*90*		*10 - 144*	*07/12/24 12:17*	*07/15/24 15:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F1 UJ	9.4	8.2	ug/L		07/12/24 12:17	07/15/24 20:06	1
Benzenethiol	ND		9.4	9.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
Benzoic acid	ND		28	23	ug/L		07/12/24 12:17	07/15/24 20:06	1
Benzyl alcohol	ND		9.4	6.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		07/12/24 12:17	07/15/24 20:06	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		07/12/24 12:17	07/15/24 20:06	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		07/12/24 12:17	07/15/24 20:06	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Chloroaniline	ND		9.4	4.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		07/12/24 12:17	07/15/24 20:06	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		07/12/24 12:17	07/15/24 20:06	1
2-Chlorophenol	ND		9.4	3.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		07/12/24 12:17	07/15/24 20:06	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		07/12/24 12:17	07/15/24 20:06	1
Dibenzofuran	ND		9.4	3.8	ug/L		07/12/24 12:17	07/15/24 20:06	1
3,3'-Dichlorobenzidine	ND	F1 UJ	10	10	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		07/12/24 12:17	07/15/24 20:06	1
Diethyl phthalate	ND		9.4	4.2	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
Dimethyl phthalate	ND		9.4	4.0	ug/L		07/12/24 12:17	07/15/24 20:06	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		07/12/24 12:17	07/15/24 20:06	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		07/12/24 12:17	07/15/24 20:06	1
1,4-Dioxane	ND		9.4	4.1	ug/L		07/12/24 12:17	07/15/24 20:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		07/12/24 12:17	07/15/24 20:06	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		07/12/24 12:17	07/15/24 20:06	1
Hexachlorocyclopentadiene	ND		19	4.2	ug/L		07/12/24 12:17	07/15/24 20:06	1
Hexachloroethane	ND		9.4	4.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
Indene	ND		9.4	3.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
Isophorone	ND		9.4	4.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
2-Methylphenol	ND		9.4	3.0	ug/L		07/12/24 12:17	07/15/24 20:06	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
2-Nitroaniline	ND		9.4	4.7	ug/L		07/12/24 12:17	07/15/24 20:06	1
3-Nitroaniline	ND		9.4	4.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Nitroaniline	ND	*+	9.4	3.9	ug/L		07/12/24 12:17	07/15/24 20:06	1
Nitrobenzene	ND		9.4	4.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
2-Nitrophenol	ND		9.4	4.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
4-Nitrophenol	ND		9.4	3.1	ug/L		07/12/24 12:17	07/15/24 20:06	1

Client Sample ID: MW5-ROX-070824
Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8
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		9.4	2.1	ug/L		07/12/24 12:17	07/15/24 20:06	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		07/12/24 12:17	07/15/24 20:06	1
Pentachlorophenol	ND		19	11	ug/L		07/12/24 12:17	07/15/24 20:06	1
Phenol	ND		9.4	4.0	ug/L		07/12/24 12:17	07/15/24 20:06	1
Pyridine	ND	F1 F2 UJ	9.4	9.4	ug/L		07/12/24 12:17	07/15/24 20:06	1
Quinoline	ND		9.4	2.3	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		07/12/24 12:17	07/15/24 20:06	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		07/12/24 12:17	07/15/24 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*21 - 114*	*07/12/24 12:17*	*07/15/24 20:06*	*1*
2-Fluorophenol	*51*		*10 - 105*	*07/12/24 12:17*	*07/15/24 20:06*	*1*
Nitrobenzene-d5	*73*		*16 - 127*	*07/12/24 12:17*	*07/15/24 20:06*	*1*
Phenol-d5	*37*		*10 - 129*	*07/12/24 12:17*	*07/15/24 20:06*	*1*
Terphenyl-d14	*92*		*13 - 150*	*07/12/24 12:17*	*07/15/24 20:06*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*07/12/24 12:17*	*07/15/24 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-Dibromo-3-Chloropropane	ND	*+ F2	0.033	0.018	ug/L		07/10/24 08:38	07/10/24 19:08	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/10/24 08:38	07/10/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*07/10/24 08:38*	*07/10/24 19:08*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW14-ROX-070824
Date Collected: 07/08/24 12:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-9
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			07/11/24 16:40	1
Acrolein	ND		20	3.3	ug/L			07/11/24 16:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/11/24 16:40	1
Benzene	ND		1.0	0.24	ug/L			07/11/24 16:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/11/24 16:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/11/24 16:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
Bromoform	ND		5.0	0.25	ug/L			07/11/24 16:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/11/24 16:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/11/24 16:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/11/24 16:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/11/24 16:40	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/11/24 16:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/11/24 16:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/11/24 16:40	1
Chloroform	ND		1.0	0.90	ug/L			07/11/24 16:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/11/24 16:40	1
Chloromethane	ND		1.0	0.40	ug/L			07/11/24 16:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/11/24 16:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/11/24 16:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/11/24 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/11/24 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/11/24 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/11/24 16:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/11/24 16:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/11/24 16:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 16:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/11/24 16:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/11/24 16:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/11/24 16:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/11/24 16:40	1
2-Hexanone	ND		25	4.3	ug/L			07/11/24 16:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/11/24 16:40	1
Methylene bromide	ND		5.0	0.22	ug/L			07/11/24 16:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 16:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/11/24 16:40	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/11/24 16:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/11/24 16:40	1
Naphthalene	ND		5.0	3.0	ug/L			07/11/24 16:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/11/24 16:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/11/24 16:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/11/24 16:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/11/24 16:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/11/24 16:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/11/24 16:40	1

Client Sample ID: MW14-ROX-070824
Date Collected: 07/08/24 12:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-9
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			07/11/24 16:40	1
Styrene	ND		1.0	1.0	ug/L			07/11/24 16:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/11/24 16:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/11/24 16:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/11/24 16:40	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/11/24 16:40	1
Toluene	ND		1.0	0.90	ug/L			07/11/24 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 16:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/11/24 16:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/11/24 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/11/24 16:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/11/24 16:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/11/24 16:40	1
Trichloroethene	ND		1.0	0.15	ug/L			07/11/24 16:40	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/11/24 16:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/11/24 16:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/11/24 16:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/11/24 16:40	1
Vinyl acetate	ND		25	0.93	ug/L			07/11/24 16:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/11/24 16:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/11/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/11/24 16:40*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/11/24 16:40*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/11/24 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		0.20	0.10	ug/L		07/12/24 12:17	07/15/24 15:27	1
Acenaphthylene	ND		0.20	0.045	ug/L		07/12/24 12:17	07/15/24 15:27	1
Anthracene	ND		0.20	0.048	ug/L		07/12/24 12:17	07/15/24 15:27	1
Benzo[a]anthracene	ND		0.20	0.035	ug/L		07/12/24 12:17	07/15/24 15:27	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/12/24 12:17	07/15/24 15:27	1
Benzo[b]fluoranthene	ND		0.20	0.038	ug/L		07/12/24 12:17	07/15/24 15:27	1
Benzo[g,h,i]perylene	ND		0.20	0.028	ug/L		07/12/24 12:17	07/15/24 15:27	1
Benzo[k]fluoranthene	ND	*1	0.20	0.063	ug/L		07/12/24 12:17	07/15/24 15:27	1
Chrysene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 15:27	1
Dibenz(a,h)anthracene	ND	*1	0.20	0.049	ug/L		07/12/24 12:17	07/15/24 15:27	1
Fluoranthene	ND		0.20	0.035	ug/L		07/12/24 12:17	07/15/24 15:27	1
Fluorene	ND		0.20	0.091	ug/L		07/12/24 12:17	07/15/24 15:27	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.035	ug/L		07/12/24 12:17	07/15/24 15:27	1
Phenanthrene	ND		0.20	0.092	ug/L		07/12/24 12:17	07/15/24 15:27	1
Pyrene	ND		0.20	0.040	ug/L		07/12/24 12:17	07/15/24 15:27	1
1-Methylnaphthalene	ND		0.20	0.082	ug/L		07/12/24 12:17	07/15/24 15:27	1
2-Methylnaphthalene	ND		0.20	0.067	ug/L		07/12/24 12:17	07/15/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*07/12/24 12:17*	*07/15/24 15:27*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/12/24 12:17*	*07/15/24 15:27*	*1*

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

Job ID: 400-258832-1

Client Sample ID: MW14-ROX-070824
Date Collected: 07/08/24 12:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-9
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	07/12/24 12:17	07/15/24 15:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.9	ug/L		07/12/24 12:17	07/15/24 21:19	1
Benzenethiol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:19	1
Benzoic acid	ND		31	25	ug/L		07/12/24 12:17	07/15/24 21:19	1
Benzyl alcohol	ND		10	7.5	ug/L		07/12/24 12:17	07/15/24 21:19	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 21:19	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Chloroaniline	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		07/12/24 12:17	07/15/24 21:19	1
2-Chloronaphthalene	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 21:19	1
2-Chlorophenol	ND		10	4.2	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/12/24 12:17	07/15/24 21:19	1
Dibenzofuran	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 21:19	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 21:19	1
Diethyl phthalate	ND		10	4.5	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
Dimethyl phthalate	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 21:19	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		07/12/24 12:17	07/15/24 21:19	1
1,4-Dioxane	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 21:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/12/24 12:17	07/15/24 21:19	1
Hexachlorobenzene	ND		10	9.9	ug/L		07/12/24 12:17	07/15/24 21:19	1
Hexachlorocyclopentadiene	ND		20	4.6	ug/L		07/12/24 12:17	07/15/24 21:19	1
Hexachloroethane	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
Indene	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
Isophorone	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
2-Methylphenol	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
2-Nitroaniline	ND		10	5.1	ug/L		07/12/24 12:17	07/15/24 21:19	1
3-Nitroaniline	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Nitroaniline	ND	*+	10	4.2	ug/L		07/12/24 12:17	07/15/24 21:19	1
Nitrobenzene	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
2-Nitrophenol	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 21:19	1
4-Nitrophenol	ND		10	3.4	ug/L		07/12/24 12:17	07/15/24 21:19	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/12/24 12:17	07/15/24 21:19	1

Client Sample ID: MW14-ROX-070824

Date Collected: 07/08/24 12:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		07/12/24 12:17	07/15/24 21:19	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 21:19	1
Pentachlorophenol	ND		20	12	ug/L		07/12/24 12:17	07/15/24 21:19	1
Phenol	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 21:19	1
Pyridine	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:19	1
Quinoline	ND		10	2.5	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 21:19	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/12/24 12:17	07/15/24 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*21 - 114*	*07/12/24 12:17*	*07/15/24 21:19*	*1*
2-Fluorophenol	*48*		*10 - 105*	*07/12/24 12:17*	*07/15/24 21:19*	*1*
Nitrobenzene-d5	*69*		*16 - 127*	*07/12/24 12:17*	*07/15/24 21:19*	*1*
Phenol-d5	*30*		*10 - 129*	*07/12/24 12:17*	*07/15/24 21:19*	*1*
Terphenyl-d14	*85*		*13 - 150*	*07/12/24 12:17*	*07/15/24 21:19*	*1*
2,4,6-Tribromophenol	*55*		*10 - 150*	*07/12/24 12:17*	*07/15/24 21:19*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.036	0.020	ug/L		07/10/24 08:38	07/10/24 20:12	1
1,2-Dibromoethane	ND		0.024	0.018	ug/L		07/10/24 08:38	07/10/24 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*07/10/24 08:38*	*07/10/24 20:12*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-258832-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F2	MS/MSD RPD exceeds control limits
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: 400-258832-1

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)
400-258832-1	TB-ROX-070824-8260-B	100	112	97
400-258832-3	MW10-ROX-070824	102	113	98
400-258832-3 MS	MW10-ROX-070824	99	115	98
400-258832-3 MSD	MW10-ROX-070824	99	115	96
400-258832-4	MW27-ROX-070824	98	112	96
400-258832-5	MW28-ROX-070824	101	114	96
400-258832-6	TB-ROX-070824-8260-A	101	108	97
400-258832-8	MW5-ROX-070824	106	103	95
400-258832-8	MW5-ROX-070824	107	103	98
400-258832-8 MS	MW5-ROX-070824	104	95	97
400-258832-8 MSD	MW5-ROX-070824	102	97	98
400-258832-9	MW14-ROX-070824	106	105	96
LCS 400-677358/1002	Lab Control Sample	101	113	98
LCS 400-677477/1002	Lab Control Sample	103	98	100
LCS 400-677634/1002	Lab Control Sample	100	98	97
MB 400-677358/4	Method Blank	101	113	96
MB 400-677477/4	Method Blank	105	105	97
MB 400-677634/4	Method Blank	104	105	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-258832-3	MW10-ROX-070824	81	57	84	43	99	61
400-258832-3 MS	MW10-ROX-070824	86	63	80	55	99	67
400-258832-3 MSD	MW10-ROX-070824	81	62	76	54	92	64
400-258832-4	MW27-ROX-070824	75	46	75	33	89	54
400-258832-5	MW28-ROX-070824	85	56	84	42	97	64
400-258832-8	MW5-ROX-070824	75	51	73	37	92	67
400-258832-8 MS	MW5-ROX-070824	86	64	79	55	99	70
400-258832-8 MSD	MW5-ROX-070824	86	63	80	56	99	70
400-258832-9	MW14-ROX-070824	71	48	69	30	85	55
LCS 400-677673/2-A	Lab Control Sample	67	54	66	48	77	52
LCS 400-677673/8-A	Lab Control Sample	82	60	80	41	96	62
LCSD 400-677673/3-A	Lab Control Sample Dup	91	66	85	56	106	72
LCSD 400-677673/9-A	Lab Control Sample Dup	79	59	80	48	94	58
MB 400-677673/1-A	Method Blank	71	52	72	37	83	51

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14

Surrogate Summary

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

Job ID: 400-258832-1

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)
400-258832-3	MW10-ROX-070824	104	81	87
400-258832-3 MS	MW10-ROX-070824	85	77	71
400-258832-3 MSD	MW10-ROX-070824	83	74	67
400-258832-4	MW27-ROX-070824	103	83	87
400-258832-5	MW28-ROX-070824	112	89	97
400-258832-8	MW5-ROX-070824	88	78	90
400-258832-8 MS	MW5-ROX-070824	84	75	67
400-258832-8 MSD	MW5-ROX-070824	88	77	70
400-258832-9	MW14-ROX-070824	100	76	89
LCS 400-677673/2-A	Lab Control Sample	70	60	55
LCSD 400-677673/3-A	Lab Control Sample Dup	98	86	79
MB 400-677673/1-A	Method Blank	109	81	87

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)
400-258832-2	TB-ROX-070824-8011-B	95
400-258832-3	MW10-ROX-070824	102
400-258832-3 MS	MW10-ROX-070824	96
400-258832-3 MSD	MW10-ROX-070824	76
400-258832-4	MW27-ROX-070824	92
400-258832-5	MW28-ROX-070824	109
400-258832-7	TB-ROX-070824-8011-A	124
400-258832-8	MW5-ROX-070824	95
400-258832-8 MS	MW5-ROX-070824	72
400-258832-8 MSD	MW5-ROX-070824	105
400-258832-9	MW14-ROX-070824	118
LCS 400-677353/2-A	Lab Control Sample	114
LCSD 400-677353/3-A	Lab Control Sample Dup	105
MB 400-677353/1-A	Method Blank	119

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-258832-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-070824-8260-B

Lab Sample ID: 400-258832-1
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 14:40	BPO	EET PEN

Client Sample ID: TB-ROX-070824-8011-B

Lab Sample ID: 400-258832-2
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			30.7 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 16:17	S1K	EET PEN

Client Sample ID: MW10-ROX-070824

Lab Sample ID: 400-258832-3
Date Collected: 07/08/24 09:15
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 12:38	BPO	EET PEN
Total/NA	Prep	3510C			257.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 18:53	S1B	EET PEN
Total/NA	Prep	3510C			257.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 14:03	JAW	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 16:38	S1K	EET PEN

Client Sample ID: MW27-ROX-070824

Lab Sample ID: 400-258832-4
Date Collected: 07/08/24 11:10
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 17:54	BPO	EET PEN
Total/NA	Prep	3510C			258 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 20:30	S1B	EET PEN
Total/NA	Prep	3510C			258 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 14:24	JAW	EET PEN
Total/NA	Prep	8011			32.9 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 17:42	S1K	EET PEN

Client Sample ID: MW28-ROX-070824

Lab Sample ID: 400-258832-5
Date Collected: 07/08/24 13:10
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 18:19	BPO	EET PEN
Total/NA	Prep	3510C			258.8 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 20:55	S1B	EET PEN

Client Sample ID: MW28-ROX-070824

Lab Sample ID: 400-258832-5

Date Collected: 07/08/24 13:10

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			258.8 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 14:45	JAW	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 18:04	S1K	EET PEN

Client Sample ID: TB-ROX-070824-8260-A

Lab Sample ID: 400-258832-6

Date Collected: 07/08/24 00:00

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 15:04	BPO	EET PEN

Client Sample ID: TB-ROX-070824-8011-A

Lab Sample ID: 400-258832-7

Date Collected: 07/08/24 00:00

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.5 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 18:25	S1K	EET PEN

Client Sample ID: MW5-ROX-070824

Lab Sample ID: 400-258832-8

Date Collected: 07/08/24 09:50

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 12:29	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	677634	07/12/24 13:55	BPO	EET PEN
Total/NA	Prep	3510C			264.8 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 20:06	S1B	EET PEN
Total/NA	Prep	3510C			264.8 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 15:06	JAW	EET PEN
Total/NA	Prep	8011			32.2 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 19:08	S1K	EET PEN

Client Sample ID: MW14-ROX-070824

Lab Sample ID: 400-258832-9

Date Collected: 07/08/24 12:50

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677477	07/11/24 16:40	BPO	EET PEN
Total/NA	Prep	3510C			244.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 21:19	S1B	EET PEN
Total/NA	Prep	3510C			244.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 15:27	JAW	EET PEN

Client Sample ID: MW14-ROX-070824

Lab Sample ID: 400-258832-9

Date Collected: 07/08/24 12:50

Matrix: Water

Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			29.5 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 20:12	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677353/1-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:13	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677358/4

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	677358	07/10/24 14:15	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677477/4

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	677477	07/11/24 11:21	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677634/4

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	677634	07/12/24 11:38	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677673/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 15:59	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 16:09	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-258832-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677353/2-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:35	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677358/1002
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	677358	07/10/24 09:47	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677477/1002
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	677477	07/11/24 10:17	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677634/1002
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	677634	07/12/24 10:38	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677673/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 16:24	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 11:59	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677673/8-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 17:14	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677353/3-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:56	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677673/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 16:49	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 12:20	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677673/9-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 17:39	S1B	EET PEN

Client Sample ID: MW10-ROX-070824
Lab Sample ID: 400-258832-3 MS
Date Collected: 07/08/24 09:15
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 13:02	BPO	EET PEN
Total/NA	Prep	3510C			263.2 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 18:04	S1B	EET PEN
Total/NA	Prep	3510C			263.2 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 12:41	JAW	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 17:00	S1K	EET PEN

Client Sample ID: MW10-ROX-070824
Lab Sample ID: 400-258832-3 MSD
Date Collected: 07/08/24 09:15
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 13:27	BPO	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 18:28	S1B	EET PEN
Total/NA	Prep	3510C			254.4 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 13:01	JAW	EET PEN
Total/NA	Prep	8011			30.6 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 17:21	S1K	EET PEN

Lab Chronicle

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

Job ID: 400-258832-1

Client Sample ID: MW5-ROX-070824
Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8 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	677477	07/11/24 15:09	BPO	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 19:17	S1B	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 13:22	JAW	EET PEN
Total/NA	Prep	8011			32.8 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 19:29	S1K	EET PEN

Client Sample ID: MW5-ROX-070824
Date Collected: 07/08/24 09:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258832-8 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	677477	07/11/24 15:32	BPO	EET PEN
Total/NA	Prep	3510C			248 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 19:42	S1B	EET PEN
Total/NA	Prep	3510C			248 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 13:43	JAW	EET PEN
Total/NA	Prep	8011			32.3 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 19:51	S1K	EET PEN

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

GC/MS VOA

Analysis Batch: 677358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-1	TB-ROX-070824-8260-B	Total/NA	Water	8260D	
400-258832-3	MW10-ROX-070824	Total/NA	Water	8260D	
400-258832-4	MW27-ROX-070824	Total/NA	Water	8260D	
400-258832-5	MW28-ROX-070824	Total/NA	Water	8260D	
400-258832-6	TB-ROX-070824-8260-A	Total/NA	Water	8260D	
MB 400-677358/4	Method Blank	Total/NA	Water	8260D	
LCS 400-677358/1002	Lab Control Sample	Total/NA	Water	8260D	
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	8260D	
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	8260D	

Analysis Batch: 677477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-8	MW5-ROX-070824	Total/NA	Water	8260D	
400-258832-9	MW14-ROX-070824	Total/NA	Water	8260D	
MB 400-677477/4	Method Blank	Total/NA	Water	8260D	
LCS 400-677477/1002	Lab Control Sample	Total/NA	Water	8260D	
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	8260D	
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	8260D	

Analysis Batch: 677634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-8	MW5-ROX-070824	Total/NA	Water	8260D	
MB 400-677634/4	Method Blank	Total/NA	Water	8260D	
LCS 400-677634/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 677673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-3	MW10-ROX-070824	Total/NA	Water	3510C	
400-258832-4	MW27-ROX-070824	Total/NA	Water	3510C	
400-258832-5	MW28-ROX-070824	Total/NA	Water	3510C	
400-258832-8	MW5-ROX-070824	Total/NA	Water	3510C	
400-258832-9	MW14-ROX-070824	Total/NA	Water	3510C	
MB 400-677673/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-677673/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-677673/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	3510C	
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	3510C	
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	3510C	
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	3510C	

Analysis Batch: 677824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-3	MW10-ROX-070824	Total/NA	Water	8270E	677673
400-258832-4	MW27-ROX-070824	Total/NA	Water	8270E	677673
400-258832-5	MW28-ROX-070824	Total/NA	Water	8270E	677673
400-258832-8	MW5-ROX-070824	Total/NA	Water	8270E	677673
400-258832-9	MW14-ROX-070824	Total/NA	Water	8270E	677673

GC/MS Semi VOA (Continued)

Analysis Batch: 677824 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-677673/1-A	Method Blank	Total/NA	Water	8270E	677673
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	8270E	677673
LCS 400-677673/8-A	Lab Control Sample	Total/NA	Water	8270E	677673
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	677673
LCSD 400-677673/9-A	Lab Control Sample Dup	Total/NA	Water	8270E	677673
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	8270E	677673
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	8270E	677673
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	8270E	677673
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	8270E	677673

Analysis Batch: 677828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-3	MW10-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-4	MW27-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-5	MW28-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-8	MW5-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-9	MW14-ROX-070824	Total/NA	Water	8270E SIM	677673
MB 400-677673/1-A	Method Blank	Total/NA	Water	8270E SIM	677673
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	677673
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	677673
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	8270E SIM	677673
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	8270E SIM	677673

GC Semi VOA

Prep Batch: 677353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-2	TB-ROX-070824-8011-B	Total/NA	Water	8011	
400-258832-3	MW10-ROX-070824	Total/NA	Water	8011	
400-258832-4	MW27-ROX-070824	Total/NA	Water	8011	
400-258832-5	MW28-ROX-070824	Total/NA	Water	8011	
400-258832-7	TB-ROX-070824-8011-A	Total/NA	Water	8011	
400-258832-8	MW5-ROX-070824	Total/NA	Water	8011	
400-258832-9	MW14-ROX-070824	Total/NA	Water	8011	
MB 400-677353/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677353/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	8011	
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	8011	
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	8011	
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	8011	

Analysis Batch: 677421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-2	TB-ROX-070824-8011-B	Total/NA	Water	8011	677353
400-258832-3	MW10-ROX-070824	Total/NA	Water	8011	677353
400-258832-4	MW27-ROX-070824	Total/NA	Water	8011	677353
400-258832-5	MW28-ROX-070824	Total/NA	Water	8011	677353
400-258832-7	TB-ROX-070824-8011-A	Total/NA	Water	8011	677353

GC Semi VOA (Continued)

Analysis Batch: 677421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258832-8	MW5-ROX-070824	Total/NA	Water	8011	677353
400-258832-9	MW14-ROX-070824	Total/NA	Water	8011	677353
MB 400-677353/1-A	Method Blank	Total/NA	Water	8011	677353
LCS 400-677353/2-A	Lab Control Sample	Total/NA	Water	8011	677353
LCSD 400-677353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677353
400-258832-3 MS	MW10-ROX-070824	Total/NA	Water	8011	677353
400-258832-3 MSD	MW10-ROX-070824	Total/NA	Water	8011	677353
400-258832-8 MS	MW5-ROX-070824	Total/NA	Water	8011	677353
400-258832-8 MSD	MW5-ROX-070824	Total/NA	Water	8011	677353

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

Lab Sample ID: MB 400-677358/4
Matrix: Water
Analysis Batch: 677358

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			07/10/24 14:15	1
Acrolein	ND		20	3.3	ug/L			07/10/24 14:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 14:15	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 14:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 14:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 14:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 14:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 14:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/10/24 14:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 14:15	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 14:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 14:15	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 14:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 14:15	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 14:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 14:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 14:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 14:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 14:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 14:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 14:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 14:15	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 14:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 14:15	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 14:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 14:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 14:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 14:15	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 14:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 14:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 14:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 14:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 14:15	1

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

Lab Sample ID: MB 400-677358/4
Matrix: Water
Analysis Batch: 677358

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			07/10/24 14:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/10/24 14:15	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 14:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 14:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 14:15	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 14:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 14:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 14:15	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 14:15	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 14:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 14:15	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 14:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/10/24 14:15*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/10/24 14:15*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 14:15*	*1*

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	499	*+	ug/L		249	43 - 150
Acrolein	250	278		ug/L		111	38 - 150
Acrylonitrile	500	505		ug/L		101	64 - 142
Benzene	50.0	47.7		ug/L		95	70 - 130
Bromobenzene	50.0	52.8		ug/L		106	70 - 132
Bromochloromethane	50.0	51.9		ug/L		104	70 - 130
Bromodichloromethane	50.0	56.7		ug/L		113	67 - 133
Bromoform	50.0	55.9		ug/L		112	57 - 140
Bromomethane	25.0	27.2		ug/L		109	10 - 150
2-Butanone (MEK)	200	291	*+	ug/L		146	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	58.5		ug/L		117	61 - 137
Chlorobenzene	50.0	51.8		ug/L		104	70 - 130
Chloroethane	25.0	24.6		ug/L		98	55 - 141
2-Chloroethyl vinyl ether	25.0	29.4		ug/L		118	10 - 150

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

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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	59.0		ug/L		118	69 - 130
1-Chlorohexane	50.0	53.8		ug/L		108	69 - 130
Chloromethane	25.0	27.9		ug/L		112	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	54.3		ug/L		109	69 - 132
Dibromochloromethane	50.0	55.7		ug/L		111	67 - 135
1,2-Dichlorobenzene	50.0	54.3		ug/L		109	67 - 130
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	54.3		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	22.1		ug/L		88	41 - 146
1,1-Dichloroethane	50.0	58.3		ug/L		117	70 - 130
1,2-Dichloroethane	50.0	58.9		ug/L		118	69 - 130
1,1-Dichloroethene	50.0	43.2		ug/L		86	63 - 134
1,2-Dichloropropane	50.0	52.1		ug/L		104	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	58.5		ug/L		117	52 - 135
1,1-Dichloropropene	50.0	54.3		ug/L		109	70 - 130
Ethylbenzene	50.0	51.7		ug/L		103	70 - 130
Ethyl methacrylate	50.0	50.5		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	61.1		ug/L		122	53 - 140
2-Hexanone	200	253		ug/L		127	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	55.4		ug/L		111	70 - 130
Methylene Chloride	50.0	46.3		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	53.3		ug/L		107	66 - 130
m-Xylene & p-Xylene	50.0	53.7		ug/L		107	70 - 130
Naphthalene	50.0	39.7		ug/L		79	47 - 149
n-Butylbenzene	50.0	53.7		ug/L		107	67 - 130
N-Propylbenzene	50.0	50.8		ug/L		102	70 - 130
o-Chlorotoluene	50.0	49.8		ug/L		100	70 - 130
o-Xylene	50.0	52.4		ug/L		105	70 - 130
p-Chlorotoluene	50.0	52.1		ug/L		104	70 - 130
p-Isopropyltoluene	50.0	51.8		ug/L		104	65 - 130
sec-Butylbenzene	50.0	50.8		ug/L		102	66 - 130
Styrene	50.0	51.0		ug/L		102	70 - 130
tert-Butylbenzene	50.0	52.8		ug/L		106	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.8		ug/L		114	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.3		ug/L		99	70 - 131
Tetrachloroethene	50.0	50.7		ug/L		101	65 - 130
Toluene	50.0	48.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	54.9		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	57.1		ug/L		114	60 - 138
1,2,4-Trichlorobenzene	50.0	55.9		ug/L		112	60 - 140
1,1,1-Trichloroethane	50.0	57.6		ug/L		115	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	25.0	30.6		ug/L		122	65 - 138

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

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2,3-Trichloropropane			50.0	50.9		ug/L		102	70 - 130		
1,2,4-Trimethylbenzene			50.0	51.7		ug/L		103	70 - 130		
1,3,5-Trimethylbenzene			50.0	52.0		ug/L		104	69 - 130		
Vinyl acetate			50.0	60.8		ug/L		122	26 - 150		
Vinyl chloride			25.0	21.7		ug/L		87	59 - 136		
Xylenes, Total			100	106		ug/L		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*113*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677358

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	ND	*+	200	209		ug/L		105	43 - 150		
Acrolein	ND		250	317		ug/L		127	38 - 150		
Acrylonitrile	ND		500	615		ug/L		123	62 - 149		
Benzene	ND		50.0	51.9		ug/L		104	56 - 142		
Bromobenzene	ND		50.0	49.2		ug/L		98	59 - 136		
Bromochloromethane	ND		50.0	56.9		ug/L		114	64 - 140		
Bromodichloromethane	ND		50.0	58.7		ug/L		117	59 - 143		
Bromoform	ND		50.0	58.5		ug/L		117	50 - 140		
Bromomethane	ND		25.0	27.6		ug/L		110	10 - 150		
2-Butanone (MEK)	ND	*+	200	223		ug/L		111	55 - 150		
Carbon disulfide	ND		50.0	42.7		ug/L		85	48 - 150		
Carbon tetrachloride	ND		50.0	59.4		ug/L		119	55 - 145		
Chlorobenzene	ND		50.0	49.7		ug/L		99	64 - 130		
Chloroethane	ND		25.0	24.7		ug/L		99	50 - 150		
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150		
Chloroform	ND		50.0	65.6		ug/L		131	60 - 141		
1-Chlorohexane	ND		50.0	49.4		ug/L		99	56 - 136		
Chloromethane	ND		25.0	27.6		ug/L		111	49 - 148		
cis-1,2-Dichloroethene	ND		50.0	57.3		ug/L		115	59 - 143		
cis-1,3-Dichloropropene	ND		50.0	58.5		ug/L		117	57 - 140		
Dibromochloromethane	ND		50.0	57.7		ug/L		115	56 - 143		
1,2-Dichlorobenzene	ND		50.0	49.6		ug/L		99	52 - 137		
1,3-Dichlorobenzene	ND		50.0	47.4		ug/L		95	54 - 135		
1,4-Dichlorobenzene	ND		50.0	46.7		ug/L		93	53 - 135		
Dichlorodifluoromethane	ND		25.0	24.6		ug/L		98	16 - 150		
1,1-Dichloroethane	ND		50.0	60.2		ug/L		120	61 - 144		
1,2-Dichloroethane	ND		50.0	64.2		ug/L		128	60 - 141		
1,1-Dichloroethene	ND		50.0	47.4		ug/L		95	54 - 147		
1,2-Dichloropropane	ND		50.0	55.3		ug/L		111	66 - 137		
1,3-Dichloropropane	ND		50.0	54.0		ug/L		108	66 - 133		
2,2-Dichloropropane	ND		50.0	61.2		ug/L		122	42 - 144		

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

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677358

Client Sample ID: MW10-ROX-070824
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	56.1		ug/L		112	65 - 136
Ethylbenzene	ND		50.0	47.9		ug/L		96	58 - 131
Ethyl methacrylate	ND		50.0	53.7		ug/L		107	64 - 130
Hexachlorobutadiene	ND		50.0	49.2		ug/L		98	31 - 149
2-Hexanone	ND		200	227		ug/L		114	65 - 140
Isopropylbenzene	ND		50.0	43.9		ug/L		88	56 - 133
Methylene bromide	ND		50.0	59.9		ug/L		120	63 - 138
Methylene Chloride	ND		50.0	51.4		ug/L		103	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	235		ug/L		117	63 - 146
Methyl tert-butyl ether	ND		50.0	60.8		ug/L		122	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.2		ug/L		98	57 - 130
Naphthalene	ND		50.0	38.0		ug/L		76	25 - 150
n-Butylbenzene	ND		50.0	42.4		ug/L		85	41 - 142
N-Propylbenzene	ND		50.0	42.6		ug/L		85	51 - 138
o-Chlorotoluene	ND		50.0	45.9		ug/L		92	53 - 134
o-Xylene	ND		50.0	48.7		ug/L		97	61 - 130
p-Chlorotoluene	ND		50.0	46.3		ug/L		93	54 - 133
p-Isopropyltoluene	ND		50.0	44.0		ug/L		88	48 - 139
sec-Butylbenzene	ND		50.0	43.6		ug/L		87	50 - 138
Styrene	ND		50.0	48.1		ug/L		96	58 - 131
tert-Butylbenzene	ND		50.0	46.4		ug/L		93	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	56.3		ug/L		113	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	51.6		ug/L		103	66 - 135
Tetrachloroethene	ND		50.0	47.8		ug/L		96	52 - 133
Toluene	ND		50.0	48.2		ug/L		96	65 - 130
trans-1,2-Dichloroethene	ND		50.0	54.1		ug/L		108	61 - 143
trans-1,3-Dichloropropene	ND		50.0	56.6		ug/L		113	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	52.1		ug/L		104	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.5		ug/L		97	39 - 148
1,1,1-Trichloroethane	ND		50.0	60.0		ug/L		120	57 - 142
1,1,2-Trichloroethane	ND		50.0	54.9		ug/L		110	66 - 131
Trichloroethene	ND		50.0	55.7		ug/L		111	64 - 136
Trichlorofluoromethane	ND		25.0	24.4		ug/L		98	54 - 150
1,2,3-Trichloropropane	ND		50.0	57.3		ug/L		115	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	46.0		ug/L		92	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	46.0		ug/L		92	52 - 135
Vinyl acetate	ND		50.0	58.5		ug/L		117	26 - 150
Vinyl chloride	ND		25.0	21.0		ug/L		84	46 - 150
Xylenes, Total	ND		100	97.9		ug/L		98	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*115*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677358

Client Sample ID: MW10-ROX-070824
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	208		ug/L		104	43 - 150	1	30
Acrolein	ND		250	342		ug/L		137	38 - 150	8	31
Acrylonitrile	ND		500	599		ug/L		120	62 - 149	3	30
Benzene	ND		50.0	50.3		ug/L		101	56 - 142	3	30
Bromobenzene	ND		50.0	51.8		ug/L		104	59 - 136	5	30
Bromochloromethane	ND		50.0	55.1		ug/L		110	64 - 140	3	30
Bromodichloromethane	ND		50.0	58.6		ug/L		117	59 - 143	0	30
Bromoform	ND		50.0	57.8		ug/L		116	50 - 140	1	30
Bromomethane	ND		25.0	29.7		ug/L		119	10 - 150	7	50
2-Butanone (MEK)	ND	*+	200	218		ug/L		109	55 - 150	2	30
Carbon disulfide	ND		50.0	41.8		ug/L		84	48 - 150	2	30
Carbon tetrachloride	ND		50.0	58.0		ug/L		116	55 - 145	2	30
Chlorobenzene	ND		50.0	51.0		ug/L		102	64 - 130	3	30
Chloroethane	ND		25.0	24.6		ug/L		99	50 - 150	0	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	62.4		ug/L		125	60 - 141	5	30
1-Chlorohexane	ND		50.0	52.6		ug/L		105	56 - 136	6	30
Chloromethane	ND		25.0	29.2		ug/L		117	49 - 148	5	31
cis-1,2-Dichloroethene	ND		50.0	55.8		ug/L		112	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	55.4		ug/L		111	57 - 140	6	30
Dibromochloromethane	ND		50.0	55.9		ug/L		112	56 - 143	3	30
1,2-Dichlorobenzene	ND		50.0	53.3		ug/L		107	52 - 137	7	30
1,3-Dichlorobenzene	ND		50.0	50.7		ug/L		101	54 - 135	7	30
1,4-Dichlorobenzene	ND		50.0	50.5		ug/L		101	53 - 135	8	30
Dichlorodifluoromethane	ND		25.0	19.1		ug/L		76	16 - 150	25	31
1,1-Dichloroethane	ND		50.0	60.4		ug/L		121	61 - 144	0	30
1,2-Dichloroethane	ND		50.0	63.3		ug/L		127	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	46.1		ug/L		92	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	52.8		ug/L		106	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	53.6		ug/L		107	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	60.0		ug/L		120	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	54.8		ug/L		110	65 - 136	2	30
Ethylbenzene	ND		50.0	50.2		ug/L		100	58 - 131	5	30
Ethyl methacrylate	ND		50.0	52.9		ug/L		106	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	54.7		ug/L		109	31 - 149	11	36
2-Hexanone	ND		200	222		ug/L		111	65 - 140	3	30
Isopropylbenzene	ND		50.0	46.7		ug/L		93	56 - 133	6	30
Methylene bromide	ND		50.0	60.7		ug/L		121	63 - 138	1	30
Methylene Chloride	ND		50.0	49.7		ug/L		99	60 - 146	3	32
4-Methyl-2-pentanone (MIBK)	ND		200	234		ug/L		117	63 - 146	0	30
Methyl tert-butyl ether	ND		50.0	57.4		ug/L		115	59 - 137	6	30
m-Xylene & p-Xylene	ND		50.0	51.1		ug/L		102	57 - 130	4	30
Naphthalene	ND		50.0	39.1		ug/L		78	25 - 150	3	30
n-Butylbenzene	ND		50.0	48.9		ug/L		98	41 - 142	14	31
N-Propylbenzene	ND		50.0	48.9		ug/L		98	51 - 138	14	30
o-Chlorotoluene	ND		50.0	48.9		ug/L		98	53 - 134	6	30
o-Xylene	ND		50.0	50.1		ug/L		100	61 - 130	3	30
p-Chlorotoluene	ND		50.0	49.2		ug/L		98	54 - 133	6	30

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

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677358

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	48.9		ug/L		98	48 - 139	11	30
sec-Butylbenzene	ND		50.0	47.9		ug/L		96	50 - 138	9	30
Styrene	ND		50.0	49.9		ug/L		100	58 - 131	4	30
tert-Butylbenzene	ND		50.0	49.5		ug/L		99	54 - 146	6	30
1,1,1,2-Tetrachloroethane	ND		50.0	55.7		ug/L		111	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	51.5		ug/L		103	66 - 135	0	30
Tetrachloroethene	ND		50.0	47.6		ug/L		95	52 - 133	0	30
Toluene	ND		50.0	48.6		ug/L		97	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	54.4		ug/L		109	61 - 143	1	30
trans-1,3-Dichloropropene	ND		50.0	54.1		ug/L		108	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	53.9		ug/L		108	43 - 145	3	30
1,2,4-Trichlorobenzene	ND		50.0	51.1		ug/L		102	39 - 148	5	30
1,1,1-Trichloroethane	ND		50.0	59.5		ug/L		119	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	51.5		ug/L		103	66 - 131	6	30
Trichloroethene	ND		50.0	55.6		ug/L		111	64 - 136	0	30
Trichlorofluoromethane	ND		25.0	23.8		ug/L		95	54 - 150	2	30
1,2,3-Trichloropropane	ND		50.0	54.7		ug/L		109	65 - 133	5	30
1,2,4-Trimethylbenzene	ND		50.0	49.5		ug/L		99	50 - 139	7	30
1,3,5-Trimethylbenzene	ND		50.0	49.5		ug/L		99	52 - 135	7	30
Vinyl acetate	ND		50.0	54.0		ug/L		108	26 - 150	8	33
Vinyl chloride	ND		25.0	21.3		ug/L		85	46 - 150	2	30
Xylenes, Total	ND		100	101		ug/L		101	59 - 130	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*115*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: MB 400-677477/4
Matrix: Water
Analysis Batch: 677477

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			07/11/24 11:21	1
Acrolein	ND		20	3.3	ug/L			07/11/24 11:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/11/24 11:21	1
Benzene	ND		1.0	0.24	ug/L			07/11/24 11:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/11/24 11:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/11/24 11:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
Bromoform	ND		5.0	0.25	ug/L			07/11/24 11:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/11/24 11:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/11/24 11:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/11/24 11:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/11/24 11:21	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/11/24 11:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/11/24 11:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/11/24 11:21	1

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

Lab Sample ID: MB 400-677477/4
Matrix: Water
Analysis Batch: 677477

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			07/11/24 11:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/11/24 11:21	1
Chloromethane	ND		1.0	0.40	ug/L			07/11/24 11:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/11/24 11:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/11/24 11:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/11/24 11:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/11/24 11:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/11/24 11:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/11/24 11:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/11/24 11:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/11/24 11:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 11:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/11/24 11:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/11/24 11:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/11/24 11:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/11/24 11:21	1
2-Hexanone	ND		25	4.3	ug/L			07/11/24 11:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/11/24 11:21	1
Methylene bromide	ND		5.0	0.22	ug/L			07/11/24 11:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/11/24 11:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/11/24 11:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/11/24 11:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/11/24 11:21	1
Naphthalene	ND		5.0	3.0	ug/L			07/11/24 11:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/11/24 11:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/11/24 11:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/11/24 11:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/11/24 11:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/11/24 11:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/11/24 11:21	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/11/24 11:21	1
Styrene	ND		1.0	1.0	ug/L			07/11/24 11:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/11/24 11:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/11/24 11:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/11/24 11:21	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/11/24 11:21	1
Toluene	ND		1.0	0.90	ug/L			07/11/24 11:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/11/24 11:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/11/24 11:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/11/24 11:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/11/24 11:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/11/24 11:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/11/24 11:21	1
Trichloroethene	ND		1.0	0.15	ug/L			07/11/24 11:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/11/24 11:21	1

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

Lab Sample ID: MB 400-677477/4
Matrix: Water
Analysis Batch: 677477

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			07/11/24 11:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/11/24 11:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/11/24 11:21	1
Vinyl acetate	ND		25	0.93	ug/L			07/11/24 11:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/11/24 11:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/11/24 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*07/11/24 11:21*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/11/24 11:21*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/11/24 11:21*	*1*

Lab Sample ID: LCS 400-677477/1002
Matrix: Water
Analysis Batch: 677477

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		104	43 - 150
Acrolein	250	237		ug/L		95	38 - 150
Acrylonitrile	500	439		ug/L		88	64 - 142
Benzene	50.0	49.8		ug/L		100	70 - 130
Bromobenzene	50.0	49.9		ug/L		100	70 - 132
Bromochloromethane	50.0	48.1		ug/L		96	70 - 130
Bromodichloromethane	50.0	49.8		ug/L		100	67 - 133
Bromoform	50.0	44.4		ug/L		89	57 - 140
Bromomethane	25.0	22.4		ug/L		89	10 - 150
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	41.6		ug/L		83	61 - 137
Carbon tetrachloride	50.0	51.5		ug/L		103	61 - 137
Chlorobenzene	50.0	48.0		ug/L		96	70 - 130
Chloroethane	25.0	25.5		ug/L		102	55 - 141
2-Chloroethyl vinyl ether	25.0	22.9		ug/L		92	10 - 150
Chloroform	50.0	48.5		ug/L		97	69 - 130
1-Chlorohexane	50.0	53.9		ug/L		108	69 - 130
Chloromethane	25.0	28.2		ug/L		113	58 - 137
cis-1,2-Dichloroethene	50.0	48.4		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	53.8		ug/L		108	69 - 132
Dibromochloromethane	50.0	49.1		ug/L		98	67 - 135
1,2-Dichlorobenzene	50.0	49.3		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.9		ug/L		100	70 - 130
Dichlorodifluoromethane	25.0	23.7		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	48.7		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	48.8		ug/L		98	69 - 130
1,1-Dichloroethene	50.0	46.3		ug/L		93	63 - 134
1,2-Dichloropropane	50.0	51.5		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	49.9		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	47.9		ug/L		96	52 - 135

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

Lab Sample ID: LCS 400-677477/1002
Matrix: Water
Analysis Batch: 677477

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	51.3		ug/L		103	70 - 130
Ethylbenzene	50.0	50.1		ug/L		100	70 - 130
Ethyl methacrylate	50.0	48.8		ug/L		98	68 - 130
Hexachlorobutadiene	50.0	50.8		ug/L		102	53 - 140
2-Hexanone	200	215		ug/L		107	65 - 137
Isopropylbenzene	50.0	50.5		ug/L		101	70 - 130
Methylene bromide	50.0	46.1		ug/L		92	70 - 130
Methylene Chloride	50.0	49.8		ug/L		100	66 - 135
4-Methyl-2-pentanone (MIBK)	200	201		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	49.4		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	48.3		ug/L		97	70 - 130
Naphthalene	50.0	43.7		ug/L		87	47 - 149
n-Butylbenzene	50.0	54.6		ug/L		109	67 - 130
N-Propylbenzene	50.0	51.6		ug/L		103	70 - 130
o-Chlorotoluene	50.0	52.1		ug/L		104	70 - 130
o-Xylene	50.0	49.9		ug/L		100	70 - 130
p-Chlorotoluene	50.0	51.7		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	52.3		ug/L		105	65 - 130
sec-Butylbenzene	50.0	51.6		ug/L		103	66 - 130
Styrene	50.0	50.1		ug/L		100	70 - 130
tert-Butylbenzene	50.0	52.7		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.5		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.8		ug/L		94	70 - 131
Tetrachloroethene	50.0	52.0		ug/L		104	65 - 130
Toluene	50.0	48.1		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	47.1		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	49.8		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	45.2		ug/L		90	60 - 138
1,2,4-Trichlorobenzene	50.0	45.4		ug/L		91	60 - 140
1,1,1-Trichloroethane	50.0	49.7		ug/L		99	68 - 130
1,1,2-Trichloroethane	50.0	50.7		ug/L		101	70 - 130
Trichloroethene	50.0	50.9		ug/L		102	70 - 130
Trichlorofluoromethane	25.0	20.8		ug/L		83	65 - 138
1,2,3-Trichloropropane	50.0	45.4		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	49.6		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	51.7		ug/L		103	69 - 130
Vinyl acetate	50.0	43.8		ug/L		88	26 - 150
Vinyl chloride	25.0	24.2		ug/L		97	59 - 136
Xylenes, Total	100	98.2		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	128	F1	ug/L		41	43 - 150
Acrolein	ND		250	308		ug/L		123	38 - 150
Acrylonitrile	ND		500	523		ug/L		105	62 - 149
Benzene	ND		50.0	46.5		ug/L		93	56 - 142
Bromobenzene	ND		50.0	37.9		ug/L		76	59 - 136
Bromochloromethane	ND		50.0	47.8		ug/L		96	64 - 140
Bromodichloromethane	ND		50.0	48.3		ug/L		97	59 - 143
Bromoform	ND		50.0	41.4		ug/L		83	50 - 140
Bromomethane	ND		25.0	25.8		ug/L		103	10 - 150
2-Butanone (MEK)	ND		200	124		ug/L		62	55 - 150
Carbon disulfide	ND		50.0	37.1		ug/L		74	48 - 150
Carbon tetrachloride	ND		50.0	44.7		ug/L		89	55 - 145
Chlorobenzene	ND		50.0	37.9		ug/L		76	64 - 130
Chloroethane	ND	F1	25.0	44.2	F1	ug/L		177	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	47.4		ug/L		95	60 - 141
1-Chlorohexane	ND		50.0	37.0		ug/L		74	56 - 136
Chloromethane	ND		25.0	30.7		ug/L		123	49 - 148
cis-1,2-Dichloroethene	ND		50.0	48.3		ug/L		97	59 - 143
cis-1,3-Dichloropropene	ND		50.0	49.8		ug/L		100	57 - 140
Dibromochloromethane	ND		50.0	45.3		ug/L		91	56 - 143
1,2-Dichlorobenzene	ND		50.0	35.3		ug/L		71	52 - 137
1,3-Dichlorobenzene	ND		50.0	33.2		ug/L		66	54 - 135
1,4-Dichlorobenzene	ND		50.0	33.3		ug/L		67	53 - 135
Dichlorodifluoromethane	ND		25.0	26.8		ug/L		107	16 - 150
1,1-Dichloroethane	ND		50.0	47.0		ug/L		94	61 - 144
1,2-Dichloroethane	ND		50.0	51.2		ug/L		102	60 - 141
1,1-Dichloroethene	ND		50.0	43.8		ug/L		88	54 - 147
1,2-Dichloropropane	ND		50.0	50.9		ug/L		102	66 - 137
1,3-Dichloropropane	ND		50.0	50.3		ug/L		101	66 - 133
2,2-Dichloropropane	ND		50.0	45.4		ug/L		91	42 - 144
1,1-Dichloropropene	ND		50.0	45.6		ug/L		91	65 - 136
Ethylbenzene	ND		50.0	36.2		ug/L		72	58 - 131
Ethyl methacrylate	ND		50.0	52.2		ug/L		104	64 - 130
Hexachlorobutadiene	ND		50.0	25.5		ug/L		51	31 - 149
2-Hexanone	ND		200	160		ug/L		80	65 - 140
Isopropylbenzene	ND		50.0	33.8		ug/L		68	56 - 133
Methylene bromide	ND		50.0	47.1		ug/L		94	63 - 138
Methylene Chloride	ND		50.0	50.4		ug/L		101	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	227		ug/L		114	63 - 146
Methyl tert-butyl ether	2.9		50.0	58.6		ug/L		111	59 - 137
m-Xylene & p-Xylene	ND		50.0	34.5		ug/L		69	57 - 130
Naphthalene	ND		50.0	40.7		ug/L		81	25 - 150
n-Butylbenzene	ND		50.0	28.6		ug/L		57	41 - 142
N-Propylbenzene	ND		50.0	31.1		ug/L		62	51 - 138
o-Chlorotoluene	ND		50.0	34.7		ug/L		69	53 - 134
o-Xylene	ND		50.0	37.2		ug/L		74	61 - 130
p-Chlorotoluene	ND		50.0	33.5		ug/L		67	54 - 133

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

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
p-Isopropyltoluene	ND		50.0	29.1		ug/L		58	48 - 139
sec-Butylbenzene	ND		50.0	30.0		ug/L		60	50 - 138
Styrene	ND		50.0	37.7		ug/L		75	58 - 131
tert-Butylbenzene	2.2		50.0	34.5		ug/L		65	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	42.5		ug/L		85	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	49.3		ug/L		99	66 - 135
Tetrachloroethene	ND		50.0	34.3		ug/L		69	52 - 133
Toluene	ND		50.0	40.3		ug/L		81	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.0		ug/L		88	61 - 143
trans-1,3-Dichloropropene	ND		50.0	47.7		ug/L		95	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	33.6		ug/L		67	43 - 145
1,2,4-Trichlorobenzene	1.5		50.0	30.9		ug/L		59	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.2		ug/L		92	57 - 142
1,1,2-Trichloroethane	ND		50.0	52.2		ug/L		104	66 - 131
Trichloroethene	ND		50.0	43.4		ug/L		87	64 - 136
Trichlorofluoromethane	ND		25.0	22.6		ug/L		90	54 - 150
1,2,3-Trichloropropane	ND		50.0	49.0		ug/L		98	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	30.9		ug/L		62	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	32.2		ug/L		64	52 - 135
Vinyl acetate	ND		50.0	56.6		ug/L		113	26 - 150
Vinyl chloride	ND		25.0	26.2		ug/L		105	46 - 150
Xylenes, Total	ND		100	71.6		ug/L		72	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND	F1	200	127	F1	ug/L		41	43 - 150	1	30
Acrolein	ND		250	341		ug/L		136	38 - 150	10	31
Acrylonitrile	ND		500	531		ug/L		106	62 - 149	2	30
Benzene	ND		50.0	46.9		ug/L		94	56 - 142	1	30
Bromobenzene	ND		50.0	37.3		ug/L		75	59 - 136	2	30
Bromochloromethane	ND		50.0	48.5		ug/L		97	64 - 140	1	30
Bromodichloromethane	ND		50.0	48.2		ug/L		96	59 - 143	0	30
Bromoform	ND		50.0	41.4		ug/L		83	50 - 140	0	30
Bromomethane	ND		25.0	26.4		ug/L		106	10 - 150	2	50
2-Butanone (MEK)	ND		200	127		ug/L		64	55 - 150	3	30
Carbon disulfide	ND		50.0	38.0		ug/L		76	48 - 150	2	30
Carbon tetrachloride	ND		50.0	45.7		ug/L		91	55 - 145	2	30
Chlorobenzene	ND		50.0	37.6		ug/L		75	64 - 130	1	30
Chloroethane	ND	F1	25.0	32.6		ug/L		131	50 - 150	30	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50

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

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloroform	ND		50.0	47.7		ug/L		95	60 - 141	1	30
1-Chlorohexane	ND		50.0	37.5		ug/L		75	56 - 136	1	30
Chloromethane	ND		25.0	34.5		ug/L		138	49 - 148	12	31
cis-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	59 - 143	0	30
cis-1,3-Dichloropropene	ND		50.0	50.0		ug/L		100	57 - 140	0	30
Dibromochloromethane	ND		50.0	45.5		ug/L		91	56 - 143	0	30
1,2-Dichlorobenzene	ND		50.0	35.2		ug/L		70	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	33.2		ug/L		66	54 - 135	0	30
1,4-Dichlorobenzene	ND		50.0	32.8		ug/L		66	53 - 135	1	30
Dichlorodifluoromethane	ND		25.0	29.0		ug/L		116	16 - 150	8	31
1,1-Dichloroethane	ND		50.0	47.8		ug/L		96	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	51.2		ug/L		102	60 - 141	0	30
1,1-Dichloroethene	ND		50.0	44.0		ug/L		88	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	50.9		ug/L		102	66 - 137	0	30
1,3-Dichloropropane	ND		50.0	50.5		ug/L		101	66 - 133	0	30
2,2-Dichloropropane	ND		50.0	46.4		ug/L		93	42 - 144	2	31
1,1-Dichloropropene	ND		50.0	46.4		ug/L		93	65 - 136	2	30
Ethylbenzene	ND		50.0	36.5		ug/L		73	58 - 131	1	30
Ethyl methacrylate	ND		50.0	52.5		ug/L		105	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	24.9		ug/L		50	31 - 149	2	36
2-Hexanone	ND		200	160		ug/L		80	65 - 140	0	30
Isopropylbenzene	ND		50.0	34.2		ug/L		68	56 - 133	1	30
Methylene bromide	ND		50.0	48.3		ug/L		97	63 - 138	3	30
Methylene Chloride	ND		50.0	50.3		ug/L		101	60 - 146	0	32
4-Methyl-2-pentanone (MIBK)	ND		200	228		ug/L		114	63 - 146	0	30
Methyl tert-butyl ether	2.9		50.0	58.9		ug/L		112	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	34.8		ug/L		70	57 - 130	1	30
Naphthalene	ND		50.0	40.6		ug/L		81	25 - 150	0	30
n-Butylbenzene	ND		50.0	27.9		ug/L		56	41 - 142	2	31
N-Propylbenzene	ND		50.0	31.2		ug/L		62	51 - 138	0	30
o-Chlorotoluene	ND		50.0	33.9		ug/L		68	53 - 134	2	30
o-Xylene	ND		50.0	37.2		ug/L		74	61 - 130	0	30
p-Chlorotoluene	ND		50.0	33.6		ug/L		67	54 - 133	0	30
p-Isopropyltoluene	ND		50.0	29.6		ug/L		59	48 - 139	2	30
sec-Butylbenzene	ND		50.0	30.0		ug/L		60	50 - 138	0	30
Styrene	ND		50.0	37.4		ug/L		75	58 - 131	1	30
tert-Butylbenzene	2.2		50.0	34.5		ug/L		65	54 - 146	0	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.5		ug/L		87	59 - 137	2	30
1,1,2,2-Tetrachloroethane	ND		50.0	49.2		ug/L		98	66 - 135	0	30
Tetrachloroethene	ND		50.0	35.1		ug/L		70	52 - 133	2	30
Toluene	ND		50.0	40.5		ug/L		81	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	44.0		ug/L		88	61 - 143	0	30
trans-1,3-Dichloropropene	ND		50.0	47.4		ug/L		95	53 - 133	1	30
1,2,3-Trichlorobenzene	ND		50.0	33.1		ug/L		66	43 - 145	1	30
1,2,4-Trichlorobenzene	1.5		50.0	30.5		ug/L		58	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	46.6		ug/L		93	57 - 142	1	30
1,1,2-Trichloroethane	ND		50.0	51.7		ug/L		103	66 - 131	1	30
Trichloroethene	ND		50.0	43.9		ug/L		88	64 - 136	1	30
Trichlorofluoromethane	ND		25.0	25.2		ug/L		101	54 - 150	11	30

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

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677477

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2,3-Trichloropropane	ND		50.0	48.7		ug/L		97	65 - 133	1	30
1,2,4-Trimethylbenzene	ND		50.0	30.9		ug/L		62	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	32.0		ug/L		64	52 - 135	1	30
Vinyl acetate	ND		50.0	62.7		ug/L		125	26 - 150	10	33
Vinyl chloride	ND		25.0	28.9		ug/L		116	46 - 150	10	30
Xylenes, Total	ND		100	72.0		ug/L		72	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-677634/4
Matrix: Water
Analysis Batch: 677634

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 130*		*07/12/24 11:38*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/12/24 11:38*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/12/24 11:38*	*1*

Lab Sample ID: LCS 400-677634/1002
Matrix: Water
Analysis Batch: 677634

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	45.0		ug/L		90	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzenethiol	ND		10	9.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzoic acid	ND		30	24	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzyl alcohol	ND		10	7.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chloroaniline	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Chlorophenol	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dibenzofuran	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Diethyl phthalate	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
1,4-Dioxane	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachloroethane	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Indene	ND		10	3.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
Isophorone	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Methylphenol	ND		10	3.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Nitroaniline	ND		10	5.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
3-Nitroaniline	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Nitroaniline	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
Nitrobenzene	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Nitrophenol	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Nitrophenol	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Pentachlorophenol	ND		20	12	ug/L		07/12/24 12:17	07/15/24 15:59	1
Phenol	ND		10	4.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Pyridine	ND		10	10	ug/L		07/12/24 12:17	07/15/24 15:59	1
Quinoline	ND		10	2.4	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/24 12:17	07/15/24 15:59	1

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		21 - 114	07/12/24 12:17	07/15/24 15:59	1
2-Fluorophenol	52		10 - 105	07/12/24 12:17	07/15/24 15:59	1
Nitrobenzene-d5	72		16 - 127	07/12/24 12:17	07/15/24 15:59	1
Phenol-d5	37		10 - 129	07/12/24 12:17	07/15/24 15:59	1
Terphenyl-d14	83		13 - 150	07/12/24 12:17	07/15/24 15:59	1
2,4,6-Tribromophenol	51		10 - 150	07/12/24 12:17	07/15/24 15:59	1

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.5		ug/L		51	10 - 127
Benzoic acid	492	215		ug/L		44	19 - 126
Benzyl alcohol	120	87.6		ug/L		73	17 - 109
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	24 - 125
Bis(2-chloroethyl)ether	120	91.5		ug/L		76	10 - 121
bis (2-chloroisopropyl) ether	120	100		ug/L		84	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	16 - 150
4-Bromophenyl phenyl ether	120	84.9		ug/L		71	17 - 150
Butyl benzyl phthalate	120	91.6		ug/L		76	21 - 150
4-Chloroaniline	120	71.8		ug/L		60	10 - 124
4-Chloro-3-methylphenol	120	79.5		ug/L		66	37 - 131
2-Chloronaphthalene	120	78.0		ug/L		65	24 - 132
2-Chlorophenol	120	81.0		ug/L		68	27 - 124
4-Chlorophenyl phenyl ether	120	83.4		ug/L		70	27 - 147
Dibenz[a,h]acridine	120	107		ug/L		90	40 - 140
Dibenzofuran	120	81.6		ug/L		68	30 - 135
3,3'-Dichlorobenzidine	160	123		ug/L		77	10 - 150
2,4-Dichlorophenol	120	74.4		ug/L		62	33 - 132
Diethyl phthalate	120	87.0		ug/L		72	37 - 145
2,4-Dimethylphenol	120	62.7		ug/L		52	38 - 132
Dimethyl phthalate	120	81.6		ug/L		68	32 - 137
Di-n-butyl phthalate	120	91.2		ug/L		76	27 - 150
4,6-Dinitro-ortho-cresol	240	202		ug/L		84	14 - 150
2,4-Dinitrophenol	240	231		ug/L		96	15 - 150
2,4-Dinitrotoluene	120	87.4		ug/L		73	35 - 136
2,6-Dinitrotoluene	120	81.6		ug/L		68	29 - 140
Di-n-octyl phthalate	120	90.2		ug/L		75	26 - 150
1,4-Dioxane	120	54.8		ug/L		46	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	91.1		ug/L		76	23 - 138
Hexachlorobenzene	120	90.8		ug/L		76	10 - 150
Hexachlorocyclopentadiene	120	56.9		ug/L		47	10 - 124
Hexachloroethane	120	73.5		ug/L		61	10 - 127
Indene	120	84.4		ug/L		70	18 - 150
Isophorone	120	80.0		ug/L		67	28 - 127
2-Methylphenol	120	87.0		ug/L		72	34 - 124
3 & 4 Methylphenol	120	81.1		ug/L		68	32 - 122

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

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Nitroaniline	120	92.3		ug/L		77	24 - 139
3-Nitroaniline	120	94.7		ug/L		79	10 - 128
4-Nitroaniline	120	127		ug/L		105	28 - 118
Nitrobenzene	120	73.5		ug/L		61	29 - 120
2-Nitrophenol	120	75.3		ug/L		63	25 - 148
4-Nitrophenol	240	170		ug/L		71	12 - 129
N-Nitrosodimethylamine	120	78.1		ug/L		65	10 - 115
N-Nitrosodi-n-propylamine	120	91.3		ug/L		76	24 - 142
N-Nitrosodiphenylamine	119	84.0		ug/L		71	29 - 138
Pentachlorophenol	240	194		ug/L		81	19 - 150
Phenol	120	61.0		ug/L		51	11 - 95
Pyridine	240	75.9		ug/L		32	10 - 82
Quinoline	120	105		ug/L		88	10 - 141
2,4,5-Trichlorophenol	120	81.8		ug/L		68	30 - 144
2,4,6-Trichlorophenol	120	76.4		ug/L		64	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*48*		*10 - 129*
Terphenyl-d14	*77*		*13 - 150*
2,4,6-Tribromophenol	*52*		*10 - 150*

Lab Sample ID: LCS 400-677673/8-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	119		ug/L		99	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*21 - 114*
2-Fluorophenol	*60*		*10 - 105*
Nitrobenzene-d5	*80*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*96*		*13 - 150*
2,4,6-Tribromophenol	*62*		*10 - 150*

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	70.5		ug/L		59	10 - 127	14	40
Benzoic acid	492	268		ug/L		54	19 - 126	22	40
Benzyl alcohol	120	101		ug/L		84	17 - 109	14	40
Bis(2-chloroethoxy)methane	120	101		ug/L		85	24 - 125	26	40

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

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether			120	116		ug/L		97	10 - 121	23	40
bis (2-chloroisopropyl) ether			120	132		ug/L		110	14 - 123	27	40
Bis(2-ethylhexyl) phthalate			120	122		ug/L		101	16 - 150	28	40
4-Bromophenyl phenyl ether			120	119		ug/L		99	17 - 150	33	40
Butyl benzyl phthalate			120	123		ug/L		103	21 - 150	29	40
4-Chloroaniline			120	87.1		ug/L		73	10 - 124	19	40
4-Chloro-3-methylphenol			120	103		ug/L		86	37 - 131	25	40
2-Chloronaphthalene			120	106		ug/L		89	24 - 132	31	40
2-Chlorophenol			120	106		ug/L		88	27 - 124	26	40
4-Chlorophenyl phenyl ether			120	113		ug/L		94	27 - 147	30	40
Dibenz[a,h]acridine			120	153		ug/L		128	40 - 140	35	40
Dibenzofuran			120	111		ug/L		93	30 - 135	31	40
3,3'-Dichlorobenzidine			160	142		ug/L		89	10 - 150	14	40
2,4-Dichlorophenol			120	98.1		ug/L		82	33 - 132	27	40
Diethyl phthalate			120	117		ug/L		97	37 - 145	29	40
2,4-Dimethylphenol			120	81.1		ug/L		68	38 - 132	26	40
Dimethyl phthalate			120	109		ug/L		91	32 - 137	28	40
Di-n-butyl phthalate			120	124		ug/L		103	27 - 150	31	40
4,6-Dinitro-ortho-cresol			240	279		ug/L		116	14 - 150	32	40
2,4-Dinitrophenol			240	290		ug/L		121	15 - 150	23	40
2,4-Dinitrotoluene			120	119		ug/L		100	35 - 136	31	40
2,6-Dinitrotoluene			120	111		ug/L		93	29 - 140	31	40
Di-n-octyl phthalate			120	120		ug/L		100	26 - 150	28	40
1,4-Dioxane			120	57.9		ug/L		48	10 - 87	6	40
1,2-Diphenylhydrazine (as Azobenzene)			120	125		ug/L		104	23 - 138	31	40
Hexachlorobenzene			120	122		ug/L		102	10 - 150	29	40
Hexachlorocyclopentadiene			120	80.0		ug/L		67	10 - 124	34	40
Hexachloroethane			120	95.8		ug/L		80	10 - 127	26	40
Indene			120	113		ug/L		94	18 - 150	29	40
Isophorone			120	104		ug/L		86	28 - 127	26	40
2-Methylphenol			120	109		ug/L		91	34 - 124	22	40
3 & 4 Methylphenol			120	99.5		ug/L		83	32 - 122	20	40
2-Nitroaniline			120	119		ug/L		99	24 - 139	25	40
3-Nitroaniline			120	113		ug/L		94	10 - 128	17	40
4-Nitroaniline			120	150	*+	ug/L		125	28 - 118	17	40
Nitrobenzene			120	95.5		ug/L		80	29 - 120	26	40
2-Nitrophenol			120	95.5		ug/L		80	25 - 148	24	40
4-Nitrophenol			240	203		ug/L		85	12 - 129	17	40
N-Nitrosodimethylamine			120	83.5		ug/L		70	10 - 115	7	40
N-Nitrosodi-n-propylamine			120	120		ug/L		100	24 - 142	27	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	30	40
Pentachlorophenol			240	268		ug/L		112	19 - 150	32	40
Phenol			120	82.0		ug/L		68	11 - 95	29	40
Pyridine			240	73.9		ug/L		31	10 - 82	3	40
Quinoline			120	122		ug/L		102	10 - 141	15	40
2,4,5-Trichlorophenol			120	112		ug/L		93	30 - 144	31	40
2,4,6-Trichlorophenol			120	105		ug/L		87	27 - 147	31	40

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

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	91		21 - 114
2-Fluorophenol	66		10 - 105
Nitrobenzene-d5	85		16 - 127
Phenol-d5	56		10 - 129
Terphenyl-d14	106		13 - 150
2,4,6-Tribromophenol	72		10 - 150

Lab Sample ID: LCSD 400-677673/9-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	110		ug/L		92	10 - 140	7	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	79		21 - 114
2-Fluorophenol	59		10 - 105
Nitrobenzene-d5	80		16 - 127
Phenol-d5	48		10 - 129
Terphenyl-d14	94		13 - 150
2,4,6-Tribromophenol	58		10 - 150

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND		114	70.4		ug/L		62	50 - 150
Benzoic acid	ND		467	251		ug/L		54	50 - 150
Benzyl alcohol	ND		114	92.4		ug/L		81	50 - 150
Bis(2-chloroethoxy)methane	ND		114	90.4		ug/L		79	50 - 150
Bis(2-chloroethyl)ether	ND		114	106		ug/L		93	50 - 150
bis (2-chloroisopropyl) ether	ND		114	120		ug/L		105	50 - 150
Bis(2-ethylhexyl) phthalate	ND		114	109		ug/L		95	50 - 150
4-Bromophenyl phenyl ether	ND		114	105		ug/L		92	50 - 150
Butyl benzyl phthalate	ND		114	111		ug/L		98	50 - 150
4-Chloroaniline	ND	F1	114	56.0	F1	ug/L		49	50 - 150
4-Chloro-3-methylphenol	ND		114	92.0		ug/L		81	50 - 150
2-Chloronaphthalene	ND		114	97.4		ug/L		85	50 - 150
2-Chlorophenol	ND		114	95.1		ug/L		83	50 - 150
4-Chlorophenyl phenyl ether	ND		114	102		ug/L		90	50 - 150
Dibenz[a,h]acridine	ND		114	125		ug/L		110	50 - 150
Dibenzofuran	ND		114	99.8		ug/L		88	50 - 150
3,3'-Dichlorobenzidine	ND		152	132		ug/L		87	50 - 150
2,4-Dichlorophenol	ND		114	87.8		ug/L		77	50 - 150
Diethyl phthalate	ND		114	105		ug/L		92	50 - 150
2,4-Dimethylphenol	ND		114	72.0		ug/L		63	50 - 150
Dimethyl phthalate	ND		114	97.7		ug/L		86	50 - 150

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

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	ND		114	111		ug/L		97	50 - 150
4,6-Dinitro-ortho-cresol	ND		228	241		ug/L		106	50 - 150
2,4-Dinitrophenol	ND		228	257		ug/L		113	50 - 150
2,4-Dinitrotoluene	ND		114	107		ug/L		94	50 - 150
2,6-Dinitrotoluene	ND		114	99.3		ug/L		87	50 - 150
Di-n-octyl phthalate	ND		114	107		ug/L		94	50 - 150
1,4-Dioxane	ND		114	57.4		ug/L		50	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	111		ug/L		97	50 - 150
Hexachlorobenzene	ND		114	110		ug/L		96	50 - 150
Hexachlorocyclopentadiene	ND		114	65.9		ug/L		58	50 - 150
Hexachloroethane	ND		114	96.8		ug/L		85	50 - 150
Indene	ND		114	103		ug/L		90	50 - 150
Isophorone	ND		114	92.4		ug/L		81	50 - 150
2-Methylphenol	ND		114	99.4		ug/L		87	50 - 150
3 & 4 Methylphenol	ND		114	91.5		ug/L		80	50 - 150
2-Nitroaniline	ND		114	108		ug/L		95	50 - 150
3-Nitroaniline	ND		114	99.9		ug/L		88	50 - 150
4-Nitroaniline	ND	*+	114	142		ug/L		124	50 - 150
Nitrobenzene	ND		114	84.6		ug/L		74	50 - 150
2-Nitrophenol	ND		114	87.3		ug/L		77	50 - 150
4-Nitrophenol	ND		228	186		ug/L		82	50 - 150
N-Nitrosodimethylamine	ND		114	80.0		ug/L		70	50 - 150
N-Nitrosodi-n-propylamine	ND		114	108		ug/L		95	50 - 150
N-Nitrosodiphenylamine	ND		113	101		ug/L		90	50 - 150
Pentachlorophenol	ND		228	236		ug/L		103	50 - 150
Phenol	ND		114	65.6		ug/L		58	50 - 150
Pyridine	ND	F1	228	97.2	F1	ug/L		43	50 - 150
Quinoline	ND		114	110		ug/L		97	50 - 150
2,4,5-Trichlorophenol	ND		114	99.3		ug/L		87	50 - 150
2,4,6-Trichlorophenol	ND		114	94.0		ug/L		83	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*21 - 114*
2-Fluorophenol	*63*		*10 - 105*
Nitrobenzene-d5	*80*		*16 - 127*
Phenol-d5	*55*		*10 - 129*
Terphenyl-d14	*99*		*13 - 150*
2,4,6-Tribromophenol	*67*		*10 - 150*

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND		118	70.4		ug/L		60	50 - 150	0	40
Benzoic acid	ND		484	266		ug/L		55	50 - 150	6	40
Benzyl alcohol	ND		118	93.8		ug/L		80	50 - 150	1	40
Bis(2-chloroethoxy)methane	ND		118	88.0		ug/L		75	50 - 150	3	40

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

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	ND		118	103		ug/L		87	50 - 150	3	40
bis (2-chloroisopropyl) ether	ND		118	118		ug/L		100	50 - 150	1	40
Bis(2-ethylhexyl) phthalate	ND		118	106		ug/L		90	50 - 150	2	40
4-Bromophenyl phenyl ether	ND		118	102		ug/L		86	50 - 150	3	40
Butyl benzyl phthalate	ND		118	107		ug/L		91	50 - 150	4	40
4-Chloroaniline	ND	F1	118	55.6	F1	ug/L		47	50 - 150	1	40
4-Chloro-3-methylphenol	ND		118	90.9		ug/L		77	50 - 150	1	40
2-Chloronaphthalene	ND		118	93.5		ug/L		79	50 - 150	4	40
2-Chlorophenol	ND		118	93.1		ug/L		79	50 - 150	2	40
4-Chlorophenyl phenyl ether	ND		118	99.5		ug/L		84	50 - 150	3	40
Dibenz[a,h]acridine	ND		118	118		ug/L		100	50 - 150	6	40
Dibenzofuran	ND		118	97.0		ug/L		82	50 - 150	3	40
3,3'-Dichlorobenzidine	ND		157	124		ug/L		79	50 - 150	6	40
2,4-Dichlorophenol	ND		118	86.4		ug/L		73	50 - 150	2	40
Diethyl phthalate	ND		118	102		ug/L		86	50 - 150	3	40
2,4-Dimethylphenol	ND		118	72.8		ug/L		62	50 - 150	1	40
Dimethyl phthalate	ND		118	95.8		ug/L		81	50 - 150	2	40
Di-n-butyl phthalate	ND		118	107		ug/L		91	50 - 150	3	40
4,6-Dinitro-ortho-cresol	ND		236	244		ug/L		103	50 - 150	1	40
2,4-Dinitrophenol	ND		236	267		ug/L		113	50 - 150	4	40
2,4-Dinitrotoluene	ND		118	103		ug/L		87	50 - 150	4	40
2,6-Dinitrotoluene	ND		118	97.7		ug/L		83	50 - 150	2	40
Di-n-octyl phthalate	ND		118	104		ug/L		88	50 - 150	3	40
1,4-Dioxane	ND		118	58.6		ug/L		50	50 - 150	2	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	106		ug/L		90	50 - 150	4	40
Hexachlorobenzene	ND		118	107		ug/L		90	50 - 150	3	40
Hexachlorocyclopentadiene	ND		118	68.5		ug/L		58	50 - 150	4	40
Hexachloroethane	ND		118	94.7		ug/L		80	50 - 150	2	40
Indene	ND		118	101		ug/L		86	50 - 150	2	40
Isophorone	ND		118	91.0		ug/L		77	50 - 150	2	40
2-Methylphenol	ND		118	98.7		ug/L		84	50 - 150	1	40
3 & 4 Methylphenol	ND		118	91.6		ug/L		78	50 - 150	0	40
2-Nitroaniline	ND		118	104		ug/L		89	50 - 150	3	40
3-Nitroaniline	ND		118	101		ug/L		86	50 - 150	1	40
4-Nitroaniline	ND	*+	118	139		ug/L		118	50 - 150	2	40
Nitrobenzene	ND		118	83.3		ug/L		71	50 - 150	1	40
2-Nitrophenol	ND		118	86.8		ug/L		74	50 - 150	1	40
4-Nitrophenol	ND		236	184		ug/L		78	50 - 150	1	40
N-Nitrosodimethylamine	ND		118	83.3		ug/L		71	50 - 150	4	40
N-Nitrosodi-n-propylamine	ND		118	105		ug/L		89	50 - 150	2	40
N-Nitrosodiphenylamine	ND		117	98.3		ug/L		84	50 - 150	3	40
Pentachlorophenol	ND		236	235		ug/L		99	50 - 150	1	40
Phenol	ND		118	67.1		ug/L		57	50 - 150	2	40
Pyridine	ND	F1	236	83.4	F1	ug/L		35	50 - 150	15	40
Quinoline	ND		118	113		ug/L		96	50 - 150	3	40
2,4,5-Trichlorophenol	ND		118	98.2		ug/L		83	50 - 150	1	40
2,4,6-Trichlorophenol	ND		118	92.1		ug/L		78	50 - 150	2	40

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

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	81		21 - 114
2-Fluorophenol	62		10 - 105
Nitrobenzene-d5	76		16 - 127
Phenol-d5	54		10 - 129
Terphenyl-d14	92		13 - 150
2,4,6-Tribromophenol	64		10 - 150

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND	F1	116	48.5	F1	ug/L		42	50 - 150
Benzoic acid	ND		476	290		ug/L		61	50 - 150
Benzyl alcohol	ND		116	94.6		ug/L		82	50 - 150
Bis(2-chloroethoxy)methane	ND		116	92.2		ug/L		79	50 - 150
Bis(2-chloroethyl)ether	ND		116	113		ug/L		97	50 - 150
bis (2-chloroisopropyl) ether	ND		116	119		ug/L		103	50 - 150
Bis(2-ethylhexyl) phthalate	ND		116	112		ug/L		97	50 - 150
4-Bromophenyl phenyl ether	ND		116	106		ug/L		91	50 - 150
Butyl benzyl phthalate	ND		116	112		ug/L		96	50 - 150
4-Chloroaniline	ND		116	72.9		ug/L		63	50 - 150
4-Chloro-3-methylphenol	ND		116	94.2		ug/L		81	50 - 150
2-Chloronaphthalene	ND		116	98.5		ug/L		85	50 - 150
2-Chlorophenol	ND		116	95.8		ug/L		83	50 - 150
4-Chlorophenyl phenyl ether	ND		116	104		ug/L		90	50 - 150
Dibenz[a,h]acridine	ND		116	129		ug/L		111	50 - 150
Dibenzofuran	ND		116	103		ug/L		88	50 - 150
3,3'-Dichlorobenzidine	ND	F1	155	59.8	F1	ug/L		39	50 - 150
2,4-Dichlorophenol	ND		116	88.8		ug/L		77	50 - 150
Diethyl phthalate	ND		116	107		ug/L		92	50 - 150
2,4-Dimethylphenol	ND		116	72.6		ug/L		63	50 - 150
Dimethyl phthalate	ND		116	99.3		ug/L		86	50 - 150
Di-n-butyl phthalate	ND		116	112		ug/L		97	50 - 150
4,6-Dinitro-ortho-cresol	ND		232	260		ug/L		112	50 - 150
2,4-Dinitrophenol	ND		232	283		ug/L		122	50 - 150
2,4-Dinitrotoluene	ND		116	108		ug/L		93	50 - 150
2,6-Dinitrotoluene	ND		116	101		ug/L		87	50 - 150
Di-n-octyl phthalate	ND		116	109		ug/L		94	50 - 150
1,4-Dioxane	ND		116	57.5		ug/L		50	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		116	110		ug/L		95	50 - 150
Hexachlorobenzene	ND		116	111		ug/L		96	50 - 150
Hexachlorocyclopentadiene	ND		116	75.2		ug/L		65	50 - 150
Hexachloroethane	ND		116	98.2		ug/L		85	50 - 150
Indene	ND		116	103		ug/L		89	50 - 150
Isophorone	ND		116	93.2		ug/L		80	50 - 150
2-Methylphenol	ND		116	100		ug/L		87	50 - 150
3 & 4 Methylphenol	ND		116	92.6		ug/L		80	50 - 150

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

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Nitroaniline	ND		116	109		ug/L		94	50 - 150
3-Nitroaniline	ND		116	100		ug/L		86	50 - 150
4-Nitroaniline	ND	*+	116	143		ug/L		123	50 - 150
Nitrobenzene	ND		116	85.3		ug/L		74	50 - 150
2-Nitrophenol	ND		116	85.8		ug/L		74	50 - 150
4-Nitrophenol	ND		232	194		ug/L		84	50 - 150
N-Nitrosodimethylamine	ND		116	80.7		ug/L		70	50 - 150
N-Nitrosodi-n-propylamine	ND		116	109		ug/L		94	50 - 150
N-Nitrosodiphenylamine	ND		115	102		ug/L		89	50 - 150
Pentachlorophenol	ND		232	253		ug/L		109	50 - 150
Phenol	ND		116	77.2		ug/L		67	50 - 150
Pyridine	ND	F1 F2	232	57.0	F1	ug/L		25	50 - 150
Quinoline	ND		116	109		ug/L		94	50 - 150
2,4,5-Trichlorophenol	ND		116	102		ug/L		88	50 - 150
2,4,6-Trichlorophenol	ND		116	95.9		ug/L		83	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*21 - 114*
2-Fluorophenol	*64*		*10 - 105*
Nitrobenzene-d5	*79*		*16 - 127*
Phenol-d5	*55*		*10 - 129*
Terphenyl-d14	*99*		*13 - 150*
2,4,6-Tribromophenol	*70*		*10 - 150*

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F1	121	60.2		ug/L		50	50 - 150	22	40
Benzoic acid	ND		496	306		ug/L		62	50 - 150	5	40
Benzyl alcohol	ND		121	96.8		ug/L		80	50 - 150	2	40
Bis(2-chloroethoxy)methane	ND		121	96.3		ug/L		80	50 - 150	4	40
Bis(2-chloroethyl)ether	ND		121	122		ug/L		100	50 - 150	8	40
bis (2-chloroisopropyl) ether	ND		121	126		ug/L		104	50 - 150	6	40
Bis(2-ethylhexyl) phthalate	ND		121	114		ug/L		95	50 - 150	2	40
4-Bromophenyl phenyl ether	ND		121	111		ug/L		92	50 - 150	5	40
Butyl benzyl phthalate	ND		121	118		ug/L		98	50 - 150	6	40
4-Chloroaniline	ND		121	75.1		ug/L		62	50 - 150	3	40
4-Chloro-3-methylphenol	ND		121	97.5		ug/L		81	50 - 150	3	40
2-Chloronaphthalene	ND		121	103		ug/L		85	50 - 150	4	40
2-Chlorophenol	ND		121	99.8		ug/L		82	50 - 150	4	40
4-Chlorophenyl phenyl ether	ND		121	108		ug/L		89	50 - 150	4	40
Dibenz[a,h]acridine	ND		121	132		ug/L		110	50 - 150	3	40
Dibenzofuran	ND		121	106		ug/L		88	50 - 150	4	40
3,3'-Dichlorobenzidine	ND	F1	161	76.6	F1	ug/L		47	50 - 150	25	40
2,4-Dichlorophenol	ND		121	93.1		ug/L		77	50 - 150	5	40
Diethyl phthalate	ND		121	111		ug/L		92	50 - 150	4	40

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

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677824

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4-Dimethylphenol	ND		121	79.2		ug/L		65	50 - 150	9	40
Dimethyl phthalate	ND		121	103		ug/L		85	50 - 150	4	40
Di-n-butyl phthalate	ND		121	116		ug/L		96	50 - 150	4	40
4,6-Dinitro-ortho-cresol	ND		242	263		ug/L		109	50 - 150	1	40
2,4-Dinitrophenol	ND		242	283		ug/L		117	50 - 150	0	40
2,4-Dinitrotoluene	ND		121	112		ug/L		93	50 - 150	3	40
2,6-Dinitrotoluene	ND		121	106		ug/L		87	50 - 150	4	40
Di-n-octyl phthalate	ND		121	112		ug/L		93	50 - 150	3	40
1,4-Dioxane	ND		121	61.2		ug/L		51	50 - 150	6	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		121	117		ug/L		97	50 - 150	6	40
Hexachlorobenzene	ND		121	117		ug/L		97	50 - 150	5	40
Hexachlorocyclopentadiene	ND		121	73.8		ug/L		61	50 - 150	2	40
Hexachloroethane	ND		121	104		ug/L		86	50 - 150	6	40
Indene	ND		121	109		ug/L		90	50 - 150	5	40
Isophorone	ND		121	98.2		ug/L		81	50 - 150	5	40
2-Methylphenol	ND		121	105		ug/L		87	50 - 150	4	40
3 & 4 Methylphenol	ND		121	96.9		ug/L		80	50 - 150	5	40
2-Nitroaniline	ND		121	110		ug/L		91	50 - 150	1	40
3-Nitroaniline	ND		121	101		ug/L		83	50 - 150	1	40
4-Nitroaniline	ND	*+	121	141		ug/L		117	50 - 150	1	40
Nitrobenzene	ND		121	89.2		ug/L		74	50 - 150	4	40
2-Nitrophenol	ND		121	94.2		ug/L		78	50 - 150	9	40
4-Nitrophenol	ND		242	192		ug/L		79	50 - 150	1	40
N-Nitrosodimethylamine	ND		121	86.4		ug/L		71	50 - 150	7	40
N-Nitrosodi-n-propylamine	ND		121	115		ug/L		95	50 - 150	5	40
N-Nitrosodiphenylamine	ND		120	107		ug/L		89	50 - 150	4	40
Pentachlorophenol	ND		242	264		ug/L		109	50 - 150	4	40
Phenol	ND		121	82.5		ug/L		68	50 - 150	7	40
Pyridine	ND	F1 F2	242	93.4	F1 F2	ug/L		39	50 - 150	48	40
Quinoline	ND		121	113		ug/L		94	50 - 150	4	40
2,4,5-Trichlorophenol	ND		121	105		ug/L		87	50 - 150	3	40
2,4,6-Trichlorophenol	ND		121	99.7		ug/L		82	50 - 150	4	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*86*		*21 - 114*
2-Fluorophenol	*63*		*10 - 105*
Nitrobenzene-d5	*80*		*16 - 127*
Phenol-d5	*56*		*10 - 129*
Terphenyl-d14	*99*		*13 - 150*
2,4,6-Tribromophenol	*70*		*10 - 150*

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/12/24 12:17	07/15/24 16:09	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/24 12:17	07/15/24 16:09	1
Anthracene	ND		0.20	0.047	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/12/24 12:17	07/15/24 16:09	1
Chrysene	ND		0.20	0.033	ug/L		07/12/24 12:17	07/15/24 16:09	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/12/24 12:17	07/15/24 16:09	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Fluorene	ND		0.20	0.089	ug/L		07/12/24 12:17	07/15/24 16:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Phenanthrene	ND		0.20	0.090	ug/L		07/12/24 12:17	07/15/24 16:09	1
Pyrene	ND		0.20	0.039	ug/L		07/12/24 12:17	07/15/24 16:09	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/12/24 12:17	07/15/24 16:09	1
2-Methylnaphthalene	0.106	J	0.20	0.066	ug/L		07/12/24 12:17	07/15/24 16:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*18 - 147*	*07/12/24 12:17*	*07/15/24 16:09*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*07/12/24 12:17*	*07/15/24 16:09*	*1*
Nitrobenzene-d5	*87*		*10 - 144*	*07/12/24 12:17*	*07/15/24 16:09*	*1*

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	76.9		ug/L		64	10 - 140
Acenaphthylene	120	77.8		ug/L		65	10 - 140
Anthracene	120	83.0		ug/L		69	19 - 140
Benzo[a]anthracene	120	79.9		ug/L		67	25 - 140
Benzo[a]pyrene	120	80.8		ug/L		67	24 - 140
Benzo[b]fluoranthene	120	87.2		ug/L		73	34 - 140
Benzo[g,h,i]perylene	120	76.2		ug/L		63	13 - 140
Benzo[k]fluoranthene	120	91.2		ug/L		76	21 - 140
Chrysene	120	89.1		ug/L		74	28 - 140
Dibenz(a,h)anthracene	120	77.6		ug/L		65	10 - 140
Fluoranthene	120	84.7		ug/L		71	18 - 140
Fluorene	120	80.9		ug/L		67	16 - 140
Indeno[1,2,3-cd]pyrene	120	75.6		ug/L		63	10 - 140
Phenanthrene	120	81.8		ug/L		68	22 - 140
Pyrene	120	86.0		ug/L		72	38 - 140
1-Methylnaphthalene	120	76.2		ug/L		64	10 - 140
2-Methylnaphthalene	120	75.2		ug/L		63	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*

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

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	60		15 - 128
Nitrobenzene-d5	55		10 - 144

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	110		ug/L		92	10 - 140	35	40
Acenaphthylene			120	113		ug/L		94	10 - 140	37	40
Anthracene			120	119		ug/L		99	19 - 140	36	40
Benzo[a]anthracene			120	118		ug/L		98	25 - 140	39	40
Benzo[a]pyrene			120	118		ug/L		98	24 - 140	37	40
Benzo[b]fluoranthene			120	123		ug/L		102	34 - 140	34	40
Benzo[g,h,i]perylene			120	107		ug/L		89	13 - 140	34	40
Benzo[k]fluoranthene			120	140	*1	ug/L		116	21 - 140	42	40
Chrysene			120	125		ug/L		104	28 - 140	33	40
Dibenz(a,h)anthracene			120	120	*1	ug/L		100	10 - 140	43	40
Fluoranthene			120	123		ug/L		102	18 - 140	37	40
Fluorene			120	118		ug/L		98	16 - 140	37	40
Indeno[1,2,3-cd]pyrene			120	112		ug/L		93	10 - 140	39	40
Phenanthrene			120	120		ug/L		100	22 - 140	38	40
Pyrene			120	125		ug/L		104	38 - 140	37	40
1-Methylnaphthalene			120	107		ug/L		89	10 - 140	33	40
2-Methylnaphthalene			120	108		ug/L		90	10 - 140	36	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	98		18 - 147
2-Fluorobiphenyl	86		15 - 128
Nitrobenzene-d5	79		10 - 144

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		114	93.1		ug/L		82	50 - 150
Acenaphthylene	ND		114	93.8		ug/L		82	50 - 150
Anthracene	ND		114	100		ug/L		88	50 - 150
Benzo[a]anthracene	ND		114	96.2		ug/L		84	50 - 150
Benzo[a]pyrene	ND		114	100		ug/L		88	50 - 150
Benzo[b]fluoranthene	ND		114	101		ug/L		88	50 - 150
Benzo[g,h,i]perylene	ND		114	85.1		ug/L		75	50 - 150
Benzo[k]fluoranthene	ND	*1	114	122		ug/L		107	50 - 150
Chrysene	ND		114	108		ug/L		94	50 - 150
Dibenz(a,h)anthracene	ND	*1	114	85.6		ug/L		75	50 - 150
Fluoranthene	ND		114	100		ug/L		88	50 - 150
Fluorene	ND		114	95.7		ug/L		84	50 - 150

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

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	ND		114	78.5		ug/L		69	50 - 150
Phenanthrene	ND		114	99.2		ug/L		87	50 - 150
Pyrene	ND		114	106		ug/L		93	50 - 150
1-Methylnaphthalene	ND		114	93.0		ug/L		82	50 - 150
2-Methylnaphthalene	0.064	J B	114	92.4		ug/L		81	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*85*		*18 - 147*
2-Fluorobiphenyl	*77*		*15 - 128*
Nitrobenzene-d5	*71*		*10 - 144*

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		118	93.0		ug/L		79	50 - 150	0	40
Acenaphthylene	ND		118	95.7		ug/L		81	50 - 150	2	40
Anthracene	ND		118	102		ug/L		86	50 - 150	2	40
Benzo[a]anthracene	ND		118	95.7		ug/L		81	50 - 150	0	40
Benzo[a]pyrene	ND		118	101		ug/L		86	50 - 150	1	40
Benzo[b]fluoranthene	ND		118	112		ug/L		95	50 - 150	10	40
Benzo[g,h,i]perylene	ND		118	95.2		ug/L		81	50 - 150	11	40
Benzo[k]fluoranthene	ND	*1	118	116		ug/L		98	50 - 150	5	40
Chrysene	ND		118	106		ug/L		90	50 - 150	2	40
Dibenz(a,h)anthracene	ND	*1	118	96.0		ug/L		81	50 - 150	12	40
Fluoranthene	ND		118	102		ug/L		86	50 - 150	1	40
Fluorene	ND		118	97.0		ug/L		82	50 - 150	1	40
Indeno[1,2,3-cd]pyrene	ND		118	91.6		ug/L		78	50 - 150	15	40
Phenanthrene	ND		118	102		ug/L		87	50 - 150	3	40
Pyrene	ND		118	105		ug/L		89	50 - 150	1	40
1-Methylnaphthalene	ND		118	95.1		ug/L		81	50 - 150	2	40
2-Methylnaphthalene	0.064	J B	118	94.5		ug/L		80	50 - 150	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*83*		*18 - 147*
2-Fluorobiphenyl	*74*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		116	91.6		ug/L		79	50 - 150
Acenaphthylene	ND		116	92.0		ug/L		79	50 - 150
Anthracene	ND		116	98.4		ug/L		85	50 - 150
Benzo[a]anthracene	ND		116	92.3		ug/L		80	50 - 150

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

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	ND		116	94.3		ug/L		81	50 - 150
Benzo[b]fluoranthene	ND		116	99.9		ug/L		86	50 - 150
Benzo[g,h,i]perylene	ND		116	90.5		ug/L		78	50 - 150
Benzo[k]fluoranthene	ND	*1	116	116		ug/L		100	50 - 150
Chrysene	ND		116	102		ug/L		88	50 - 150
Dibenz(a,h)anthracene	ND	*1	116	90.1		ug/L		78	50 - 150
Fluoranthene	ND		116	99.1		ug/L		85	50 - 150
Fluorene	ND		116	94.9		ug/L		82	50 - 150
Indeno[1,2,3-cd]pyrene	ND		116	87.1		ug/L		75	50 - 150
Phenanthrene	ND		116	98.7		ug/L		85	50 - 150
Pyrene	ND		116	109		ug/L		94	50 - 150
1-Methylnaphthalene	ND		116	90.4		ug/L		78	50 - 150
2-Methylnaphthalene	ND		116	90.4		ug/L		78	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*84*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*67*		*10 - 144*

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677828

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		121	99.4		ug/L		82	50 - 150	8	40
Acenaphthylene	ND		121	102		ug/L		84	50 - 150	10	40
Anthracene	ND		121	110		ug/L		91	50 - 150	11	40
Benzo[a]anthracene	ND		121	104		ug/L		86	50 - 150	12	40
Benzo[a]pyrene	ND		121	108		ug/L		89	50 - 150	14	40
Benzo[b]fluoranthene	ND		121	118		ug/L		97	50 - 150	17	40
Benzo[g,h,i]perylene	ND		121	103		ug/L		85	50 - 150	13	40
Benzo[k]fluoranthene	ND	*1	121	119		ug/L		98	50 - 150	2	40
Chrysene	ND		121	117		ug/L		97	50 - 150	14	40
Dibenz(a,h)anthracene	ND	*1	121	105		ug/L		87	50 - 150	15	40
Fluoranthene	ND		121	110		ug/L		91	50 - 150	11	40
Fluorene	ND		121	104		ug/L		86	50 - 150	9	40
Indeno[1,2,3-cd]pyrene	ND		121	98.5		ug/L		81	50 - 150	12	40
Phenanthrene	ND		121	110		ug/L		91	50 - 150	11	40
Pyrene	ND		121	115		ug/L		95	50 - 150	5	40
1-Methylnaphthalene	ND		121	102		ug/L		84	50 - 150	12	40
2-Methylnaphthalene	ND		121	101		ug/L		83	50 - 150	11	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*88*		*18 - 147*
2-Fluorobiphenyl	*77*		*15 - 128*
Nitrobenzene-d5	*70*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677353/1-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677353

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		07/10/24 08:38	07/10/24 15:13	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/10/24 08:38	07/10/24 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*07/10/24 08:38*	*07/10/24 15:13*	*1*

Lab Sample ID: LCS 400-677353/2-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677353

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.148	*+	ug/L		147	60 - 140		
1,2-Dibromoethane			0.100	0.0982		ug/L		98	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*51 - 149*

Lab Sample ID: LCSD 400-677353/3-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677353

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.135		ug/L		134	60 - 140	9	30
1,2-Dibromoethane			0.100	0.0964		ug/L		96	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: 400-258832-3 MS
Matrix: Water
Analysis Batch: 677421

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND	*+ F2	0.105	0.106		ug/L		101	10 - 150		
1,2-Dibromoethane	ND	F2	0.105	0.0590		ug/L		56	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*51 - 149*

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677421

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677353

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	*+ F2	0.115	0.132	F2	ug/L		115	10 - 150	22	20
1,2-Dibromoethane	ND	F2	0.115	0.0688	p	ug/L		60	39 - 150	15	20

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-258832-3 MSD
Matrix: Water
Analysis Batch: 677421

Client Sample ID: MW10-ROX-070824
Prep Type: Total/NA
Prep Batch: 677353

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*76*		*51 - 149*

Lab Sample ID: 400-258832-8 MS
Matrix: Water
Analysis Batch: 677421

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677353

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	ND	*+ F2	0.107	0.129		ug/L		120	10 - 150
1,2-Dibromoethane	ND		0.107	0.0655	p	ug/L		61	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*72*		*51 - 149*

Lab Sample ID: 400-258832-8 MSD
Matrix: Water
Analysis Batch: 677421

Client Sample ID: MW5-ROX-070824
Prep Type: Total/NA
Prep Batch: 677353

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	*+ F2	0.109	0.160	F2	ug/L		146	10 - 150	21	20
1,2-Dibromoethane	ND		0.109	0.0627	p	ug/L		58	39 - 150	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

7/16/2024

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: 7/8/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

400-258832 COC

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-070824-8260-B	7/8/2024	0000	Water	2					2	X			
	TB-ROX-070824-8011-B	7/8/2024	0000	Water	2					2		X		
	MW10-ROX-070824	7/8/2024	0915	Water	6			2		8	X	X	X	X
	MW10-ROX-070824-MS	7/8/2024	0915	Water	6			2		8	X	X	X	X
	MW10-ROX-070824-MSD	7/8/2024	0915	Water	6			2		8	X	X	X	X
	MW27-ROX-070824	7/8/2024	1110	Water	6			2		8	X	X	X	X
	MW28-ROX-070824	7/8/2024	1310	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 7252 0543 6399, 7252 0543 6388	7/8/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7/9/24	Time: 8:17

CUSTODY SEALS: 1717996, 1717997, 1717998, 1717999

0.9°C, 5.02 MB

Version: 27Sept22

Shell Oil Products US Chain Of Custody Record

AECOM

7/16/2024

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: 7/8/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 3.3.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM	LOG CODE:	SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA	State: IL
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA			
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell		EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions	PHONE NO.: 314-802-1207
TELEPHONE: 314-429-0100	FAX: 314-429-0462	Bill To Contact E-MAIL: melissa.remiger@aecom.com	
SAMPLER NAME(S) (Print): C. McDavid, E. Chalfant		E-MAIL: melissa.remiger@aecom.com	AECOM Other ID:

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.3.2

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 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-070824-8260-A	7/8/2024	0000	Water	2					2	X			
	TB-ROX-070824-8011-A	7/8/2024	0000	Water	2					2		X		
	MW5-ROX-070824	7/8/2024	0950	Water	6			2		8	X	X	X	X
	MW5-ROX-070824-MS	7/8/2024	0950	Water	6			2		8	X	X	X	X
	MW5-ROX-070824-MSD	7/8/2024	0950	Water	6			2		8	X	X	X	X
	MW14-ROX-070824	7/8/2024	1250	Water	6			2		8	X	X	X	X

07-08-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See page 1	7/8/2024	1600
		7/9/24	10:17

Version: 27Sept23

CUSTODY SEALS: See page 1

0.9°C, 5.0°C IR10

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-258832-1

Login Number: 258832
List Number: 1
Creator: Pardonner, Brett

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C 5.0°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-258832-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-258833-1

Data Reviewer: Andreia Vladimirescu

Peer Reviewer: Delaine Austin

Date Reviewed: 8/26/2024

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

Sample Identification	Sample Identification
TB-ROX-070824-8260-BP	TB-ROX-070824-8011-BP
MW23-ROX-070824	--

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-methylnaphthalene was detected in a PAH method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCSD recoveries, and/or PAH LCS/LCSD RPDs, were outside evaluation criteria. 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 400-677673/1-A	PAHs	2-Methylnaphthalene	0.106 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 400-677358/1002	VOCs	Acetone	**249**	NA	43-150
LCS 400-677358/1002	VOCs	2-Butanone (MEK)	**146**	NA	61-145
LCS/LCSD 400-677673/2-A/3-A	SVOCs	4-Nitroaniline	105/**125**	17	28-118/40
LCS/LCSD 400-677673/2-A/3-A	PAHs	Benzo[k]fluoranthene	76/116	**42**	21-140/40
LCS/LCSD 400-677673/2-A/3-A	PAHs	Dibenz(a,h)anthracene	65/100	**43**	10-140/40
LCS/LCSD 400-677353/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**147**/134	9	60-140/30

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/19/2024 8:18:10 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-258833-1

Reviewed 08/26/2024
VA

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
7/19/2024 8:18:10 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job Narrative
400-258833-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/9/2024 10:17 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.9°C and 5.0°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-677358 recovered above the upper control limit for Acetone, Hexachlorobutadiene, Trichlorofluoromethane 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 400-677358 recovered outside control limits for the following analytes: 2-Butanone (MEK) and Acetone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 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-070824-8260-BP (400-258833-1) and MW23-ROX-070824 (400-258833-3). 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 laboratory control sample duplicate (LCSD) for preparation batch 400-677673 and analytical batch 400-677824 recovered outside control limits for the following analytes: 4-Nitroaniline. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-677824 recovered above the upper control limit for 2-Methylphenol, 1,2-Diphenylhydrazine (as Azobenzene), N-Nitrosodi-n-propylamine, Butyl benzyl phthalate and N-Nitrosodimethylamine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-673785 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-677673 and analytical batch 400-677828 recovered outside control limits for the following analytes: Benzo[k]fluoranthene and Dibenz(a,h)anthracene.

Method 8270E_SIM: The method blank for preparation batch 400-677673 and analytical batch 400-677828 contained 2-Methylnaphthalene 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.

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

GC Semi VOA

Job ID: 400-258833-1 (Continued) Eurofins Pensacola

Method 8011: The laboratory control sample (LCS) for preparation batch 400-677353 and analytical batch 400-677421 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. 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 continuing calibration verification (CCV) associated with batch 400-677421 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: 400-258833-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-258833-1	TB-ROX-070824-8260-BP	Water	07/08/24 00:00	07/09/24 10:17
400-258833-2	TB-ROX-070824-8011-BP	Water	07/08/24 00:00	07/09/24 10:17
400-258833-3	MW23-ROX-070824	Water	07/08/24 10:50	07/09/24 10:17

Detection Summary

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

Job ID: 400-258833-1

Client Sample ID: TB-ROX-070824-8260-BP — Lab Sample ID: 400-258833-1

No Detections.

Client Sample ID: TB-ROX-070824-8011-BP — Lab Sample ID: 400-258833-2

No Detections.

Client Sample ID: MW23-ROX-070824 — Lab Sample ID: 400-258833-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.69	J	1.0	0.20	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.1		1.0	0.22	ug/L	1		8260D	Total/NA
Trichloroethene	0.29	J	1.0	0.15	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: 400-258833-1

Client Sample ID: TB-ROX-070824-8260-BP
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-1
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			07/10/24 15:28	1
Acrolein	ND		20	3.3	ug/L			07/10/24 15:28	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 15:28	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 15:28	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 15:28	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 15:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 15:28	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 15:28	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 15:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 15:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 15:28	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 15:28	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 15:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 15:28	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 15:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 15:28	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 15:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 15:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 15:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 15:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 15:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 15:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 15:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 15:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 15:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 15:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 15:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 15:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 15:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 15:28	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 15:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 15:28	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 15:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 15:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 15:28	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 15:28	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 15:28	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 15:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 15:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 15:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 15:28	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 15:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 15:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 15:28	1

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

Job ID: 400-258833-1

Client Sample ID: TB-ROX-070824-8260-BP
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-1
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			07/10/24 15:28	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 15:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 15:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 15:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 15:28	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 15:28	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 15:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 15:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 15:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 15:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 15:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 15:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 15:28	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 15:28	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 15:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 15:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 15:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 15:28	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 15:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 15:28	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/10/24 15:28*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/10/24 15:28*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 15:28*	*1*

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

Job ID: 400-258833-1

Client Sample ID: TB-ROX-070824-8011-BP
Date Collected: 07/08/24 00:00
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.034	0.019	ug/L		07/10/24 08:38	07/10/24 20:33	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/10/24 08:38	07/10/24 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*129*		*51 - 149*	*07/10/24 08:38*	*07/10/24 20:33*	*1*

Client Sample ID: MW23-ROX-070824
Date Collected: 07/08/24 10:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-3
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			07/10/24 17:30	1
Acrolein	ND		20	3.3	ug/L			07/10/24 17:30	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 17:30	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 17:30	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 17:30	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 17:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 17:30	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 17:30	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/10/24 17:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 17:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 17:30	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 17:30	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 17:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 17:30	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 17:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 17:30	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 17:30	1
cis-1,2-Dichloroethene	**0.69**	**J**	1.0	0.20	ug/L			07/10/24 17:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 17:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 17:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 17:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 17:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 17:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 17:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 17:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 17:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 17:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 17:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 17:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 17:30	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 17:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 17:30	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 17:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 17:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 17:30	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			07/10/24 17:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 17:30	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 17:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 17:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 17:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 17:30	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 17:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 17:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/10/24 17:30	1

Client Sample ID: MW23-ROX-070824
Date Collected: 07/08/24 10:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-3
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			07/10/24 17:30	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 17:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 17:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 17:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 17:30	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 17:30	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 17:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 17:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 17:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 17:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 17:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 17:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 17:30	1
Trichloroethene	**0.29**	**J**	1.0	0.15	ug/L			07/10/24 17:30	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 17:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 17:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 17:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 17:30	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 17:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 17:30	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/10/24 17:30*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/10/24 17:30*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/10/24 17:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		07/12/24 12:17	07/15/24 15:48	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/12/24 12:17	07/15/24 15:48	1
Anthracene	ND		0.21	0.049	ug/L		07/12/24 12:17	07/15/24 15:48	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/12/24 12:17	07/15/24 15:48	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/12/24 12:17	07/15/24 15:48	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/12/24 12:17	07/15/24 15:48	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/12/24 12:17	07/15/24 15:48	1
Benzo[k]fluoranthene	ND	*1	0.21	0.064	ug/L		07/12/24 12:17	07/15/24 15:48	1
Chrysene	ND		0.21	0.034	ug/L		07/12/24 12:17	07/15/24 15:48	1
Dibenz(a,h)anthracene	ND	*1	0.21	0.050	ug/L		07/12/24 12:17	07/15/24 15:48	1
Fluoranthene	ND		0.21	0.035	ug/L		07/12/24 12:17	07/15/24 15:48	1
Fluorene	ND		0.21	0.092	ug/L		07/12/24 12:17	07/15/24 15:48	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/12/24 12:17	07/15/24 15:48	1
Phenanthrene	ND		0.21	0.093	ug/L		07/12/24 12:17	07/15/24 15:48	1
Pyrene	ND		0.21	0.040	ug/L		07/12/24 12:17	07/15/24 15:48	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/12/24 12:17	07/15/24 15:48	1
2-Methylnaphthalene	ND		0.21	0.068	ug/L		07/12/24 12:17	07/15/24 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*07/12/24 12:17*	*07/15/24 15:48*	*1*
2-Fluorobiphenyl	*84*		*15 - 128*	*07/12/24 12:17*	*07/15/24 15:48*	*1*

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

Job ID: 400-258833-1

Client Sample ID: MW23-ROX-070824

Date Collected: 07/08/24 10:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*94*		*10 - 144*	*07/12/24 12:17*	*07/15/24 15:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		07/12/24 12:17	07/15/24 21:43	1
Benzenethiol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:43	1
Benzoic acid	ND		31	25	ug/L		07/12/24 12:17	07/15/24 21:43	1
Benzyl alcohol	ND		10	7.6	ug/L		07/12/24 12:17	07/15/24 21:43	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 21:43	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Chloroaniline	ND		10	4.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		07/12/24 12:17	07/15/24 21:43	1
2-Chloronaphthalene	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
2-Chlorophenol	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
Dibenzofuran	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 21:43	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		07/12/24 12:17	07/15/24 21:43	1
Diethyl phthalate	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4-Dimethylphenol	ND		10	5.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
Dimethyl phthalate	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 21:43	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		07/12/24 12:17	07/15/24 21:43	1
1,4-Dioxane	ND		10	4.5	ug/L		07/12/24 12:17	07/15/24 21:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
Hexachlorobenzene	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:43	1
Hexachlorocyclopentadiene	ND		21	4.7	ug/L		07/12/24 12:17	07/15/24 21:43	1
Hexachloroethane	ND		10	5.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
Indene	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 21:43	1
Isophorone	ND		10	5.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
2-Methylphenol	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 21:43	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
2-Nitroaniline	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 21:43	1
3-Nitroaniline	ND		10	4.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Nitroaniline	ND	*+	10	4.3	ug/L		07/12/24 12:17	07/15/24 21:43	1
Nitrobenzene	ND		10	4.9	ug/L		07/12/24 12:17	07/15/24 21:43	1
2-Nitrophenol	ND		10	4.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
4-Nitrophenol	ND		10	3.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		07/12/24 12:17	07/15/24 21:43	1

Client Sample ID: MW23-ROX-070824
Date Collected: 07/08/24 10:50
Date Received: 07/09/24 10:17

Lab Sample ID: 400-258833-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		07/12/24 12:17	07/15/24 21:43	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 21:43	1
Pentachlorophenol	ND		21	12	ug/L		07/12/24 12:17	07/15/24 21:43	1
Phenol	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 21:43	1
Pyridine	ND		10	10	ug/L		07/12/24 12:17	07/15/24 21:43	1
Quinoline	ND		10	2.5	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 21:43	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/12/24 12:17	07/15/24 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*07/12/24 12:17*	*07/15/24 21:43*	*1*
2-Fluorophenol	*63*		*10 - 105*	*07/12/24 12:17*	*07/15/24 21:43*	*1*
Nitrobenzene-d5	*84*		*16 - 127*	*07/12/24 12:17*	*07/15/24 21:43*	*1*
Phenol-d5	*46*		*10 - 129*	*07/12/24 12:17*	*07/15/24 21:43*	*1*
Terphenyl-d14	*101*		*13 - 150*	*07/12/24 12:17*	*07/15/24 21:43*	*1*
2,4,6-Tribromophenol	*69*		*10 - 150*	*07/12/24 12:17*	*07/15/24 21:43*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.031	0.018	ug/L		07/10/24 08:38	07/10/24 20:54	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/10/24 08:38	07/10/24 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*07/10/24 08:38*	*07/10/24 20:54*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-258833-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

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: 400-258833-1

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)
400-258833-1	TB-ROX-070824-8260-BP	99	112	96
400-258833-3	MW23-ROX-070824	99	114	97
LCS 400-677358/1002	Lab Control Sample	101	113	98
MB 400-677358/4	Method Blank	101	113	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-258833-3	MW23-ROX-070824	85	63	84	46	101	69
LCS 400-677673/2-A	Lab Control Sample	67	54	66	48	77	52
LCS 400-677673/8-A	Lab Control Sample	82	60	80	41	96	62
LCSD 400-677673/3-A	Lab Control Sample Dup	91	66	85	56	106	72
LCSD 400-677673/9-A	Lab Control Sample Dup	79	59	80	48	94	58
MB 400-677673/1-A	Method Blank	71	52	72	37	83	51

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-258833-3	MW23-ROX-070824	96	84	94
LCS 400-677673/2-A	Lab Control Sample	70	60	55
LCSD 400-677673/3-A	Lab Control Sample Dup	98	86	79
MB 400-677673/1-A	Method Blank	109	81	87

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: 400-258833-1

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)
400-258833-2	TB-ROX-070824-8011-BP	129
400-258833-3	MW23-ROX-070824	76
LCS 400-677353/2-A	Lab Control Sample	114
LCSD 400-677353/3-A	Lab Control Sample Dup	105
MB 400-677353/1-A	Method Blank	119

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-258833-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-258833-1

Client Sample ID: TB-ROX-070824-8260-BP
Lab Sample ID: 400-258833-1
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 15:28	BPO	EET PEN

Client Sample ID: TB-ROX-070824-8011-BP
Lab Sample ID: 400-258833-2
Date Collected: 07/08/24 00:00
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			30.8 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 20:33	S1K	EET PEN

Client Sample ID: MW23-ROX-070824
Lab Sample ID: 400-258833-3
Date Collected: 07/08/24 10:50
Matrix: Water
Date Received: 07/09/24 10:17

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677358	07/10/24 17:30	BPO	EET PEN
Total/NA	Prep	3510C			241 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 21:43	S1B	EET PEN
Total/NA	Prep	3510C			241 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 15:48	JAW	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 20:54	S1K	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677353/1-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:13	S1K	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677358/4
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	677358	07/10/24 14:15	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677673/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 15:59	S1B	EET PEN

Lab Chronicle

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

Job ID: 400-258833-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677673/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	677828	07/15/24 16:09	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677353/2-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:35	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677358/1002
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	677358	07/10/24 09:47	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677673/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 16:24	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 11:59	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677673/8-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 17:14	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677353/3-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	677353	07/10/24 08:38	KR	EET PEN
Total/NA	Analysis	8011		1			677421	07/10/24 15:56	S1K	EET PEN

Lab Chronicle

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

Job ID: 400-258833-1

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-677673/3-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	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 16:49	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	677828	07/15/24 12:20	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-677673/9-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677673	07/12/24 12:17	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	677824	07/15/24 17:39	S1B	EET PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-258833-1

GC/MS VOA

Analysis Batch: 677358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-1	TB-ROX-070824-8260-BP	Total/NA	Water	8260D	
400-258833-3	MW23-ROX-070824	Total/NA	Water	8260D	
MB 400-677358/4	Method Blank	Total/NA	Water	8260D	
LCS 400-677358/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 677673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-3	MW23-ROX-070824	Total/NA	Water	3510C	
MB 400-677673/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-677673/8-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-677673/9-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 677824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-3	MW23-ROX-070824	Total/NA	Water	8270E	677673
MB 400-677673/1-A	Method Blank	Total/NA	Water	8270E	677673
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	8270E	677673
LCS 400-677673/8-A	Lab Control Sample	Total/NA	Water	8270E	677673
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	677673
LCSD 400-677673/9-A	Lab Control Sample Dup	Total/NA	Water	8270E	677673

Analysis Batch: 677828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-3	MW23-ROX-070824	Total/NA	Water	8270E SIM	677673
MB 400-677673/1-A	Method Blank	Total/NA	Water	8270E SIM	677673
LCS 400-677673/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	677673
LCSD 400-677673/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	677673

GC Semi VOA

Prep Batch: 677353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-2	TB-ROX-070824-8011-BP	Total/NA	Water	8011	
400-258833-3	MW23-ROX-070824	Total/NA	Water	8011	
MB 400-677353/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677353/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 677421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258833-2	TB-ROX-070824-8011-BP	Total/NA	Water	8011	677353
400-258833-3	MW23-ROX-070824	Total/NA	Water	8011	677353
MB 400-677353/1-A	Method Blank	Total/NA	Water	8011	677353
LCS 400-677353/2-A	Lab Control Sample	Total/NA	Water	8011	677353
LCSD 400-677353/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677353

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

Lab Sample ID: MB 400-677358/4
Matrix: Water
Analysis Batch: 677358

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			07/10/24 14:15	1
Acrolein	ND		20	3.3	ug/L			07/10/24 14:15	1
Acrylonitrile	ND		10	2.8	ug/L			07/10/24 14:15	1
Benzene	ND		1.0	0.24	ug/L			07/10/24 14:15	1
Bromobenzene	ND		1.0	0.54	ug/L			07/10/24 14:15	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/10/24 14:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Bromoform	ND		5.0	0.25	ug/L			07/10/24 14:15	1
Bromomethane	ND		1.0	0.98	ug/L			07/10/24 14:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/10/24 14:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/10/24 14:15	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/10/24 14:15	1
Chloroethane	ND		1.0	0.76	ug/L			07/10/24 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/10/24 14:15	1
Chloroform	ND		1.0	0.90	ug/L			07/10/24 14:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/10/24 14:15	1
Chloromethane	ND		1.0	0.40	ug/L			07/10/24 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/10/24 14:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/10/24 14:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/10/24 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/10/24 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/10/24 14:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/10/24 14:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/10/24 14:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/10/24 14:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/10/24 14:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/10/24 14:15	1
2-Hexanone	ND		25	4.3	ug/L			07/10/24 14:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/10/24 14:15	1
Methylene bromide	ND		5.0	0.22	ug/L			07/10/24 14:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/10/24 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/10/24 14:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/10/24 14:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/10/24 14:15	1
Naphthalene	ND		5.0	3.0	ug/L			07/10/24 14:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/10/24 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/10/24 14:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/10/24 14:15	1
o-Xylene	ND		5.0	0.60	ug/L			07/10/24 14:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/10/24 14:15	1

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

Lab Sample ID: MB 400-677358/4
Matrix: Water
Analysis Batch: 677358

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			07/10/24 14:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/10/24 14:15	1
Styrene	ND		1.0	1.0	ug/L			07/10/24 14:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/10/24 14:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/10/24 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/10/24 14:15	1
Toluene	ND		1.0	0.90	ug/L			07/10/24 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/10/24 14:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/10/24 14:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/10/24 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/10/24 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/10/24 14:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/10/24 14:15	1
Trichloroethene	ND		1.0	0.15	ug/L			07/10/24 14:15	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/10/24 14:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/10/24 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/10/24 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/10/24 14:15	1
Vinyl acetate	ND		25	0.93	ug/L			07/10/24 14:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/10/24 14:15	1
Xylenes, Total	ND		10	1.6	ug/L			07/10/24 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/10/24 14:15*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/10/24 14:15*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/10/24 14:15*	*1*

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	499	*+	ug/L		249	43 - 150
Acrolein	250	278		ug/L		111	38 - 150
Acrylonitrile	500	505		ug/L		101	64 - 142
Benzene	50.0	47.7		ug/L		95	70 - 130
Bromobenzene	50.0	52.8		ug/L		106	70 - 132
Bromochloromethane	50.0	51.9		ug/L		104	70 - 130
Bromodichloromethane	50.0	56.7		ug/L		113	67 - 133
Bromoform	50.0	55.9		ug/L		112	57 - 140
Bromomethane	25.0	27.2		ug/L		109	10 - 150
2-Butanone (MEK)	200	291	*+	ug/L		146	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	58.5		ug/L		117	61 - 137
Chlorobenzene	50.0	51.8		ug/L		104	70 - 130
Chloroethane	25.0	24.6		ug/L		98	55 - 141
2-Chloroethyl vinyl ether	25.0	29.4		ug/L		118	10 - 150

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

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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	59.0		ug/L		118	69 - 130
1-Chlorohexane	50.0	53.8		ug/L		108	69 - 130
Chloromethane	25.0	27.9		ug/L		112	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	54.3		ug/L		109	69 - 132
Dibromochloromethane	50.0	55.7		ug/L		111	67 - 135
1,2-Dichlorobenzene	50.0	54.3		ug/L		109	67 - 130
1,3-Dichlorobenzene	50.0	53.2		ug/L		106	70 - 130
1,4-Dichlorobenzene	50.0	54.3		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	22.1		ug/L		88	41 - 146
1,1-Dichloroethane	50.0	58.3		ug/L		117	70 - 130
1,2-Dichloroethane	50.0	58.9		ug/L		118	69 - 130
1,1-Dichloroethene	50.0	43.2		ug/L		86	63 - 134
1,2-Dichloropropane	50.0	52.1		ug/L		104	70 - 130
1,3-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	58.5		ug/L		117	52 - 135
1,1-Dichloropropene	50.0	54.3		ug/L		109	70 - 130
Ethylbenzene	50.0	51.7		ug/L		103	70 - 130
Ethyl methacrylate	50.0	50.5		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	61.1		ug/L		122	53 - 140
2-Hexanone	200	253		ug/L		127	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	55.4		ug/L		111	70 - 130
Methylene Chloride	50.0	46.3		ug/L		93	66 - 135
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	53.3		ug/L		107	66 - 130
m-Xylene & p-Xylene	50.0	53.7		ug/L		107	70 - 130
Naphthalene	50.0	39.7		ug/L		79	47 - 149
n-Butylbenzene	50.0	53.7		ug/L		107	67 - 130
N-Propylbenzene	50.0	50.8		ug/L		102	70 - 130
o-Chlorotoluene	50.0	49.8		ug/L		100	70 - 130
o-Xylene	50.0	52.4		ug/L		105	70 - 130
p-Chlorotoluene	50.0	52.1		ug/L		104	70 - 130
p-Isopropyltoluene	50.0	51.8		ug/L		104	65 - 130
sec-Butylbenzene	50.0	50.8		ug/L		102	66 - 130
Styrene	50.0	51.0		ug/L		102	70 - 130
tert-Butylbenzene	50.0	52.8		ug/L		106	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.8		ug/L		114	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.3		ug/L		99	70 - 131
Tetrachloroethene	50.0	50.7		ug/L		101	65 - 130
Toluene	50.0	48.4		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	54.9		ug/L		110	63 - 130
1,2,3-Trichlorobenzene	50.0	57.1		ug/L		114	60 - 138
1,2,4-Trichlorobenzene	50.0	55.9		ug/L		112	60 - 140
1,1,1-Trichloroethane	50.0	57.6		ug/L		115	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	53.2		ug/L		106	70 - 130
Trichlorofluoromethane	25.0	30.6		ug/L		122	65 - 138

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

Lab Sample ID: LCS 400-677358/1002
Matrix: Water
Analysis Batch: 677358

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	52.0		ug/L		104	69 - 130
Vinyl acetate	50.0	60.8		ug/L		122	26 - 150
Vinyl chloride	25.0	21.7		ug/L		87	59 - 136
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*101*		*72 - 130*
Dibromofluoromethane	*113*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzenethiol	ND		10	9.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzoic acid	ND		30	24	ug/L		07/12/24 12:17	07/15/24 15:59	1
Benzyl alcohol	ND		10	7.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chloroaniline	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Chlorophenol	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dibenzofuran	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Diethyl phthalate	ND		10	4.4	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/12/24 12:17	07/15/24 15:59	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
1,4-Dioxane	ND		10	4.3	ug/L		07/12/24 12:17	07/15/24 15:59	1

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/12/24 12:17	07/15/24 15:59	1
Hexachloroethane	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Indene	ND		10	3.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
Isophorone	ND		10	5.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Methylphenol	ND		10	3.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Nitroaniline	ND		10	5.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
3-Nitroaniline	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Nitroaniline	ND		10	4.1	ug/L		07/12/24 12:17	07/15/24 15:59	1
Nitrobenzene	ND		10	4.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
2-Nitrophenol	ND		10	4.6	ug/L		07/12/24 12:17	07/15/24 15:59	1
4-Nitrophenol	ND		10	3.3	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/12/24 12:17	07/15/24 15:59	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/12/24 12:17	07/15/24 15:59	1
Pentachlorophenol	ND		20	12	ug/L		07/12/24 12:17	07/15/24 15:59	1
Phenol	ND		10	4.2	ug/L		07/12/24 12:17	07/15/24 15:59	1
Pyridine	ND		10	10	ug/L		07/12/24 12:17	07/15/24 15:59	1
Quinoline	ND		10	2.4	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/12/24 12:17	07/15/24 15:59	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/12/24 12:17	07/15/24 15:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*21 - 114*	*07/12/24 12:17*	*07/15/24 15:59*	*1*
2-Fluorophenol	*52*		*10 - 105*	*07/12/24 12:17*	*07/15/24 15:59*	*1*
Nitrobenzene-d5	*72*		*16 - 127*	*07/12/24 12:17*	*07/15/24 15:59*	*1*
Phenol-d5	*37*		*10 - 129*	*07/12/24 12:17*	*07/15/24 15:59*	*1*
Terphenyl-d14	*83*		*13 - 150*	*07/12/24 12:17*	*07/15/24 15:59*	*1*
2,4,6-Tribromophenol	*51*		*10 - 150*	*07/12/24 12:17*	*07/15/24 15:59*	*1*

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.5		ug/L		51	10 - 127
Benzoic acid	492	215		ug/L		44	19 - 126
Benzyl alcohol	120	87.6		ug/L		73	17 - 109
Bis(2-chloroethoxy)methane	120	77.7		ug/L		65	24 - 125
Bis(2-chloroethyl)ether	120	91.5		ug/L		76	10 - 121
bis (2-chloroisopropyl) ether	120	100		ug/L		84	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	16 - 150
4-Bromophenyl phenyl ether	120	84.9		ug/L		71	17 - 150
Butyl benzyl phthalate	120	91.6		ug/L		76	21 - 150
4-Chloroaniline	120	71.8		ug/L		60	10 - 124
4-Chloro-3-methylphenol	120	79.5		ug/L		66	37 - 131

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

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	78.0		ug/L		65	24 - 132
2-Chlorophenol	120	81.0		ug/L		68	27 - 124
4-Chlorophenyl phenyl ether	120	83.4		ug/L		70	27 - 147
Dibenz[a,h]acridine	120	107		ug/L		90	40 - 140
Dibenzofuran	120	81.6		ug/L		68	30 - 135
3,3'-Dichlorobenzidine	160	123		ug/L		77	10 - 150
2,4-Dichlorophenol	120	74.4		ug/L		62	33 - 132
Diethyl phthalate	120	87.0		ug/L		72	37 - 145
2,4-Dimethylphenol	120	62.7		ug/L		52	38 - 132
Dimethyl phthalate	120	81.6		ug/L		68	32 - 137
Di-n-butyl phthalate	120	91.2		ug/L		76	27 - 150
4,6-Dinitro-ortho-cresol	240	202		ug/L		84	14 - 150
2,4-Dinitrophenol	240	231		ug/L		96	15 - 150
2,4-Dinitrotoluene	120	87.4		ug/L		73	35 - 136
2,6-Dinitrotoluene	120	81.6		ug/L		68	29 - 140
Di-n-octyl phthalate	120	90.2		ug/L		75	26 - 150
1,4-Dioxane	120	54.8		ug/L		46	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	91.1		ug/L		76	23 - 138
Hexachlorobenzene	120	90.8		ug/L		76	10 - 150
Hexachlorocyclopentadiene	120	56.9		ug/L		47	10 - 124
Hexachloroethane	120	73.5		ug/L		61	10 - 127
Indene	120	84.4		ug/L		70	18 - 150
Isophorone	120	80.0		ug/L		67	28 - 127
2-Methylphenol	120	87.0		ug/L		72	34 - 124
3 & 4 Methylphenol	120	81.1		ug/L		68	32 - 122
2-Nitroaniline	120	92.3		ug/L		77	24 - 139
3-Nitroaniline	120	94.7		ug/L		79	10 - 128
4-Nitroaniline	120	127		ug/L		105	28 - 118
Nitrobenzene	120	73.5		ug/L		61	29 - 120
2-Nitrophenol	120	75.3		ug/L		63	25 - 148
4-Nitrophenol	240	170		ug/L		71	12 - 129
N-Nitrosodimethylamine	120	78.1		ug/L		65	10 - 115
N-Nitrosodi-n-propylamine	120	91.3		ug/L		76	24 - 142
N-Nitrosodiphenylamine	119	84.0		ug/L		71	29 - 138
Pentachlorophenol	240	194		ug/L		81	19 - 150
Phenol	120	61.0		ug/L		51	11 - 95
Pyridine	240	75.9		ug/L		32	10 - 82
Quinoline	120	105		ug/L		88	10 - 141
2,4,5-Trichlorophenol	120	81.8		ug/L		68	30 - 144
2,4,6-Trichlorophenol	120	76.4		ug/L		64	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*48*		*10 - 129*
Terphenyl-d14	*77*		*13 - 150*

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

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*52*		*10 - 150*

Lab Sample ID: LCS 400-677673/8-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	119		ug/L		99	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*82*		*21 - 114*
2-Fluorophenol	*60*		*10 - 105*
Nitrobenzene-d5	*80*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*96*		*13 - 150*
2,4,6-Tribromophenol	*62*		*10 - 150*

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	70.5		ug/L		59	10 - 127	14	40
Benzoic acid	492	268		ug/L		54	19 - 126	22	40
Benzyl alcohol	120	101		ug/L		84	17 - 109	14	40
Bis(2-chloroethoxy)methane	120	101		ug/L		85	24 - 125	26	40
Bis(2-chloroethyl)ether	120	116		ug/L		97	10 - 121	23	40
bis (2-chloroisopropyl) ether	120	132		ug/L		110	14 - 123	27	40
Bis(2-ethylhexyl) phthalate	120	122		ug/L		101	16 - 150	28	40
4-Bromophenyl phenyl ether	120	119		ug/L		99	17 - 150	33	40
Butyl benzyl phthalate	120	123		ug/L		103	21 - 150	29	40
4-Chloroaniline	120	87.1		ug/L		73	10 - 124	19	40
4-Chloro-3-methylphenol	120	103		ug/L		86	37 - 131	25	40
2-Chloronaphthalene	120	106		ug/L		89	24 - 132	31	40
2-Chlorophenol	120	106		ug/L		88	27 - 124	26	40
4-Chlorophenyl phenyl ether	120	113		ug/L		94	27 - 147	30	40
Dibenz[a,h]acridine	120	153		ug/L		128	40 - 140	35	40
Dibenzofuran	120	111		ug/L		93	30 - 135	31	40
3,3'-Dichlorobenzidine	160	142		ug/L		89	10 - 150	14	40
2,4-Dichlorophenol	120	98.1		ug/L		82	33 - 132	27	40
Diethyl phthalate	120	117		ug/L		97	37 - 145	29	40
2,4-Dimethylphenol	120	81.1		ug/L		68	38 - 132	26	40
Dimethyl phthalate	120	109		ug/L		91	32 - 137	28	40
Di-n-butyl phthalate	120	124		ug/L		103	27 - 150	31	40
4,6-Dinitro-ortho-cresol	240	279		ug/L		116	14 - 150	32	40
2,4-Dinitrophenol	240	290		ug/L		121	15 - 150	23	40
2,4-Dinitrotoluene	120	119		ug/L		100	35 - 136	31	40
2,6-Dinitrotoluene	120	111		ug/L		93	29 - 140	31	40

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

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	120		ug/L		100	26 - 150	28	40
1,4-Dioxane			120	57.9		ug/L		48	10 - 87	6	40
1,2-Diphenylhydrazine (as Azobenzene)			120	125		ug/L		104	23 - 138	31	40
Hexachlorobenzene			120	122		ug/L		102	10 - 150	29	40
Hexachlorocyclopentadiene			120	80.0		ug/L		67	10 - 124	34	40
Hexachloroethane			120	95.8		ug/L		80	10 - 127	26	40
Indene			120	113		ug/L		94	18 - 150	29	40
Isophorone			120	104		ug/L		86	28 - 127	26	40
2-Methylphenol			120	109		ug/L		91	34 - 124	22	40
3 & 4 Methylphenol			120	99.5		ug/L		83	32 - 122	20	40
2-Nitroaniline			120	119		ug/L		99	24 - 139	25	40
3-Nitroaniline			120	113		ug/L		94	10 - 128	17	40
4-Nitroaniline			120	150	*+	ug/L		125	28 - 118	17	40
Nitrobenzene			120	95.5		ug/L		80	29 - 120	26	40
2-Nitrophenol			120	95.5		ug/L		80	25 - 148	24	40
4-Nitrophenol			240	203		ug/L		85	12 - 129	17	40
N-Nitrosodimethylamine			120	83.5		ug/L		70	10 - 115	7	40
N-Nitrosodi-n-propylamine			120	120		ug/L		100	24 - 142	27	40
N-Nitrosodiphenylamine			119	113		ug/L		95	29 - 138	30	40
Pentachlorophenol			240	268		ug/L		112	19 - 150	32	40
Phenol			120	82.0		ug/L		68	11 - 95	29	40
Pyridine			240	73.9		ug/L		31	10 - 82	3	40
Quinoline			120	122		ug/L		102	10 - 141	15	40
2,4,5-Trichlorophenol			120	112		ug/L		93	30 - 144	31	40
2,4,6-Trichlorophenol			120	105		ug/L		87	27 - 147	31	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*91*		*21 - 114*
2-Fluorophenol	*66*		*10 - 105*
Nitrobenzene-d5	*85*		*16 - 127*
Phenol-d5	*56*		*10 - 129*
Terphenyl-d14	*106*		*13 - 150*
2,4,6-Tribromophenol	*72*		*10 - 150*

Lab Sample ID: LCSD 400-677673/9-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	110		ug/L		92	10 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*21 - 114*
2-Fluorophenol	*59*		*10 - 105*
Nitrobenzene-d5	*80*		*16 - 127*
Phenol-d5	*48*		*10 - 129*
Terphenyl-d14	*94*		*13 - 150*

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

Lab Sample ID: LCSD 400-677673/9-A
Matrix: Water
Analysis Batch: 677824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*58*		*10 - 150*

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

Lab Sample ID: MB 400-677673/1-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677673

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/12/24 12:17	07/15/24 16:09	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/12/24 12:17	07/15/24 16:09	1
Anthracene	ND		0.20	0.047	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/12/24 12:17	07/15/24 16:09	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/12/24 12:17	07/15/24 16:09	1
Chrysene	ND		0.20	0.033	ug/L		07/12/24 12:17	07/15/24 16:09	1
Dibenz(a,h)anthracene	ND		0.20	0.048	ug/L		07/12/24 12:17	07/15/24 16:09	1
Fluoranthene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Fluorene	ND		0.20	0.089	ug/L		07/12/24 12:17	07/15/24 16:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/12/24 12:17	07/15/24 16:09	1
Phenanthrene	ND		0.20	0.090	ug/L		07/12/24 12:17	07/15/24 16:09	1
Pyrene	ND		0.20	0.039	ug/L		07/12/24 12:17	07/15/24 16:09	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/12/24 12:17	07/15/24 16:09	1
2-Methylnaphthalene	0.106	J	0.20	0.066	ug/L		07/12/24 12:17	07/15/24 16:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*109*		*18 - 147*	*07/12/24 12:17*	*07/15/24 16:09*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*07/12/24 12:17*	*07/15/24 16:09*	*1*
Nitrobenzene-d5	*87*		*10 - 144*	*07/12/24 12:17*	*07/15/24 16:09*	*1*

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	76.9		ug/L		64	10 - 140
Acenaphthylene	120	77.8		ug/L		65	10 - 140
Anthracene	120	83.0		ug/L		69	19 - 140
Benzo[a]anthracene	120	79.9		ug/L		67	25 - 140
Benzo[a]pyrene	120	80.8		ug/L		67	24 - 140
Benzo[b]fluoranthene	120	87.2		ug/L		73	34 - 140
Benzo[g,h,i]perylene	120	76.2		ug/L		63	13 - 140
Benzo[k]fluoranthene	120	91.2		ug/L		76	21 - 140
Chrysene	120	89.1		ug/L		74	28 - 140
Dibenz(a,h)anthracene	120	77.6		ug/L		65	10 - 140
Fluoranthene	120	84.7		ug/L		71	18 - 140

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

Lab Sample ID: LCS 400-677673/2-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Fluorene			120	80.9		ug/L		67	16 - 140		
Indeno[1,2,3-cd]pyrene			120	75.6		ug/L		63	10 - 140		
Phenanthrene			120	81.8		ug/L		68	22 - 140		
Pyrene			120	86.0		ug/L		72	38 - 140		
1-Methylnaphthalene			120	76.2		ug/L		64	10 - 140		
2-Methylnaphthalene			120	75.2		ug/L		63	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*70*		*18 - 147*
2-Fluorobiphenyl	*60*		*15 - 128*
Nitrobenzene-d5	*55*		*10 - 144*

Lab Sample ID: LCSD 400-677673/3-A
Matrix: Water
Analysis Batch: 677828

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677673

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	110		ug/L		92	10 - 140	35	40
Acenaphthylene			120	113		ug/L		94	10 - 140	37	40
Anthracene			120	119		ug/L		99	19 - 140	36	40
Benzo[a]anthracene			120	118		ug/L		98	25 - 140	39	40
Benzo[a]pyrene			120	118		ug/L		98	24 - 140	37	40
Benzo[b]fluoranthene			120	123		ug/L		102	34 - 140	34	40
Benzo[g,h,i]perylene			120	107		ug/L		89	13 - 140	34	40
Benzo[k]fluoranthene			120	140	*1	ug/L		116	21 - 140	42	40
Chrysene			120	125		ug/L		104	28 - 140	33	40
Dibenz(a,h)anthracene			120	120	*1	ug/L		100	10 - 140	43	40
Fluoranthene			120	123		ug/L		102	18 - 140	37	40
Fluorene			120	118		ug/L		98	16 - 140	37	40
Indeno[1,2,3-cd]pyrene			120	112		ug/L		93	10 - 140	39	40
Phenanthrene			120	120		ug/L		100	22 - 140	38	40
Pyrene			120	125		ug/L		104	38 - 140	37	40
1-Methylnaphthalene			120	107		ug/L		89	10 - 140	33	40
2-Methylnaphthalene			120	108		ug/L		90	10 - 140	36	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*98*		*18 - 147*
2-Fluorobiphenyl	*86*		*15 - 128*
Nitrobenzene-d5	*79*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677353/1-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677353

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		07/10/24 08:38	07/10/24 15:13	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-677353/1-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677353

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/10/24 08:38	07/10/24 15:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*51 - 149*	*07/10/24 08:38*	*07/10/24 15:13*	*1*

Lab Sample ID: LCS 400-677353/2-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677353

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.148	*+	ug/L		147	60 - 140		
1,2-Dibromoethane			0.100	0.0982		ug/L		98	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*51 - 149*

Lab Sample ID: LCSD 400-677353/3-A
Matrix: Water
Analysis Batch: 677421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677353

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.135		ug/L		134	60 - 140	9	30
1,2-Dibromoethane			0.100	0.0964		ug/L		96	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

7/19/2024

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: 7/8/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 – 3.3.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM	LOG CODE:	SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA	State: IL
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
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell		E-MAIL: melissa.remiger@aecom.com	AECOM Other ID.
TELEPHONE: 314-429-0100 / FAX: 314-429-0462 / Bill To Contact E-MAIL: melissa.remiger@aecom.com		SAMPLER NAME(S) (Print): C. McDavid, E. Chalfant	LAB USE ONLY

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.3.2

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 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

400-258833 COC

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-070824-8260-BP	7/8/2024	0000	Water	2					2	X			
	TB-ROX-070824-8011-BP	7/8/2024	0000	Water	2					2		X		
	MW23-ROX-070824	7/8/2024	1050	Water	6			2		8	X	X	X	X

07-08-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0543 6399, 7252 0543 6388	7/8/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 7/9/24	Time: 10:17

Version: 27Sept23

CUSTODY SEALS: 1717996, 1717997, 1717998, 1717999

0.9°C, S.02 MD

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-258833-1

Login Number: 258833
List Number: 1
Creator: Pardonner, Brett

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C 5.0°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-258833-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-258978-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Delaine Austin

Date Reviewed: 8/19/2024

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

Sample Identification	Sample Identification
TB-ROX-070924-8260-B	TB-ROX-070924-8260-A
TB-ROX-070924-8011-B	TB-ROX-070924-8011-A
ROST4PZG-ROX-070924	P54-ROX-070924
ROST3MW-ROX-070924	MW24-ROX-070924
ROST4PZC-ROX-070924	--

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 recovery for 4-nitroaniline was outside evaluation criteria. The PAH internal standard area recovery for perylene-d_{12} was outside criteria in sample ROST3MW-ROX-070924. The continuing calibration verification (CCV) for several analytes were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-677969/2-A/3-A	SVOCs	4-Nitroaniline	**122/123**	1	28-118/40

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
ROST4PZC-ROX-070924	PAHs	Acenaphthene-d_{10}	**35445**	10235	5118 - 20470
MB 400-677969/1-A	PAHs	Perylene-d_{12}	**3301**	7043	3522-14086
ROST3MW-ROX-070924	PAHs	Perylene-d_{12}	**3308**	7043	3522-14086
ROST4PZC-ROX-070924 DL	PAHs	Perylene-d_{12}	**2850**	7043	3522-14086
ROST4PZC-ROX-070924 DL	PAHs	Chrysene-d_{12}	**4284**	8685	4343-17370

Qualifications due to internal standard recoveries are included in the table below.

Sample ID	Parameter	Analyte	Qualification
ROST3MW-ROX-070924	PAHs	Benzo[a]pyrene	**UJ**
ROST3MW-ROX-070924	PAHs	Benzo[b]fluoranthene	**UJ**
ROST3MW-ROX-070924	PAHs	Benzo[g,h,i]perylene	**UJ**
ROST3MW-ROX-070924	PAHs	Benzo[k]fluoranthene	**UJ**
ROST3MW-ROX-070924	PAHs	Dibenz(a,h)anthracene	**UJ**
ROST3MW-ROX-070924	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**

Analytical data that were reported as non-detect and associated with internal standard

recoveries above evaluation criteria, did not require qualification. Method blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for 2,4-dimethylphenol, hexachlorocyclopentadiene, and dibenz(a,h)anthracene were outside evaluation criteria, biased low. Dibenz(a,h)anthracene in sample ROST3MW-ROX-070924 was previously qualified in Section 8.0 of this data review due to internal standard recovery. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-070924	SVOCs	2,4-Dimethylphenol	**UJ**
ROST3MW-ROX-070924	SVOCs	2,4-Dimethylphenol	**UJ**
ROST4PZC-ROX-070924	SVOCs	2,4-Dimethylphenol	**UJ**
P54-ROX-070924	SVOCs	2,4-Dimethylphenol	**UJ**
MW24-ROX-070924	SVOCs	2,4-Dimethylphenol	**UJ**
ROST4PZG-ROX-070924	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST3MW-ROX-070924	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZC-ROX-070924	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-070924	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW24-ROX-070924	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZG-ROX-070924	SVOCs	Dibenz(a,h)anthracene	**UJ**
ROST4PZC-ROX-070924	SVOCs	Dibenz(a,h)anthracene	**UJ**
P54-ROX-070924	SVOCs	Dibenz(a,h)anthracene	**UJ**
MW24-ROX-070924	SVOCs	Dibenz(a,h)anthracene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
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St. Louis, Missouri 63102
Generated 7/18/2024 4:35:52 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-258978-1

Reviewed 08/19/2024
AN

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

Job Notes

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

Authorization



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Job Narrative
400-258978-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/10/2024 8:23 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.9°C.

GC/MS VOA
Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-675148 was outside method criteria for the following analyte(s): 2-Chloroethyl vinyl ether and Propylene oxide. 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 one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-070924-8260-B (400-258978-1), ROST3MW-ROX-070924 (400-258978-4), ROST4PZC-ROX-070924 (400-258978-5), TB-ROX-070924-8260-A (400-258978-6), P54-ROX-070924 (400-258978-8) and MW24-ROX-070924 (400-258978-9). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound 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 (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-677969 and analytical batch 400-678124 recovered outside control limits for the following analytes: 4-Nitroaniline. 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 continuing calibration verification (CCV) associated with batch 400-678124 recovered outside acceptance criteria, low biased, for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: Internal standard response was outside of acceptance limits for the method blank : (MB 400-677969/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the method blank is non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The following sample was diluted due to the nature of the sample matrix: ROST4PZC-ROX-070924 (400-258978-5). Elevated reporting limits (RLs) are provided.

Method 8270E_SIM: Internal standard responses were outside of acceptance limits for the following sample: ROST3MW-ROX-070924 (400-258978-4). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the sample(s) are non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-678076 recovered outside acceptance criteria, low biased, for Dibenz(a,h)anthracene. 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: Sample was not sent for re-extract for verification of detects as historical data confirms results.

ROST4PZG-ROX-070924 (400-258978-3), ROST3MW-ROX-070924 (400-258978-4), ROST4PZC-ROX-070924 (400-258978-5), P54-ROX-070924 (400-258978-8) and MW24-ROX-070924 (400-258978-9)

Job ID: 400-258978-1 (Continued) Eurofins Pensacola

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 400-677547 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: 400-258978-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-258978-1	TB-ROX-070924-8260-B	Water	07/09/24 12:00	07/10/24 08:23
400-258978-2	TB-ROX-070924-8011-B	Water	07/09/24 12:00	07/10/24 08:23
400-258978-3	ROST4PZG-ROX-070924	Water	07/09/24 09:20	07/10/24 08:23
400-258978-4	ROST3MW-ROX-070924	Water	07/09/24 10:40	07/10/24 08:23
400-258978-5	ROST4PZC-ROX-070924	Water	07/09/24 13:50	07/10/24 08:23
400-258978-6	TB-ROX-070924-8260-A	Water	07/09/24 12:00	07/10/24 08:23
400-258978-7	TB-ROX-070924-8011-A	Water	07/09/24 12:00	07/10/24 08:23
400-258978-8	P54-ROX-070924	Water	07/09/24 11:20	07/10/24 08:23
400-258978-9	MW24-ROX-070924	Water	07/09/24 13:55	07/10/24 08:23

Detection Summary

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-B — Lab Sample ID: 400-258978-1

No Detections.

Client Sample ID: TB-ROX-070924-8011-B — Lab Sample ID: 400-258978-2

No Detections.

Client Sample ID: ROST4PZG-ROX-070924 — Lab Sample ID: 400-258978-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	25	10	ug/L	1		8260D	Total/NA
Benzene	1.2		1.0	0.24	ug/L	1		8260D	Total/NA
Isopropylbenzene	0.91	J	1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	1.6	J	5.0	0.63	ug/L	1		8260D	Total/NA
N-Propylbenzene	0.95	J	1.0	0.69	ug/L	1		8260D	Total/NA
Xylenes, Total	1.8	J	10	1.6	ug/L	1		8260D	Total/NA
1-Methylnaphthalene	0.15	J	0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.21		0.20	0.066	ug/L	1		8270E SIM	Total/NA

Client Sample ID: ROST3MW-ROX-070924 — Lab Sample ID: 400-258978-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.12	J	0.19	0.096	ug/L	1		8270E SIM	Total/NA
Anthracene	0.049	J	0.19	0.046	ug/L	1		8270E SIM	Total/NA
Fluorene	0.10	J	0.19	0.086	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.12	J	0.19	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.16	J	0.19	0.064	ug/L	1		8270E SIM	Total/NA

Client Sample ID: ROST4PZC-ROX-070924 — Lab Sample ID: 400-258978-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14	J	25	10	ug/L	1		8260D	Total/NA
Benzene	1.1		1.0	0.24	ug/L	1		8260D	Total/NA
Ethylbenzene	0.51	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	1.4		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	5.5		5.0	0.63	ug/L	1		8260D	Total/NA
Naphthalene	14		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	1.9		1.0	0.69	ug/L	1		8260D	Total/NA
Toluene	4.2		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	1.5		1.0	0.82	ug/L	1		8260D	Total/NA
Xylenes, Total	6.0	J	10	1.6	ug/L	1		8260D	Total/NA
Anthracene	0.28		0.20	0.046	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.22		0.20	0.089	ug/L	1		8270E SIM	Total/NA
Pyrene	0.070	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	5.1		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.35		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Acenaphthene - DL	0.34	J	0.39	0.20	ug/L	2		8270E SIM	Total/NA
Fluorene - DL	0.27	J	0.39	0.18	ug/L	2		8270E SIM	Total/NA

Client Sample ID: TB-ROX-070924-8260-A — Lab Sample ID: 400-258978-6

No Detections.

Client Sample ID: TB-ROX-070924-8011-A — Lab Sample ID: 400-258978-7

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-258978-1

Client Sample ID: P54-ROX-070924 — Lab Sample ID: 400-258978-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.11	J	0.19	0.063	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW24-ROX-070924 — Lab Sample ID: 400-258978-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.12	J	0.21	0.069	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-B
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-1
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			07/12/24 16:22	1
Acrolein	ND		20	3.3	ug/L			07/12/24 16:22	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 16:22	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 16:22	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 16:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 16:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 16:22	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 16:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 16:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 16:22	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 16:22	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 16:22	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 16:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 16:22	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 16:22	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 16:22	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 16:22	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 16:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 16:22	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 16:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 16:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 16:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 16:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 16:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 16:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 16:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 16:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 16:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 16:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 16:22	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 16:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 16:22	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 16:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 16:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 16:22	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 16:22	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 16:22	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 16:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 16:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 16:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 16:22	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 16:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 16:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 16:22	1

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-B
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-1
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			07/12/24 16:22	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 16:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 16:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 16:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 16:22	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 16:22	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 16:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 16:22	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 16:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 16:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 16:22	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 16:22	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 16:22	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 16:22	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 16:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 16:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 16:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 16:22	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 16:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 16:22	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/12/24 16:22*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/12/24 16:22*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/12/24 16:22*	*1*

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8011-B
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/11/24 09:39	07/11/24 17:16	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/11/24 09:39	07/11/24 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*131*		*51 - 149*	*07/11/24 09:39*	*07/11/24 17:16*	*1*

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

Job ID: 400-258978-1

Client Sample ID: ROST4PZG-ROX-070924
Date Collected: 07/09/24 09:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-3
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			07/12/24 16:49	1
Acrolein	ND		20	3.3	ug/L			07/12/24 16:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 16:49	1
Benzene	**1.2**		1.0	0.24	ug/L			07/12/24 16:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 16:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 16:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 16:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 16:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 16:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 16:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 16:49	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 16:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 16:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 16:49	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 16:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 16:49	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 16:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 16:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 16:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 16:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 16:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 16:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 16:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 16:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 16:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 16:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 16:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 16:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 16:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 16:49	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 16:49	1
Isopropylbenzene	**0.91**	**J**	1.0	0.53	ug/L			07/12/24 16:49	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 16:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 16:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 16:49	1
m-Xylene & p-Xylene	**1.6**	**J**	5.0	0.63	ug/L			07/12/24 16:49	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 16:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 16:49	1
N-Propylbenzene	**0.95**	**J**	1.0	0.69	ug/L			07/12/24 16:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 16:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 16:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 16:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 16:49	1

Client Sample ID: ROST4PZG-ROX-070924
Date Collected: 07/09/24 09:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-3
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			07/12/24 16:49	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 16:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 16:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 16:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 16:49	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 16:49	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 16:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 16:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 16:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 16:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 16:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 16:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 16:49	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 16:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 16:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 16:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 16:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 16:49	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 16:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 16:49	1
Xylenes, Total	**1.8**	**J**	10	1.6	ug/L			07/12/24 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/12/24 16:49*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/12/24 16:49*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/12/24 16:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		07/16/24 10:32	07/17/24 12:16	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:32	07/17/24 12:16	1
Anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 12:16	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:16	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/16/24 10:32	07/17/24 12:16	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 12:16	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 12:16	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/16/24 10:32	07/17/24 12:16	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 12:16	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/16/24 10:32	07/17/24 12:16	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:16	1
Fluorene	ND		0.20	0.088	ug/L		07/16/24 10:32	07/17/24 12:16	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:16	1
Phenanthrene	ND		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 12:16	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 12:16	1
1-Methylnaphthalene	**0.15**	**J**	0.20	0.079	ug/L		07/16/24 10:32	07/17/24 12:16	1
2-Methylnaphthalene	**0.21**		0.20	0.066	ug/L		07/16/24 10:32	07/17/24 12:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*120*		*18 - 147*	*07/16/24 10:32*	*07/17/24 12:16*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*07/16/24 10:32*	*07/17/24 12:16*	*1*

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

Job ID: 400-258978-1

Client Sample ID: ROST4PZG-ROX-070924

Date Collected: 07/09/24 09:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*10 - 144*	*07/16/24 10:32*	*07/17/24 12:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
Benzenethiol	ND		9.9	9.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 19:49	1
Benzyl alcohol	ND		9.9	7.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
Bis(2-chloroethoxy)methane	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 19:49	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		07/16/24 10:32	07/17/24 19:49	1
Butyl benzyl phthalate	ND		9.9	5.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Chloroaniline	ND		9.9	4.7	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Chloro-3-methylphenol	ND		9.9	5.3	ug/L		07/16/24 10:32	07/17/24 19:49	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
2-Chlorophenol	ND		9.9	4.1	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 19:49	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		07/16/24 10:32	07/17/24 19:49	1
Dibenzofuran	ND		9.9	4.0	ug/L		07/16/24 10:32	07/17/24 19:49	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4-Dichlorophenol	ND		9.9	4.3	ug/L		07/16/24 10:32	07/17/24 19:49	1
Diethyl phthalate	ND		9.9	4.4	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4-Dimethylphenol	ND	UJ	9.9	5.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
Dimethyl phthalate	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
Di-n-butyl phthalate	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4-Dinitrotoluene	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 19:49	1
Di-n-octyl phthalate	ND		9.9	6.0	ug/L		07/16/24 10:32	07/17/24 19:49	1
1,4-Dioxane	ND		9.9	4.3	ug/L		07/16/24 10:32	07/17/24 19:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		07/16/24 10:32	07/17/24 19:49	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/16/24 10:32	07/17/24 19:49	1
Hexachloroethane	ND		9.9	5.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
Indene	ND		9.9	3.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
Isophorone	ND		9.9	5.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
2-Methylphenol	ND		9.9	3.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
2-Nitroaniline	ND		9.9	5.0	ug/L		07/16/24 10:32	07/17/24 19:49	1
3-Nitroaniline	ND		9.9	4.7	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Nitroaniline	ND	*+	9.9	4.1	ug/L		07/16/24 10:32	07/17/24 19:49	1
Nitrobenzene	ND		9.9	4.7	ug/L		07/16/24 10:32	07/17/24 19:49	1
2-Nitrophenol	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 19:49	1
4-Nitrophenol	ND		9.9	3.3	ug/L		07/16/24 10:32	07/17/24 19:49	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		07/16/24 10:32	07/17/24 19:49	1

Client Sample ID: ROST4PZG-ROX-070924
Date Collected: 07/09/24 09:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		07/16/24 10:32	07/17/24 19:49	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 19:49	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 19:49	1
Phenol	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 19:49	1
Pyridine	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 19:49	1
Quinoline	ND		9.9	2.4	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4,5-Trichlorophenol	ND		9.9	4.0	ug/L		07/16/24 10:32	07/17/24 19:49	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/16/24 10:32	07/17/24 19:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*21 - 114*	*07/16/24 10:32*	*07/17/24 19:49*	*1*
2-Fluorophenol	*55*		*10 - 105*	*07/16/24 10:32*	*07/17/24 19:49*	*1*
Nitrobenzene-d5	*78*		*16 - 127*	*07/16/24 10:32*	*07/17/24 19:49*	*1*
Phenol-d5	*40*		*10 - 129*	*07/16/24 10:32*	*07/17/24 19:49*	*1*
Terphenyl-d14	*100*		*13 - 150*	*07/16/24 10:32*	*07/17/24 19:49*	*1*
2,4,6-Tribromophenol	*65*		*10 - 150*	*07/16/24 10:32*	*07/17/24 19:49*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/11/24 09:39	07/11/24 17:38	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/11/24 09:39	07/11/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*07/11/24 09:39*	*07/11/24 17:38*	*1*

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

Job ID: 400-258978-1

Client Sample ID: ROST3MW-ROX-070924
Date Collected: 07/09/24 10:40
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-4
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			07/12/24 17:16	1
Acrolein	ND		20	3.3	ug/L			07/12/24 17:16	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 17:16	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 17:16	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 17:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 17:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 17:16	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 17:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 17:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 17:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 17:16	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 17:16	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 17:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 17:16	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 17:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 17:16	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 17:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 17:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 17:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 17:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 17:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 17:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 17:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 17:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 17:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 17:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 17:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 17:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 17:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 17:16	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 17:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 17:16	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 17:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 17:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 17:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 17:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 17:16	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 17:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 17:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 17:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 17:16	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 17:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 17:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 17:16	1

Client Sample ID: ROST3MW-ROX-070924
Date Collected: 07/09/24 10:40
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-4
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			07/12/24 17:16	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 17:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 17:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 17:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 17:16	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 17:16	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 17:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 17:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 17:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 17:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 17:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 17:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 17:16	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 17:16	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 17:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 17:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 17:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 17:16	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 17:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 17:16	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/12/24 17:16*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*07/12/24 17:16*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/12/24 17:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.12**	**J**	0.19	0.096	ug/L		07/16/24 10:32	07/17/24 12:37	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/16/24 10:32	07/17/24 12:37	1
Anthracene	**0.049**	**J**	0.19	0.046	ug/L		07/16/24 10:32	07/17/24 12:37	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/16/24 10:32	07/17/24 12:37	1
Benzo[a]pyrene	ND	*3 UJ	0.19	0.062	ug/L		07/16/24 10:32	07/17/24 12:37	1
Benzo[b]fluoranthene	ND	*3 UJ	0.19	0.036	ug/L		07/16/24 10:32	07/17/24 12:37	1
Benzo[g,h,i]perylene	ND	*3 UJ	0.19	0.026	ug/L		07/16/24 10:32	07/17/24 12:37	1
Benzo[k]fluoranthene	ND	*3 UJ	0.19	0.060	ug/L		07/16/24 10:32	07/17/24 12:37	1
Chrysene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 12:37	1
Dibenz(a,h)anthracene	ND	*3 UJ	0.19	0.047	ug/L		07/16/24 10:32	07/17/24 12:37	1
Fluoranthene	ND		0.19	0.033	ug/L		07/16/24 10:32	07/17/24 12:37	1
Fluorene	**0.10**	**J**	0.19	0.086	ug/L		07/16/24 10:32	07/17/24 12:37	1
Indeno[1,2,3-cd]pyrene	ND	*3 UJ	0.19	0.033	ug/L		07/16/24 10:32	07/17/24 12:37	1
Phenanthrene	ND		0.19	0.087	ug/L		07/16/24 10:32	07/17/24 12:37	1
Pyrene	ND		0.19	0.038	ug/L		07/16/24 10:32	07/17/24 12:37	1
1-Methylnaphthalene	**0.12**	**J**	0.19	0.078	ug/L		07/16/24 10:32	07/17/24 12:37	1
2-Methylnaphthalene	**0.16**	**J**	0.19	0.064	ug/L		07/16/24 10:32	07/17/24 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*134*		*18 - 147*	*07/16/24 10:32*	*07/17/24 12:37*	*1*
2-Fluorobiphenyl	*77*		*15 - 128*	*07/16/24 10:32*	*07/17/24 12:37*	*1*

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

Job ID: 400-258978-1

Client Sample ID: ROST3MW-ROX-070924
Date Collected: 07/09/24 10:40
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-4
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*	*07/16/24 10:32*	*07/17/24 12:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/16/24 10:32	07/17/24 20:14	1
Benzenethiol	ND		9.7	9.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
Benzoic acid	ND		29	23	ug/L		07/16/24 10:32	07/17/24 20:14	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/16/24 10:32	07/17/24 20:14	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/16/24 10:32	07/17/24 20:14	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/16/24 10:32	07/17/24 20:14	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/16/24 10:32	07/17/24 20:14	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Chloroaniline	ND		9.7	4.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/16/24 10:32	07/17/24 20:14	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/16/24 10:32	07/17/24 20:14	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/16/24 10:32	07/17/24 20:14	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/16/24 10:32	07/17/24 20:14	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/16/24 10:32	07/17/24 20:14	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4-Dimethylphenol	ND	UJ	9.7	5.0	ug/L		07/16/24 10:32	07/17/24 20:14	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/16/24 10:32	07/17/24 20:14	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/16/24 10:32	07/17/24 20:14	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/16/24 10:32	07/17/24 20:14	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/16/24 10:32	07/17/24 20:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/16/24 10:32	07/17/24 20:14	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/16/24 10:32	07/17/24 20:14	1
Hexachlorocyclopentadiene	ND	UJ	19	4.4	ug/L		07/16/24 10:32	07/17/24 20:14	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/16/24 10:32	07/17/24 20:14	1
Indene	ND		9.7	3.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
Isophorone	ND		9.7	5.0	ug/L		07/16/24 10:32	07/17/24 20:14	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/16/24 10:32	07/17/24 20:14	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
2-Nitroaniline	ND		9.7	4.8	ug/L		07/16/24 10:32	07/17/24 20:14	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Nitroaniline	ND	*+	9.7	4.0	ug/L		07/16/24 10:32	07/17/24 20:14	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/16/24 10:32	07/17/24 20:14	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/16/24 10:32	07/17/24 20:14	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/16/24 10:32	07/17/24 20:14	1

Client Sample ID: ROST3MW-ROX-070924

Date Collected: 07/09/24 10:40
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		07/16/24 10:32	07/17/24 20:14	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/16/24 10:32	07/17/24 20:14	1
Pentachlorophenol	ND		19	12	ug/L		07/16/24 10:32	07/17/24 20:14	1
Phenol	ND		9.7	4.1	ug/L		07/16/24 10:32	07/17/24 20:14	1
Pyridine	ND		9.7	9.7	ug/L		07/16/24 10:32	07/17/24 20:14	1
Quinoline	ND		9.7	2.3	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/16/24 10:32	07/17/24 20:14	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/16/24 10:32	07/17/24 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*07/16/24 10:32*	*07/17/24 20:14*	*1*
2-Fluorophenol	*60*		*10 - 105*	*07/16/24 10:32*	*07/17/24 20:14*	*1*
Nitrobenzene-d5	*79*		*16 - 127*	*07/16/24 10:32*	*07/17/24 20:14*	*1*
Phenol-d5	*42*		*10 - 129*	*07/16/24 10:32*	*07/17/24 20:14*	*1*
Terphenyl-d14	*104*		*13 - 150*	*07/16/24 10:32*	*07/17/24 20:14*	*1*
2,4,6-Tribromophenol	*65*		*10 - 150*	*07/16/24 10:32*	*07/17/24 20:14*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/11/24 09:39	07/11/24 17:59	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/11/24 09:39	07/11/24 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*		*51 - 149*	*07/11/24 09:39*	*07/11/24 17:59*	*1*

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

Job ID: 400-258978-1

Client Sample ID: ROST4PZC-ROX-070924
Date Collected: 07/09/24 13:50
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14**	**J**	25	10	ug/L			07/12/24 17:43	1
Acrolein	ND		20	3.3	ug/L			07/12/24 17:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 17:43	1
Benzene	**1.1**		1.0	0.24	ug/L			07/12/24 17:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 17:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 17:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 17:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 17:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 17:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 17:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 17:43	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 17:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 17:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 17:43	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 17:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 17:43	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 17:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 17:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 17:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 17:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 17:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 17:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 17:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 17:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 17:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 17:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 17:43	1
Ethylbenzene	**0.51**	**J**	1.0	0.50	ug/L			07/12/24 17:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 17:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 17:43	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 17:43	1
Isopropylbenzene	**1.4**		1.0	0.53	ug/L			07/12/24 17:43	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 17:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 17:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 17:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 17:43	1
m-Xylene & p-Xylene	**5.5**		5.0	0.63	ug/L			07/12/24 17:43	1
Naphthalene	**14**		5.0	3.0	ug/L			07/12/24 17:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 17:43	1
N-Propylbenzene	**1.9**		1.0	0.69	ug/L			07/12/24 17:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 17:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 17:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 17:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 17:43	1

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

Job ID: 400-258978-1

Client Sample ID: ROST4PZC-ROX-070924

Lab Sample ID: 400-258978-5

Date Collected: 07/09/24 13:50

Matrix: Water

Date Received: 07/10/24 08:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/12/24 17:43	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 17:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 17:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 17:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 17:43	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 17:43	1
Toluene	**4.2**		1.0	0.90	ug/L			07/12/24 17:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 17:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 17:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 17:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 17:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 17:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 17:43	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 17:43	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 17:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 17:43	1
1,2,4-Trimethylbenzene	**1.5**		1.0	0.82	ug/L			07/12/24 17:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 17:43	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 17:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 17:43	1
Xylenes, Total	**6.0**	**J**	10	1.6	ug/L			07/12/24 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/12/24 17:43*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*07/12/24 17:43*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/12/24 17:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**0.28**		0.20	0.046	ug/L		07/16/24 10:32	07/17/24 12:58	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:58	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/16/24 10:32	07/17/24 12:58	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 12:58	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 12:58	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/16/24 10:32	07/17/24 12:58	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 12:58	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/16/24 10:32	07/17/24 12:58	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:58	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 12:58	1
Phenanthrene	**0.22**		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 12:58	1
Pyrene	**0.070**	**J**	0.20	0.038	ug/L		07/16/24 10:32	07/17/24 12:58	1
1-Methylnaphthalene	**5.1**		0.20	0.079	ug/L		07/16/24 10:32	07/17/24 12:58	1
2-Methylnaphthalene	**0.35**		0.20	0.065	ug/L		07/16/24 10:32	07/17/24 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*124*		*18 - 147*	*07/16/24 10:32*	*07/17/24 12:58*	*1*
Nitrobenzene-d5	*87*		*10 - 144*	*07/16/24 10:32*	*07/17/24 12:58*	*1*

Client Sample ID: ROST4PZC-ROX-070924

Lab Sample ID: 400-258978-5

Date Collected: 07/09/24 13:50

Matrix: Water

Date Received: 07/10/24 08:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.34**	**J**	0.39	0.20	ug/L		07/16/24 10:32	07/17/24 17:53	2
Acenaphthylene	ND		0.39	0.087	ug/L		07/16/24 10:32	07/17/24 17:53	2
Fluorene	**0.27**	**J**	0.39	0.18	ug/L		07/16/24 10:32	07/17/24 17:53	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*15 - 128*	*07/16/24 10:32*	*07/17/24 17:53*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
Benzenethiol	ND		9.9	9.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 20:39	1
Benzyl alcohol	ND		9.9	7.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
Bis(2-chloroethoxy)methane	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
Bis(2-chloroethyl)ether	ND		9.9	3.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Chloroaniline	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
2-Chloronaphthalene	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 20:39	1
2-Chlorophenol	ND		9.9	4.0	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 20:39	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
Dibenzofuran	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4-Dichlorophenol	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
Diethyl phthalate	ND		9.9	4.3	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4-Dimethylphenol	ND	UJ	9.9	5.1	ug/L		07/16/24 10:32	07/17/24 20:39	1
Dimethyl phthalate	ND		9.9	4.1	ug/L		07/16/24 10:32	07/17/24 20:39	1
Di-n-butyl phthalate	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4-Dinitrophenol	ND		30	4.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4-Dinitrotoluene	ND		9.9	5.0	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,6-Dinitrotoluene	ND		9.9	3.8	ug/L		07/16/24 10:32	07/17/24 20:39	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
1,4-Dioxane	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		07/16/24 10:32	07/17/24 20:39	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/16/24 10:32	07/17/24 20:39	1
Hexachloroethane	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 20:39	1
Indene	ND		9.9	3.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
Isophorone	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 20:39	1
2-Methylphenol	ND		9.9	3.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
2-Nitroaniline	ND		9.9	4.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
3-Nitroaniline	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Nitroaniline	ND	*+	9.9	4.0	ug/L		07/16/24 10:32	07/17/24 20:39	1

Client Sample ID: ROST4PZC-ROX-070924
Date Collected: 07/09/24 13:50
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-5
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	4.6	ug/L		07/16/24 10:32	07/17/24 20:39	1
2-Nitrophenol	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
4-Nitrophenol	ND		9.9	3.3	ug/L		07/16/24 10:32	07/17/24 20:39	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		07/16/24 10:32	07/17/24 20:39	1
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		07/16/24 10:32	07/17/24 20:39	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 20:39	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 20:39	1
Phenol	ND		9.9	4.1	ug/L		07/16/24 10:32	07/17/24 20:39	1
Pyridine	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
Quinoline	ND		9.9	2.4	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4,5-Trichlorophenol	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 20:39	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/16/24 10:32	07/17/24 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*21 - 114*	*07/16/24 10:32*	*07/17/24 20:39*	*1*
2-Fluorophenol	*58*		*10 - 105*	*07/16/24 10:32*	*07/17/24 20:39*	*1*
Nitrobenzene-d5	*76*		*16 - 127*	*07/16/24 10:32*	*07/17/24 20:39*	*1*
Phenol-d5	*43*		*10 - 129*	*07/16/24 10:32*	*07/17/24 20:39*	*1*
Terphenyl-d14	*94*		*13 - 150*	*07/16/24 10:32*	*07/17/24 20:39*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*07/16/24 10:32*	*07/17/24 20:39*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/11/24 09:39	07/11/24 18:20	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/11/24 09:39	07/11/24 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*145*		*51 - 149*	*07/11/24 09:39*	*07/11/24 18:20*	*1*

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-A
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-6
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			07/12/24 18:10	1
Acrolein	ND		20	3.3	ug/L			07/12/24 18:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 18:10	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 18:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 18:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 18:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 18:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 18:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 18:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 18:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 18:10	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 18:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 18:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 18:10	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 18:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 18:10	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 18:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 18:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 18:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 18:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 18:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 18:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 18:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 18:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 18:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 18:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 18:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 18:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 18:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 18:10	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 18:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 18:10	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 18:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 18:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 18:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 18:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 18:10	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 18:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 18:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 18:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 18:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 18:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 18:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 18:10	1

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-A
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-6
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			07/12/24 18:10	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 18:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 18:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 18:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 18:10	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 18:10	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 18:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 18:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 18:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 18:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 18:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 18:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 18:10	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 18:10	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 18:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 18:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 18:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 18:10	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 18:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 18:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/12/24 18:10*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/12/24 18:10*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/12/24 18:10*	*1*

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8011-A
Date Collected: 07/09/24 12:00
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-7
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		07/11/24 09:39	07/11/24 19:02	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/11/24 09:39	07/11/24 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*07/11/24 09:39*	*07/11/24 19:02*	*1*

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

Job ID: 400-258978-1

Client Sample ID: P54-ROX-070924
Date Collected: 07/09/24 11:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-8
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			07/12/24 18:38	1
Acrolein	ND		20	3.3	ug/L			07/12/24 18:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 18:38	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 18:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 18:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 18:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 18:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 18:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 18:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 18:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 18:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 18:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 18:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 18:38	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 18:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 18:38	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 18:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 18:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 18:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 18:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 18:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 18:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 18:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 18:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 18:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 18:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 18:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 18:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 18:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 18:38	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 18:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 18:38	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 18:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 18:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 18:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 18:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 18:38	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 18:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 18:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 18:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 18:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 18:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 18:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 18:38	1

Client Sample ID: P54-ROX-070924
Date Collected: 07/09/24 11:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-8
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			07/12/24 18:38	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 18:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 18:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 18:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 18:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 18:38	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 18:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 18:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 18:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 18:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 18:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 18:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 18:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 18:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 18:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 18:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 18:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 18:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 18:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 18:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/12/24 18:38*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/12/24 18:38*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/12/24 18:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.094	ug/L		07/16/24 10:32	07/17/24 13:19	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/16/24 10:32	07/17/24 13:19	1
Anthracene	ND		0.19	0.045	ug/L		07/16/24 10:32	07/17/24 13:19	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 13:19	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		07/16/24 10:32	07/17/24 13:19	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/16/24 10:32	07/17/24 13:19	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/16/24 10:32	07/17/24 13:19	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		07/16/24 10:32	07/17/24 13:19	1
Chrysene	ND		0.19	0.031	ug/L		07/16/24 10:32	07/17/24 13:19	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/16/24 10:32	07/17/24 13:19	1
Fluoranthene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 13:19	1
Fluorene	ND		0.19	0.085	ug/L		07/16/24 10:32	07/17/24 13:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 13:19	1
Phenanthrene	ND		0.19	0.086	ug/L		07/16/24 10:32	07/17/24 13:19	1
Pyrene	ND		0.19	0.037	ug/L		07/16/24 10:32	07/17/24 13:19	1
1-Methylnaphthalene	ND		0.19	0.076	ug/L		07/16/24 10:32	07/17/24 13:19	1
2-Methylnaphthalene	**0.11**	**J**	0.19	0.063	ug/L		07/16/24 10:32	07/17/24 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*120*		*18 - 147*	*07/16/24 10:32*	*07/17/24 13:19*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/16/24 10:32*	*07/17/24 13:19*	*1*

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

Job ID: 400-258978-1

Client Sample ID: P54-ROX-070924
Date Collected: 07/09/24 11:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*84*		*10 - 144*	*07/16/24 10:32*	*07/17/24 13:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	8.3	ug/L		07/16/24 10:32	07/17/24 21:04	1
Benzenethiol	ND		9.5	9.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
Benzoic acid	ND		29	23	ug/L		07/16/24 10:32	07/17/24 21:04	1
Benzyl alcohol	ND		9.5	7.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		07/16/24 10:32	07/17/24 21:04	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		07/16/24 10:32	07/17/24 21:04	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		07/16/24 10:32	07/17/24 21:04	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Chloroaniline	ND		9.5	4.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		07/16/24 10:32	07/17/24 21:04	1
2-Chlorophenol	ND		9.5	3.9	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		07/16/24 10:32	07/17/24 21:04	1
Dibenzofuran	ND		9.5	3.8	ug/L		07/16/24 10:32	07/17/24 21:04	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
Diethyl phthalate	ND		9.5	4.2	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4-Dimethylphenol	ND	UJ	9.5	5.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		07/16/24 10:32	07/17/24 21:04	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		07/16/24 10:32	07/17/24 21:04	1
1,4-Dioxane	ND		9.5	4.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		07/16/24 10:32	07/17/24 21:04	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/16/24 10:32	07/17/24 21:04	1
Hexachloroethane	ND		9.5	5.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
Indene	ND		9.5	3.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
Isophorone	ND		9.5	5.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
2-Methylphenol	ND		9.5	3.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
2-Nitroaniline	ND		9.5	4.8	ug/L		07/16/24 10:32	07/17/24 21:04	1
3-Nitroaniline	ND		9.5	4.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Nitroaniline	ND	*+	9.5	3.9	ug/L		07/16/24 10:32	07/17/24 21:04	1
Nitrobenzene	ND		9.5	4.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
2-Nitrophenol	ND		9.5	4.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
4-Nitrophenol	ND		9.5	3.1	ug/L		07/16/24 10:32	07/17/24 21:04	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		07/16/24 10:32	07/17/24 21:04	1

Client Sample ID: P54-ROX-070924
Date Collected: 07/09/24 11:20
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		07/16/24 10:32	07/17/24 21:04	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
Pentachlorophenol	ND		19	11	ug/L		07/16/24 10:32	07/17/24 21:04	1
Phenol	ND		9.5	4.0	ug/L		07/16/24 10:32	07/17/24 21:04	1
Pyridine	ND		9.5	9.5	ug/L		07/16/24 10:32	07/17/24 21:04	1
Quinoline	ND		9.5	2.3	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		07/16/24 10:32	07/17/24 21:04	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/16/24 10:32	07/17/24 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*21 - 114*	*07/16/24 10:32*	*07/17/24 21:04*	*1*
2-Fluorophenol	*39*		*10 - 105*	*07/16/24 10:32*	*07/17/24 21:04*	*1*
Nitrobenzene-d5	*78*		*16 - 127*	*07/16/24 10:32*	*07/17/24 21:04*	*1*
Phenol-d5	*26*		*10 - 129*	*07/16/24 10:32*	*07/17/24 21:04*	*1*
Terphenyl-d14	*91*		*13 - 150*	*07/16/24 10:32*	*07/17/24 21:04*	*1*
2,4,6-Tribromophenol	*46*		*10 - 150*	*07/16/24 10:32*	*07/17/24 21:04*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/11/24 09:39	07/11/24 19:23	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/11/24 09:39	07/11/24 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/11/24 09:39*	*07/11/24 19:23*	*1*

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

Job ID: 400-258978-1

Client Sample ID: MW24-ROX-070924
Date Collected: 07/09/24 13:55
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-9
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			07/12/24 19:05	1
Acrolein	ND		20	3.3	ug/L			07/12/24 19:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 19:05	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 19:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 19:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 19:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 19:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 19:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 19:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 19:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 19:05	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 19:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 19:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 19:05	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 19:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 19:05	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 19:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 19:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 19:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 19:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 19:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 19:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 19:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 19:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 19:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 19:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 19:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 19:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 19:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 19:05	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 19:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 19:05	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 19:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 19:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 19:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 19:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 19:05	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 19:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 19:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 19:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 19:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 19:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 19:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/12/24 19:05	1

Client Sample ID: MW24-ROX-070924

Date Collected: 07/09/24 13:55
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-9

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			07/12/24 19:05	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 19:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 19:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 19:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 19:05	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 19:05	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 19:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 19:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 19:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 19:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 19:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 19:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 19:05	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 19:05	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 19:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 19:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 19:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 19:05	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 19:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 19:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/12/24 19:05*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/12/24 19:05*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/12/24 19:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.10	ug/L		07/16/24 10:32	07/17/24 13:40	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/16/24 10:32	07/17/24 13:40	1
Anthracene	ND		0.21	0.049	ug/L		07/16/24 10:32	07/17/24 13:40	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 13:40	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/16/24 10:32	07/17/24 13:40	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/16/24 10:32	07/17/24 13:40	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/16/24 10:32	07/17/24 13:40	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/16/24 10:32	07/17/24 13:40	1
Chrysene	ND		0.21	0.034	ug/L		07/16/24 10:32	07/17/24 13:40	1
Dibenz(a,h)anthracene	ND	UJ	0.21	0.050	ug/L		07/16/24 10:32	07/17/24 13:40	1
Fluoranthene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 13:40	1
Fluorene	ND		0.21	0.093	ug/L		07/16/24 10:32	07/17/24 13:40	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 13:40	1
Phenanthrene	ND		0.21	0.094	ug/L		07/16/24 10:32	07/17/24 13:40	1
Pyrene	ND		0.21	0.041	ug/L		07/16/24 10:32	07/17/24 13:40	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/16/24 10:32	07/17/24 13:40	1
2-Methylnaphthalene	**0.12**	**J**	0.21	0.069	ug/L		07/16/24 10:32	07/17/24 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*18 - 147*	*07/16/24 10:32*	*07/17/24 13:40*	*1*
2-Fluorobiphenyl	*76*		*15 - 128*	*07/16/24 10:32*	*07/17/24 13:40*	*1*

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

Job ID: 400-258978-1

Client Sample ID: MW24-ROX-070924
Date Collected: 07/09/24 13:55
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*75*		*10 - 144*	*07/16/24 10:32*	*07/17/24 13:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		07/16/24 10:32	07/17/24 21:29	1
Benzenethiol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 21:29	1
Benzoic acid	ND		31	25	ug/L		07/16/24 10:32	07/17/24 21:29	1
Benzyl alcohol	ND		10	7.6	ug/L		07/16/24 10:32	07/17/24 21:29	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
Bis(2-chloroethyl)ether	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 21:29	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
Bis(2-ethylhexyl) phthalate	ND		10	9.3	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Chloroaniline	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		07/16/24 10:32	07/17/24 21:29	1
2-Chloronaphthalene	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 21:29	1
2-Chlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
Dibenzofuran	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 21:29	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		07/16/24 10:32	07/17/24 21:29	1
Diethyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4-Dimethylphenol	ND	UJ	10	5.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
Dimethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,6-Dinitrotoluene	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 21:29	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		07/16/24 10:32	07/17/24 21:29	1
1,4-Dioxane	ND		10	4.5	ug/L		07/16/24 10:32	07/17/24 21:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
Hexachlorobenzene	ND		10	10	ug/L		07/16/24 10:32	07/17/24 21:29	1
Hexachlorocyclopentadiene	ND	UJ	21	4.7	ug/L		07/16/24 10:32	07/17/24 21:29	1
Hexachloroethane	ND		10	5.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
Indene	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 21:29	1
Isophorone	ND		10	5.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
2-Methylphenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 21:29	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
2-Nitroaniline	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 21:29	1
3-Nitroaniline	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Nitroaniline	ND	*+	10	4.3	ug/L		07/16/24 10:32	07/17/24 21:29	1
Nitrobenzene	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 21:29	1
2-Nitrophenol	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
4-Nitrophenol	ND		10	3.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		07/16/24 10:32	07/17/24 21:29	1

Client Sample ID: MW24-ROX-070924
Date Collected: 07/09/24 13:55
Date Received: 07/10/24 08:23

Lab Sample ID: 400-258978-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		07/16/24 10:32	07/17/24 21:29	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 21:29	1
Pentachlorophenol	ND		21	12	ug/L		07/16/24 10:32	07/17/24 21:29	1
Phenol	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 21:29	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 21:29	1
Quinoline	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4,5-Trichlorophenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 21:29	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*21 - 114*	*07/16/24 10:32*	*07/17/24 21:29*	*1*
2-Fluorophenol	*49*		*10 - 105*	*07/16/24 10:32*	*07/17/24 21:29*	*1*
Nitrobenzene-d5	*75*		*16 - 127*	*07/16/24 10:32*	*07/17/24 21:29*	*1*
Phenol-d5	*37*		*10 - 129*	*07/16/24 10:32*	*07/17/24 21:29*	*1*
Terphenyl-d14	*98*		*13 - 150*	*07/16/24 10:32*	*07/17/24 21:29*	*1*
2,4,6-Tribromophenol	*52*		*10 - 150*	*07/16/24 10:32*	*07/17/24 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-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/11/24 09:39	07/11/24 19:44	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/11/24 09:39	07/11/24 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*07/11/24 09:39*	*07/11/24 19:44*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-258978-1
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, high biased.
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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: 400-258978-1

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)
400-258978-1	TB-ROX-070924-8260-B	99	105	96
400-258978-3	ROST4PZG-ROX-070924	98	101	99
400-258978-4	ROST3MW-ROX-070924	98	99	99
400-258978-5	ROST4PZC-ROX-070924	98	100	100
400-258978-6	TB-ROX-070924-8260-A	98	105	97
400-258978-8	P54-ROX-070924	97	107	96
400-258978-9	MW24-ROX-070924	99	106	96
LCS 400-677642/1002	Lab Control Sample	97	101	98
MB 400-677642/7	Method Blank	99	103	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-258978-3	ROST4PZG-ROX-070924	81	55	78	40	100	65
400-258978-4	ROST3MW-ROX-070924	82	60	79	42	104	65
400-258978-5	ROST4PZC-ROX-070924	78	58	76	43	94	66
400-258978-8	P54-ROX-070924	80	39	78	26	91	46
400-258978-9	MW24-ROX-070924	77	49	75	37	98	52
LCS 400-677969/2-A	Lab Control Sample	85	66	82	58	105	69
LCS 400-677969/4-A	Lab Control Sample	81	62	81	47	105	63
LCSD 400-677969/3-A	Lab Control Sample Dup	84	62	81	53	102	68
LCSD 400-677969/5-A	Lab Control Sample Dup	80	57	77	41	99	60
MB 400-677969/1-A	Method Blank	83	58	83	42	104	62

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)
400-258978-3	ROST4PZG-ROX-070924	120	64	84
400-258978-4	ROST3MW-ROX-070924	134	77	87
400-258978-5	ROST4PZC-ROX-070924	124		87
400-258978-5 - DL	ROST4PZC-ROX-070924		47	
400-258978-8	P54-ROX-070924	120	80	84

Surrogate Summary

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

Job ID: 400-258978-1

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)
400-258978-9	MW24-ROX-070924	105	76	75
LCS 400-677969/2-A	Lab Control Sample	105	76	66
LCSD 400-677969/3-A	Lab Control Sample Dup	100	75	65
MB 400-677969/1-A	Method Blank	137	80	84

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)
400-258978-2	TB-ROX-070924-8011-B	131
400-258978-3	ROST4PZG-ROX-070924	94
400-258978-4	ROST3MW-ROX-070924	145
400-258978-5	ROST4PZC-ROX-070924	145
400-258978-7	TB-ROX-070924-8011-A	89
400-258978-8	P54-ROX-070924	96
400-258978-9	MW24-ROX-070924	100
LCS 400-677486/2-A	Lab Control Sample	138
LCSD 400-677486/3-A	Lab Control Sample Dup	140
MB 400-677486/1-A	Method Blank	136

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-258978-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-258978-1

Client Sample ID: TB-ROX-070924-8260-B
Lab Sample ID: 400-258978-1
Date Collected: 07/09/24 12:00
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 16:22	CAR	EET PEN

Client Sample ID: TB-ROX-070924-8011-B
Lab Sample ID: 400-258978-2
Date Collected: 07/09/24 12:00
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.5 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 17:16	S1K	EET PEN

Client Sample ID: ROST4PZG-ROX-070924
Lab Sample ID: 400-258978-3
Date Collected: 07/09/24 09:20
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 16:49	CAR	EET PEN
Total/NA	Prep	3510C			251.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 19:49	S1B	EET PEN
Total/NA	Prep	3510C			251.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 12:16	JAW	EET PEN
Total/NA	Prep	8011			32.5 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 17:38	S1K	EET PEN

Client Sample ID: ROST3MW-ROX-070924
Lab Sample ID: 400-258978-4
Date Collected: 07/09/24 10:40
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 17:16	CAR	EET PEN
Total/NA	Prep	3510C			258 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 20:14	S1B	EET PEN
Total/NA	Prep	3510C			258 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 12:37	JAW	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 17:59	S1K	EET PEN

Client Sample ID: ROST4PZC-ROX-070924
Lab Sample ID: 400-258978-5
Date Collected: 07/09/24 13:50
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 17:43	CAR	EET PEN
Total/NA	Prep	3510C			253.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 20:39	S1B	EET PEN

Client Sample ID: ROST4PZC-ROX-070924

Lab Sample ID: 400-258978-5

Date Collected: 07/09/24 13:50

Matrix: Water

Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			253.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 12:58	JAW	EET PEN
Total/NA	Prep	3510C	DL		253.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM	DL	2	0.4 mL	0.4 mL	678076	07/17/24 17:53	JAW	EET PEN
Total/NA	Prep	8011			33.5 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 18:20	S1K	EET PEN

Client Sample ID: TB-ROX-070924-8260-A

Lab Sample ID: 400-258978-6

Date Collected: 07/09/24 12:00

Matrix: Water

Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 18:10	CAR	EET PEN

Client Sample ID: TB-ROX-070924-8011-A

Lab Sample ID: 400-258978-7

Date Collected: 07/09/24 12:00

Matrix: Water

Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 19:02	S1K	EET PEN

Client Sample ID: P54-ROX-070924

Lab Sample ID: 400-258978-8

Date Collected: 07/09/24 11:20

Matrix: Water

Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 18:38	CAR	EET PEN
Total/NA	Prep	3510C			262.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 21:04	S1B	EET PEN
Total/NA	Prep	3510C			262.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 13:19	JAW	EET PEN
Total/NA	Prep	8011			32 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 19:23	S1K	EET PEN

Client Sample ID: MW24-ROX-070924

Lab Sample ID: 400-258978-9

Date Collected: 07/09/24 13:55

Matrix: Water

Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677642	07/12/24 19:05	CAR	EET PEN
Total/NA	Prep	3510C			240.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 21:29	S1B	EET PEN
Total/NA	Prep	3510C			240.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 13:40	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-258978-1

Client Sample ID: MW24-ROX-070924
Lab Sample ID: 400-258978-9
Date Collected: 07/09/24 13:55
Matrix: Water
Date Received: 07/10/24 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.7 mL	35 mL	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 19:44	S1K	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677486/1-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	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 15:10	S1K	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677642/7
Date Collected: N/A
Matrix: Water
Date Received: 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	677642	07/12/24 13:12	CAR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-677969/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 17:44	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 11:14	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677486/2-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	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 15:31	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677642/1002
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	677642	07/12/24 11:38	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677969/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:09	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678076	07/17/24 11:35	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677969/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:59	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677486/3-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	677486	07/11/24 09:39	KR	EET PEN
Total/NA	Analysis	8011		1			677547	07/11/24 15:52	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677969/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:34	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678076	07/17/24 11:56	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677969/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 19:24	S1B	EET PEN

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

GC/MS VOA

Analysis Batch: 677642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-1	TB-ROX-070924-8260-B	Total/NA	Water	8260D	
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	8260D	
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	8260D	
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	8260D	
400-258978-6	TB-ROX-070924-8260-A	Total/NA	Water	8260D	
400-258978-8	P54-ROX-070924	Total/NA	Water	8260D	
400-258978-9	MW24-ROX-070924	Total/NA	Water	8260D	
MB 400-677642/7	Method Blank	Total/NA	Water	8260D	
LCS 400-677642/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 677969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	3510C	
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	3510C	
400-258978-5 - DL	ROST4PZC-ROX-070924	Total/NA	Water	3510C	
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	3510C	
400-258978-8	P54-ROX-070924	Total/NA	Water	3510C	
400-258978-9	MW24-ROX-070924	Total/NA	Water	3510C	
MB 400-677969/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-677969/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-677969/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 678076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	8270E SIM	677969
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	8270E SIM	677969
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	8270E SIM	677969
400-258978-5 - DL	ROST4PZC-ROX-070924	Total/NA	Water	8270E SIM	677969
400-258978-8	P54-ROX-070924	Total/NA	Water	8270E SIM	677969
400-258978-9	MW24-ROX-070924	Total/NA	Water	8270E SIM	677969
MB 400-677969/1-A	Method Blank	Total/NA	Water	8270E SIM	677969
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	677969
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	677969

Analysis Batch: 678124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	8270E	677969
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	8270E	677969
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	8270E	677969
400-258978-8	P54-ROX-070924	Total/NA	Water	8270E	677969
400-258978-9	MW24-ROX-070924	Total/NA	Water	8270E	677969
MB 400-677969/1-A	Method Blank	Total/NA	Water	8270E	677969
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	8270E	677969
LCS 400-677969/4-A	Lab Control Sample	Total/NA	Water	8270E	677969
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	677969
LCSD 400-677969/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	677969

QC Association Summary

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

Job ID: 400-258978-1

GC Semi VOA

Prep Batch: 677486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-2	TB-ROX-070924-8011-B	Total/NA	Water	8011	
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	8011	
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	8011	
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	8011	
400-258978-7	TB-ROX-070924-8011-A	Total/NA	Water	8011	
400-258978-8	P54-ROX-070924	Total/NA	Water	8011	
400-258978-9	MW24-ROX-070924	Total/NA	Water	8011	
MB 400-677486/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677486/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677486/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 677547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-258978-2	TB-ROX-070924-8011-B	Total/NA	Water	8011	677486
400-258978-3	ROST4PZG-ROX-070924	Total/NA	Water	8011	677486
400-258978-4	ROST3MW-ROX-070924	Total/NA	Water	8011	677486
400-258978-5	ROST4PZC-ROX-070924	Total/NA	Water	8011	677486
400-258978-7	TB-ROX-070924-8011-A	Total/NA	Water	8011	677486
400-258978-8	P54-ROX-070924	Total/NA	Water	8011	677486
400-258978-9	MW24-ROX-070924	Total/NA	Water	8011	677486
MB 400-677486/1-A	Method Blank	Total/NA	Water	8011	677486
LCS 400-677486/2-A	Lab Control Sample	Total/NA	Water	8011	677486
LCSD 400-677486/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677486

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

Lab Sample ID: MB 400-677642/7
Matrix: Water
Analysis Batch: 677642

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			07/12/24 13:12	1
Acrolein	ND		20	3.3	ug/L			07/12/24 13:12	1
Acrylonitrile	ND		10	2.8	ug/L			07/12/24 13:12	1
Benzene	ND		1.0	0.24	ug/L			07/12/24 13:12	1
Bromobenzene	ND		1.0	0.54	ug/L			07/12/24 13:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/12/24 13:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
Bromoform	ND		5.0	0.25	ug/L			07/12/24 13:12	1
Bromomethane	ND		1.0	0.98	ug/L			07/12/24 13:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/12/24 13:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/12/24 13:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/12/24 13:12	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/12/24 13:12	1
Chloroethane	ND		1.0	0.76	ug/L			07/12/24 13:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/12/24 13:12	1
Chloroform	ND		1.0	0.90	ug/L			07/12/24 13:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/12/24 13:12	1
Chloromethane	ND		1.0	0.40	ug/L			07/12/24 13:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/12/24 13:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/12/24 13:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/12/24 13:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/12/24 13:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/12/24 13:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/12/24 13:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/12/24 13:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/12/24 13:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 13:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/12/24 13:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/12/24 13:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/12/24 13:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/12/24 13:12	1
2-Hexanone	ND		25	4.3	ug/L			07/12/24 13:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/12/24 13:12	1
Methylene bromide	ND		5.0	0.22	ug/L			07/12/24 13:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/12/24 13:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/12/24 13:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/12/24 13:12	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/12/24 13:12	1
Naphthalene	ND		5.0	3.0	ug/L			07/12/24 13:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/12/24 13:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/12/24 13:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/12/24 13:12	1
o-Xylene	ND		5.0	0.60	ug/L			07/12/24 13:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/12/24 13:12	1

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

Lab Sample ID: MB 400-677642/7
Matrix: Water
Analysis Batch: 677642

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			07/12/24 13:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/12/24 13:12	1
Styrene	ND		1.0	1.0	ug/L			07/12/24 13:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/12/24 13:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/12/24 13:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/12/24 13:12	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/12/24 13:12	1
Toluene	ND		1.0	0.90	ug/L			07/12/24 13:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/12/24 13:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/12/24 13:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/12/24 13:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/12/24 13:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/12/24 13:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/12/24 13:12	1
Trichloroethene	ND		1.0	0.15	ug/L			07/12/24 13:12	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/12/24 13:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/12/24 13:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/12/24 13:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/12/24 13:12	1
Vinyl acetate	ND		25	0.93	ug/L			07/12/24 13:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/12/24 13:12	1
Xylenes, Total	ND		10	1.6	ug/L			07/12/24 13:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/12/24 13:12*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/12/24 13:12*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/12/24 13:12*	*1*

Lab Sample ID: LCS 400-677642/1002
Matrix: Water
Analysis Batch: 677642

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	189		ug/L		95	43 - 150
Acrolein	500	535		ug/L		107	38 - 150
Acrylonitrile	500	507		ug/L		101	64 - 142
Benzene	50.0	43.2		ug/L		86	70 - 130
Bromobenzene	50.0	45.6		ug/L		91	70 - 132
Bromochloromethane	50.0	45.8		ug/L		92	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	44.5		ug/L		89	57 - 140
Bromomethane	50.0	46.6		ug/L		93	10 - 150
2-Butanone (MEK)	200	186		ug/L		93	61 - 145
Carbon disulfide	50.0	37.8		ug/L		76	61 - 137
Carbon tetrachloride	50.0	44.9		ug/L		90	61 - 137
Chlorobenzene	50.0	45.3		ug/L		91	70 - 130
Chloroethane	50.0	49.6		ug/L		99	55 - 141
2-Chloroethyl vinyl ether	50.0	46.8		ug/L		94	10 - 150

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

Lab Sample ID: LCS 400-677642/1002
Matrix: Water
Analysis Batch: 677642

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	45.1		ug/L		90	69 - 130
1-Chlorohexane	50.0	46.2		ug/L		92	69 - 130
Chloromethane	50.0	57.2		ug/L		114	58 - 137
cis-1,2-Dichloroethene	50.0	44.4		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	45.2		ug/L		90	69 - 132
Dibromochloromethane	50.0	47.0		ug/L		94	67 - 135
1,2-Dichlorobenzene	50.0	46.6		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.7		ug/L		91	70 - 130
Dichlorodifluoromethane	50.0	58.0		ug/L		116	41 - 146
1,1-Dichloroethane	50.0	43.7		ug/L		87	70 - 130
1,2-Dichloroethane	50.0	46.4		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	43.7		ug/L		87	63 - 134
1,2-Dichloropropane	50.0	46.4		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	46.2		ug/L		92	70 - 130
2,2-Dichloropropane	50.0	41.8		ug/L		84	52 - 135
1,1-Dichloropropene	50.0	43.1		ug/L		86	70 - 130
Ethylbenzene	50.0	44.7		ug/L		89	70 - 130
Ethyl methacrylate	50.0	46.0		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	47.1		ug/L		94	53 - 140
2-Hexanone	200	186		ug/L		93	65 - 137
Isopropylbenzene	50.0	46.2		ug/L		92	70 - 130
Methylene bromide	50.0	47.6		ug/L		95	70 - 130
Methylene Chloride	50.0	45.0		ug/L		90	66 - 135
4-Methyl-2-pentanone (MIBK)	200	192		ug/L		96	69 - 138
Methyl tert-butyl ether	50.0	44.7		ug/L		89	66 - 130
m-Xylene & p-Xylene	50.0	45.5		ug/L		91	70 - 130
Naphthalene	50.0	45.7		ug/L		91	47 - 149
n-Butylbenzene	50.0	47.5		ug/L		95	67 - 130
N-Propylbenzene	50.0	46.5		ug/L		93	70 - 130
o-Chlorotoluene	50.0	45.3		ug/L		91	70 - 130
o-Xylene	50.0	45.3		ug/L		91	70 - 130
p-Chlorotoluene	50.0	45.0		ug/L		90	70 - 130
p-Isopropyltoluene	50.0	46.2		ug/L		92	65 - 130
sec-Butylbenzene	50.0	46.5		ug/L		93	66 - 130
Styrene	50.0	46.4		ug/L		93	70 - 130
tert-Butylbenzene	50.0	45.1		ug/L		90	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.0		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.2		ug/L		90	70 - 131
Tetrachloroethene	50.0	42.2		ug/L		84	65 - 130
Toluene	50.0	42.8		ug/L		86	70 - 130
trans-1,2-Dichloroethene	50.0	42.6		ug/L		85	70 - 130
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	63 - 130
1,2,3-Trichlorobenzene	50.0	46.2		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	47.3		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	43.5		ug/L		87	68 - 130
1,1,2-Trichloroethane	50.0	45.5		ug/L		91	70 - 130
Trichloroethene	50.0	45.5		ug/L		91	70 - 130
Trichlorofluoromethane	50.0	49.1		ug/L		98	65 - 138

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

Lab Sample ID: LCS 400-677642/1002
Matrix: Water
Analysis Batch: 677642

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	46.1		ug/L		92	70 - 130
1,2,4-Trimethylbenzene	50.0	45.5		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	44.9		ug/L		90	69 - 130
Vinyl acetate	100	90.4		ug/L		90	26 - 150
Vinyl chloride	50.0	44.5		ug/L		89	59 - 136
Xylenes, Total	100	90.8		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzenethiol	ND		10	9.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 17:44	1

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Indene	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Nitroaniline	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 17:44	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 17:44	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:32	07/17/24 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*21 - 114*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
2-Fluorophenol	*58*		*10 - 105*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Nitrobenzene-d5	*83*		*16 - 127*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Phenol-d5	*42*		*10 - 129*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Terphenyl-d14	*104*		*13 - 150*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
2,4,6-Tribromophenol	*62*		*10 - 150*	*07/16/24 10:32*	*07/17/24 17:44*	*1*

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	65.4		ug/L		54	10 - 127
Benzoic acid	492	250		ug/L		51	19 - 126
Benzyl alcohol	120	107		ug/L		89	17 - 109
Bis(2-chloroethoxy)methane	120	101		ug/L		84	24 - 125
Bis(2-chloroethyl)ether	120	120		ug/L		100	10 - 121
bis (2-chloroisopropyl) ether	120	133		ug/L		111	14 - 123
Bis(2-ethylhexyl) phthalate	120	125		ug/L		104	16 - 150
4-Bromophenyl phenyl ether	120	119		ug/L		99	17 - 150
Butyl benzyl phthalate	120	127		ug/L		106	21 - 150
4-Chloroaniline	120	57.4		ug/L		48	10 - 124
4-Chloro-3-methylphenol	120	103		ug/L		86	37 - 131

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	106		ug/L		88	24 - 132
2-Chlorophenol	120	106		ug/L		88	27 - 124
4-Chlorophenyl phenyl ether	120	112		ug/L		94	27 - 147
Dibenz[a,h]acridine	120	135		ug/L		113	40 - 140
Dibenzofuran	120	111		ug/L		92	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	97.8		ug/L		81	33 - 132
Diethyl phthalate	120	114		ug/L		95	37 - 145
2,4-Dimethylphenol	120	80.6		ug/L		67	38 - 132
Dimethyl phthalate	120	108		ug/L		90	32 - 137
Di-n-butyl phthalate	120	121		ug/L		101	27 - 150
4,6-Dinitro-ortho-cresol	240	257		ug/L		107	14 - 150
2,4-Dinitrophenol	240	271		ug/L		113	15 - 150
2,4-Dinitrotoluene	120	115		ug/L		96	35 - 136
2,6-Dinitrotoluene	120	110		ug/L		92	29 - 140
Di-n-octyl phthalate	120	121		ug/L		101	26 - 150
1,4-Dioxane	120	64.1		ug/L		53	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	127		ug/L		106	23 - 138
Hexachlorobenzene	120	122		ug/L		102	10 - 150
Hexachlorocyclopentadiene	120	67.4		ug/L		56	10 - 124
Hexachloroethane	120	96.3		ug/L		80	10 - 127
Indene	120	109		ug/L		91	18 - 150
Isophorone	120	103		ug/L		86	28 - 127
2-Methylphenol	120	109		ug/L		90	34 - 124
3 & 4 Methylphenol	120	102		ug/L		85	32 - 122
2-Nitroaniline	120	119		ug/L		99	24 - 139
3-Nitroaniline	120	110		ug/L		91	10 - 128
4-Nitroaniline	120	146	*+	ug/L		122	28 - 118
Nitrobenzene	120	95.5		ug/L		80	29 - 120
2-Nitrophenol	120	94.8		ug/L		79	25 - 148
4-Nitrophenol	240	190		ug/L		79	12 - 129
N-Nitrosodimethylamine	120	90.0		ug/L		75	10 - 115
N-Nitrosodi-n-propylamine	120	116		ug/L		97	24 - 142
N-Nitrosodiphenylamine	119	113		ug/L		95	29 - 138
Pentachlorophenol	240	251		ug/L		105	19 - 150
Phenol	120	78.7		ug/L		66	11 - 95
Pyridine	240	71.3		ug/L		30	10 - 82
Quinoline	120	108		ug/L		90	10 - 141
2,4,5-Trichlorophenol	120	109		ug/L		91	30 - 144
2,4,6-Trichlorophenol	120	104		ug/L		87	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*21 - 114*
2-Fluorophenol	*66*		*10 - 105*
Nitrobenzene-d5	*82*		*16 - 127*
Phenol-d5	*58*		*10 - 129*
Terphenyl-d14	*105*		*13 - 150*

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	69		10 - 150

Lab Sample ID: LCS 400-677969/4-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	80.1		ug/L		67	10 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	81		21 - 114
2-Fluorophenol	62		10 - 105
Nitrobenzene-d5	81		16 - 127
Phenol-d5	47		10 - 129
Terphenyl-d14	105		13 - 150
2,4,6-Tribromophenol	63		10 - 150

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	69.1		ug/L		58	10 - 127	6	40
Benzoic acid			492	225		ug/L		46	19 - 126	10	40
Benzyl alcohol			120	99.8		ug/L		83	17 - 109	7	40
Bis(2-chloroethoxy)methane			120	99.8		ug/L		83	24 - 125	1	40
Bis(2-chloroethyl)ether			120	116		ug/L		96	10 - 121	4	40
bis (2-chloroisopropyl) ether			120	129		ug/L		107	14 - 123	3	40
Bis(2-ethylhexyl) phthalate			120	121		ug/L		101	16 - 150	3	40
4-Bromophenyl phenyl ether			120	114		ug/L		95	17 - 150	5	40
Butyl benzyl phthalate			120	124		ug/L		104	21 - 150	2	40
4-Chloroaniline			120	57.5		ug/L		48	10 - 124	0	40
4-Chloro-3-methylphenol			120	102		ug/L		85	37 - 131	1	40
2-Chloronaphthalene			120	105		ug/L		87	24 - 132	1	40
2-Chlorophenol			120	101		ug/L		84	27 - 124	4	40
4-Chlorophenyl phenyl ether			120	111		ug/L		92	27 - 147	2	40
Dibenz[a,h]acridine			120	127		ug/L		106	40 - 140	6	40
Dibenzofuran			120	109		ug/L		91	30 - 135	2	40
3,3'-Dichlorobenzidine			160	139		ug/L		87	10 - 150	3	40
2,4-Dichlorophenol			120	96.9		ug/L		81	33 - 132	1	40
Diethyl phthalate			120	113		ug/L		94	37 - 145	1	40
2,4-Dimethylphenol			120	78.6		ug/L		65	38 - 132	3	40
Dimethyl phthalate			120	106		ug/L		88	32 - 137	2	40
Di-n-butyl phthalate			120	119		ug/L		99	27 - 150	1	40
4,6-Dinitro-ortho-cresol			240	251		ug/L		105	14 - 150	2	40
2,4-Dinitrophenol			240	270		ug/L		112	15 - 150	0	40
2,4-Dinitrotoluene			120	115		ug/L		96	35 - 136	0	40
2,6-Dinitrotoluene			120	109		ug/L		91	29 - 140	1	40

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

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	118		ug/L		98	26 - 150	3	40
1,4-Dioxane			120	61.1		ug/L		51	10 - 87	5	40
1,2-Diphenylhydrazine (as Azobenzene)			120	122		ug/L		101	23 - 138	4	40
Hexachlorobenzene			120	118		ug/L		98	10 - 150	3	40
Hexachlorocyclopentadiene			120	63.4		ug/L		53	10 - 124	6	40
Hexachloroethane			120	99.7		ug/L		83	10 - 127	3	40
Indene			120	106		ug/L		88	18 - 150	3	40
Isophorone			120	102		ug/L		85	28 - 127	1	40
2-Methylphenol			120	103		ug/L		86	34 - 124	5	40
3 & 4 Methylphenol			120	96.5		ug/L		80	32 - 122	6	40
2-Nitroaniline			120	119		ug/L		99	24 - 139	1	40
3-Nitroaniline			120	110		ug/L		91	10 - 128	0	40
4-Nitroaniline			120	147	*+	ug/L		123	28 - 118	1	40
Nitrobenzene			120	94.8		ug/L		79	29 - 120	1	40
2-Nitrophenol			120	94.6		ug/L		79	25 - 148	0	40
4-Nitrophenol			240	164		ug/L		68	12 - 129	15	40
N-Nitrosodimethylamine			120	83.8		ug/L		70	10 - 115	7	40
N-Nitrosodi-n-propylamine			120	113		ug/L		94	24 - 142	2	40
N-Nitrosodiphenylamine			119	110		ug/L		92	29 - 138	3	40
Pentachlorophenol			240	247		ug/L		103	19 - 150	1	40
Phenol			120	70.0		ug/L		58	11 - 95	12	40
Pyridine			240	78.0		ug/L		33	10 - 82	9	40
Quinoline			120	109		ug/L		91	10 - 141	0	40
2,4,5-Trichlorophenol			120	107		ug/L		90	30 - 144	2	40
2,4,6-Trichlorophenol			120	104		ug/L		86	27 - 147	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*62*		*10 - 105*
Nitrobenzene-d5	*81*		*16 - 127*
Phenol-d5	*53*		*10 - 129*
Terphenyl-d14	*102*		*13 - 150*
2,4,6-Tribromophenol	*68*		*10 - 150*

Lab Sample ID: LCSD 400-677969/5-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	90.3		ug/L		75	10 - 140	12	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*21 - 114*
2-Fluorophenol	*57*		*10 - 105*
Nitrobenzene-d5	*77*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*99*		*13 - 150*

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

Lab Sample ID: LCSD 400-677969/5-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*60*		*10 - 150*

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/16/24 10:32	07/17/24 11:14	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:32	07/17/24 11:14	1
Anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/16/24 10:32	07/17/24 11:14	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 11:14	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/16/24 10:32	07/17/24 11:14	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Fluorene	ND		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 11:14	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Phenanthrene	ND		0.20	0.090	ug/L		07/16/24 10:32	07/17/24 11:14	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 11:14	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/16/24 10:32	07/17/24 11:14	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/16/24 10:32	07/17/24 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*137*		*18 - 147*	*07/16/24 10:32*	*07/17/24 11:14*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/16/24 10:32*	*07/17/24 11:14*	*1*
Nitrobenzene-d5	*84*		*10 - 144*	*07/16/24 10:32*	*07/17/24 11:14*	*1*

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	99.6		ug/L		83	10 - 140
Acenaphthylene	120	99.4		ug/L		83	10 - 140
Anthracene	120	102		ug/L		85	19 - 140
Benzo[a]anthracene	120	101		ug/L		84	25 - 140
Benzo[a]pyrene	120	96.1		ug/L		80	24 - 140
Benzo[b]fluoranthene	120	109		ug/L		91	34 - 140
Benzo[g,h,i]perylene	120	92.3		ug/L		77	13 - 140
Benzo[k]fluoranthene	120	117		ug/L		98	21 - 140
Chrysene	120	116		ug/L		96	28 - 140
Dibenz(a,h)anthracene	120	74.9		ug/L		62	10 - 140
Fluoranthene	120	103		ug/L		86	18 - 140

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	120	99.0		ug/L		83	16 - 140
Indeno[1,2,3-cd]pyrene	120	78.6		ug/L		66	10 - 140
Phenanthrene	120	108		ug/L		90	22 - 140
Pyrene	120	151		ug/L		126	38 - 140
1-Methylnaphthalene	120	95.6		ug/L		80	10 - 140
2-Methylnaphthalene	120	93.9		ug/L		78	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*105*		*18 - 147*
2-Fluorobiphenyl	*76*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	97.7		ug/L		81	10 - 140	2	40
Acenaphthylene	120	99.5		ug/L		83	10 - 140	0	40
Anthracene	120	99.2		ug/L		83	19 - 140	3	40
Benzo[a]anthracene	120	95.8		ug/L		80	25 - 140	5	40
Benzo[a]pyrene	120	87.2		ug/L		73	24 - 140	10	40
Benzo[b]fluoranthene	120	107		ug/L		90	34 - 140	2	40
Benzo[g,h,i]perylene	120	93.7		ug/L		78	13 - 140	1	40
Benzo[k]fluoranthene	120	110		ug/L		91	21 - 140	7	40
Chrysene	120	112		ug/L		94	28 - 140	3	40
Dibenz(a,h)anthracene	120	80.6		ug/L		67	10 - 140	7	40
Fluoranthene	120	101		ug/L		84	18 - 140	2	40
Fluorene	120	97.9		ug/L		82	16 - 140	1	40
Indeno[1,2,3-cd]pyrene	120	80.3		ug/L		67	10 - 140	2	40
Phenanthrene	120	103		ug/L		86	22 - 140	5	40
Pyrene	120	148		ug/L		124	38 - 140	2	40
1-Methylnaphthalene	120	95.5		ug/L		80	10 - 140	0	40
2-Methylnaphthalene	120	95.0		ug/L		79	10 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*65*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677486/1-A
Matrix: Water
Analysis Batch: 677547

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677486

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		07/11/24 09:39	07/11/24 15:10	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-677486/1-A
Matrix: Water
Analysis Batch: 677547

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677486

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/11/24 09:39	07/11/24 15:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*136*		*51 - 149*	*07/11/24 09:39*	*07/11/24 15:10*	*1*

Lab Sample ID: LCS 400-677486/2-A
Matrix: Water
Analysis Batch: 677547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677486

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.107		ug/L		107	60 - 140		
1,2-Dibromoethane			0.100	0.0933	p	ug/L		93	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*138*		*51 - 149*

Lab Sample ID: LCSD 400-677486/3-A
Matrix: Water
Analysis Batch: 677547

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677486

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		112	60 - 140	5	30
1,2-Dibromoethane			0.100	0.0987		ug/L		98	60 - 140	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*140*		*51 - 149*

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:
☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/9/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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, M. Massa
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND
☐ LA - RWQCB REPORT FORMAT
DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____
TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

REQUESTED ANALYSIS 60721927 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

400-258978 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-070924-8260-B	7/9/2024	0000	Water	2					2	X			
	TB-ROX-070924-8011-B	7/9/2024	0000	Water	2					2		X		
	ROST4PZG-ROX-070924	7/9/2024	0920	Water	6			2		8	X	X	X	X
	ROST3MW-ROX-070924	7/9/2024	1040	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-070924	7/9/2024	1350	Water	6			2		8	X	X	X	X

7.9.24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 7252 0540 4544	7/9/2024	1600
	Lew	7-10-24	823
	3.9°C (IRS)		

Version: 27Sept23

CUSTODY SEALS: 2355744, 2355745

7/18/2024

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/9/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 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 60721927 – 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): C. McDavid, 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; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-070924-8260-A	7/9/2024	0000	Water	2					2	X			
	TB-ROX-070924-8011-A	7/9/2024	0000	Water	2					2		X		
	P54-ROX-070924	7/9/2024	1120	Water	6			2		8	X	X	X	X
	MW24-ROX-070924	7/9/2024	1355	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See page 1	7/9/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-10-24	Time: 823
Relinquished by: (Signature)	Received by: (Signature) 3.9°C ITP 8	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

Page 57 of 59

7/18/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-258978-1

Login Number: 258978
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	3.9°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-258978-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-259040-1

Data Reviewer: Adelina Gita

Peer Reviewer: Delaine Austin

Date Reviewed: 8/21/2024

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

Sample Identification	Sample Identification
TB-ROX-071024-8260-A	TB-ROX-071024-8011-A
MW6A-ROX-071024-EB	MW6A-ROX-071024
MW6B-ROX-071024	MW6C-ROX-071024
MW6D-ROX-071024	MW6D-ROX-071024-DUP
TB-ROX-071024-8260-B	TB-ROX-071024-8011-B
ROST4PZE-ROX-071024-EB	ROST4PZE-ROX-071024
P56-ROX-071024	P57-ROX-071024

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 case narrative several PAHs and SVOCs were detected in equipment blank MW6A-ROX-071024-EB. Several VOC, SVOC, and VOC by 8011 LCS and/or LCSD recoveries for several analytes and were outside evaluation criteria. The internal standard area recovery for perylene-d_{12} was outside criteria in a PAH method blank. The continuing calibration verification (CCV) for several analytes, were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW6A-ROX-071024-EB	PAHs	1-Methylnaphthalene	0.092 µg/L
MW6A-ROX-071024-EB	PAHs	2-Methylnaphthalene	0.16 µg/L
MW6A-ROX-071024-EB	SVOCs	Dibenz[a,h]acridine	3.5 µg/L
MW6A-ROX-071024-EB	SVOCs	4-Nitrophenol	4.5 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
MW6A-ROX-071024	PAHs	2-Methylnaphthalene	-	**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 400-677844/1002	VOCs	Acetone	**174**	NA	43-150
LCS/LCSD 400-677969/2-A/3-A	SVOCs	4-Nitroaniline	**122/123**	1	28-118/40
LCS/LCSD 400-677802/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	**149/143**	4	60-140/30

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.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-071024	VOCs	Acetone	**J**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MB 400-677969/1-A	PAHs	Perylene-d_{12}	**3301**	7043	3522-14086

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW6D-ROX-071024	MW6D-ROX-071024-DUP

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for several analytes, were outside evaluation criteria, biased low. Acetone in sample P56-ROX-071024 was previously qualified in Section 5.0 of this data review due to LCS outside evaluation criteria; no further qualification of acetone was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6B-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6C-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6D-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6D-ROX-071024-DUP	VOCs	2-Chloroethyl vinyl ether	**UJ**
ROST4PZE-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
P56-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
P57-ROX-071024	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6A-ROX-071024	SVOCs	2,4-Dimethylphenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW6B-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
MW6C-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
MW6D-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
MW6D-ROX-071024-DUP	SVOCs	2,4-Dimethylphenol	UJ
ROST4PZE-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
P56-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
P57-ROX-071024	SVOCs	2,4-Dimethylphenol	UJ
MW6A-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
MW6B-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
MW6C-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
MW6D-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
MW6D-ROX-071024-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZE-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
P56-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
P57-ROX-071024	SVOCs	Hexachlorocyclopentadiene	UJ
MW6A-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
MW6B-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
MW6C-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
MW6D-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
MW6D-ROX-071024-DUP	PAHs	Dibenz(a,h)anthracene	UJ
ROST4PZE-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
P56-ROX-071024	PAHs	Dibenz(a,h)anthracene	UJ
P57-ROX-071024	PAHs	Dibenz(a,h)anthracene	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 7/19/2024 7:48:15 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-259040-1

Reviewed 08/21/2024
AG

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
7/19/2024 7:48:15 AM

Authorized for release by
Leah Klingensmith, Senior Project Manager
Leah.Klingensmith@et.eurofinsus.com
(615)301-5038

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Job Narrative
400-259040-1

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 7/11/2024 8:58 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 2.0°C and 2.3°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-071024-8260-A (400-259040-1), MW6A-ROX-071024-EB (400-259040-3), MW6A-ROX-071024 (400-259040-4), MW6B-ROX-071024 (400-259040-5), MW6C-ROX-071024 (400-259040-6), MW6D-ROX-071024 (400-259040-7), MW6D-ROX-071024-DUP (400-259040-8), TB-ROX-071024-8260-B (400-259040-9), ROST4PZE-ROX-071024-EB (400-259040-11), ROST4PZE-ROX-071024 (400-259040-12), P56-ROX-071024 (400-259040-13) and P57-ROX-071024 (400-259040-14). 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 400-677844 recovered above the upper control limit for Acetone and Acrolein. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-677844 recovered outside acceptance criteria, low biased, for 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: The laboratory control sample (LCS) for analytical batch 400-677844 recovered outside control limits for the following analytes: Acetone. These analytes were biased high in the LCS and were below the reporting limit in the associated samples; therefore, the data have been reported.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-674014 was outside method criteria for the following analyte(s): Bromomethane and Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-677969 and analytical batch 400-678124 recovered outside control limits for the following analytes: 4-Nitroaniline. 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 continuing calibration verification (CCV) associated with batch 400-678124 recovered outside acceptance criteria, low biased, for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: Internal standard response was outside of acceptance limits for the method blank : (MB 400-677969/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the method blank is non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-678076 recovered outside

acceptance criteria, low biased, for Dibenz(a,h)anthracene. 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: Sample was not sent for re-extract for verification of detects as historical data confirms results. MW6A-ROX-071024-EB (400-259040-3), MW6A-ROX-071024 (400-259040-4), MW6B-ROX-071024 (400-259040-5), MW6C-ROX-071024 (400-259040-6), MW6D-ROX-071024 (400-259040-7), MW6D-ROX-071024-DUP (400-259040-8), ROST4PZE-ROX-071024-EB (400-259040-11), ROST4PZE-ROX-071024 (400-259040-12), P56-ROX-071024 (400-259040-13) and P57-ROX-071024 (400-259040-14)

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 400-677826 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.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-677802 and analytical batch 400-677826 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Sample Summary

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

Job ID: 400-259040-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-259040-1	TB-ROX-071024-8260-A	Water	07/10/24 12:00	07/11/24 08:58
400-259040-2	TB-ROX-071024-8011-A	Water	07/10/24 12:00	07/11/24 08:58
400-259040-3	MW6A-ROX-071024-EB	Water	07/10/24 08:15	07/11/24 08:58
400-259040-4	MW6A-ROX-071024	Water	07/10/24 09:55	07/11/24 08:58
400-259040-5	MW6B-ROX-071024	Water	07/10/24 10:35	07/11/24 08:58
400-259040-6	MW6C-ROX-071024	Water	07/10/24 12:35	07/11/24 08:58
400-259040-7	MW6D-ROX-071024	Water	07/10/24 13:30	07/11/24 08:58
400-259040-8	MW6D-ROX-071024-DUP	Water	07/10/24 13:30	07/11/24 08:58
400-259040-9	TB-ROX-071024-8260-B	Water	07/10/24 12:00	07/11/24 08:58
400-259040-10	TB-ROX-071024-8011-B	Water	07/10/24 12:00	07/11/24 08:58
400-259040-11	ROST4PZE-ROX-071024-EB	Water	07/10/24 08:30	07/11/24 08:58
400-259040-12	ROST4PZE-ROX-071024	Water	07/10/24 09:50	07/11/24 08:58
400-259040-13	P56-ROX-071024	Water	07/10/24 11:40	07/11/24 08:58
400-259040-14	P57-ROX-071024	Water	07/10/24 12:50	07/11/24 08:58

Detection Summary

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-A — Lab Sample ID: 400-259040-1

No Detections.

Client Sample ID: TB-ROX-071024-8011-A — Lab Sample ID: 400-259040-2

No Detections.

Client Sample ID: MW6A-ROX-071024-EB — Lab Sample ID: 400-259040-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.092	J	0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.16	J	0.20	0.065	ug/L	1		8270E SIM	Total/NA
Dibenz[a,h]acridine	3.5	J	9.9	2.8	ug/L	1		8270E	Total/NA
4-Nitrophenol	4.5	J	9.9	3.3	ug/L	1		8270E	Total/NA

Client Sample ID: MW6A-ROX-071024 — Lab Sample ID: 400-259040-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.29	J	1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.20		0.20	0.045	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.039	J	0.20	0.034	ug/L	1		8270E SIM	Total/NA
Chrysene	0.036	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Pyrene	0.055	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.10	J U	0.20	0.067	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6B-ROX-071024 — Lab Sample ID: 400-259040-5

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
2-Methylnaphthalene	0.13	J	0.20	0.066	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6C-ROX-071024 — Lab Sample ID: 400-259040-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	0.092	J	0.19	0.062	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW6D-ROX-071024 — Lab Sample ID: 400-259040-7

No Detections.

Client Sample ID: MW6D-ROX-071024-DUP — Lab Sample ID: 400-259040-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.098	J	0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.18	J	0.20	0.066	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB-ROX-071024-8260-B — Lab Sample ID: 400-259040-9

No Detections.

Client Sample ID: TB-ROX-071024-8011-B — Lab Sample ID: 400-259040-10

No Detections.

Client Sample ID: ROST4PZE-ROX-071024-EB — Lab Sample ID: 400-259040-11

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024 — Lab Sample ID: 400-259040-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.069	J	0.19	0.046	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.037	J	0.19	0.033	ug/L	1		8270E SIM	Total/NA
Pyrene	0.072	J	0.19	0.038	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P56-ROX-071024 — Lab Sample ID: 400-259040-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	J *+ J	25	10	ug/L	1		8260D	Total/NA
Isopropylbenzene	6.5		1.0	0.53	ug/L	1		8260D	Total/NA
N-Propylbenzene	6.3		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	1.2		1.0	0.70	ug/L	1		8260D	Total/NA
Acenaphthene	0.62		0.20	0.099	ug/L	1		8270E SIM	Total/NA
Anthracene	0.10	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluorene	0.28		0.20	0.089	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.43		0.20	0.090	ug/L	1		8270E SIM	Total/NA
Pyrene	0.049	J	0.20	0.039	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	4.3		0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.8		0.20	0.066	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P57-ROX-071024 — Lab Sample ID: 400-259040-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.2		1.0	0.24	ug/L	1		8260D	Total/NA
Ethylbenzene	0.54	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	18		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	0.68	J	5.0	0.63	ug/L	1		8260D	Total/NA
n-Butylbenzene	1.3		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	16		1.0	0.69	ug/L	1		8260D	Total/NA
sec-Butylbenzene	4.5		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	5.4		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.5		1.0	0.90	ug/L	1		8260D	Total/NA
Acenaphthene	0.44		0.20	0.099	ug/L	1		8270E SIM	Total/NA
Anthracene	0.073	J	0.20	0.047	ug/L	1		8270E SIM	Total/NA
Fluorene	0.46		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	22		0.20	0.080	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	13		0.20	0.066	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-A
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-1
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			07/15/24 13:25	1
Acrolein	ND		20	3.3	ug/L			07/15/24 13:25	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 13:25	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 13:25	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 13:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 13:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 13:25	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 13:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 13:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 13:25	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 13:25	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 13:25	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 13:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/24 13:25	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 13:25	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 13:25	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 13:25	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 13:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 13:25	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 13:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 13:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 13:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 13:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 13:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 13:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 13:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 13:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 13:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 13:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 13:25	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 13:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 13:25	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 13:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 13:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 13:25	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 13:25	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 13:25	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 13:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 13:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 13:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 13:25	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 13:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 13:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 13:25	1

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-A
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-1
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			07/15/24 13:25	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 13:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 13:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 13:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 13:25	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 13:25	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 13:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 13:25	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 13:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 13:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 13:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 13:25	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 13:25	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 13:25	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 13:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 13:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 13:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 13:25	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 13:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 13:25	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*07/15/24 13:25*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*07/15/24 13:25*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 13:25*	*1*

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8011-A
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/15/24 08:26	07/15/24 12:49	1
1,2-Dibromoethane	ND	*+	0.022	0.016	ug/L		07/15/24 08:26	07/15/24 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 12:49*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6A-ROX-071024-EB
Date Collected: 07/10/24 08:15
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-3
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			07/15/24 13:49	1
Acrolein	ND		20	3.3	ug/L			07/15/24 13:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 13:49	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 13:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 13:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 13:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 13:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 13:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 13:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 13:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 13:49	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 13:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 13:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/24 13:49	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 13:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 13:49	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 13:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 13:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 13:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 13:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 13:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 13:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 13:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 13:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 13:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 13:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 13:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 13:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 13:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 13:49	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 13:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 13:49	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 13:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 13:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 13:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 13:49	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 13:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 13:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 13:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 13:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 13:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 13:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 13:49	1

Client Sample ID: MW6A-ROX-071024-EB
Date Collected: 07/10/24 08:15
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-3
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			07/15/24 13:49	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 13:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 13:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 13:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 13:49	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 13:49	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 13:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 13:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 13:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 13:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 13:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 13:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 13:49	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 13:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 13:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 13:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 13:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 13:49	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 13:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 13:49	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/15/24 13:49*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/15/24 13:49*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 13:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.098	ug/L		07/16/24 10:32	07/17/24 14:01	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/16/24 10:32	07/17/24 14:01	1
Anthracene	ND		0.20	0.046	ug/L		07/16/24 10:32	07/17/24 14:01	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:01	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/16/24 10:32	07/17/24 14:01	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 14:01	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 14:01	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/16/24 10:32	07/17/24 14:01	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 14:01	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 14:01	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:01	1
Fluorene	ND		0.20	0.088	ug/L		07/16/24 10:32	07/17/24 14:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:01	1
Phenanthrene	ND		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 14:01	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 14:01	1
1-Methylnaphthalene	**0.092**	**J**	0.20	0.079	ug/L		07/16/24 10:32	07/17/24 14:01	1
2-Methylnaphthalene	**0.16**	**J**	0.20	0.065	ug/L		07/16/24 10:32	07/17/24 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*130*		*18 - 147*	*07/16/24 10:32*	*07/17/24 14:01*	*1*
2-Fluorobiphenyl	*86*		*15 - 128*	*07/16/24 10:32*	*07/17/24 14:01*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6A-ROX-071024-EB

Date Collected: 07/10/24 08:15
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*92*		*10 - 144*	*07/16/24 10:32*	*07/17/24 14:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
Benzenethiol	ND		9.9	9.8	ug/L		07/16/24 10:32	07/17/24 21:53	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 21:53	1
Benzyl alcohol	ND		9.9	7.2	ug/L		07/16/24 10:32	07/17/24 21:53	1
Bis(2-chloroethoxy)methane	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
Bis(2-chloroethyl)ether	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		07/16/24 10:32	07/17/24 21:53	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Chloroaniline	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		07/16/24 10:32	07/17/24 21:53	1
2-Chloronaphthalene	ND		9.9	3.8	ug/L		07/16/24 10:32	07/17/24 21:53	1
2-Chlorophenol	ND		9.9	4.0	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Chlorophenyl phenyl ether	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 21:53	1
Dibenz[a,h]acridine	**3.5**	**J**	9.9	2.8	ug/L		07/16/24 10:32	07/17/24 21:53	1
Dibenzofuran	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4-Dichlorophenol	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 21:53	1
Diethyl phthalate	ND		9.9	4.3	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4-Dimethylphenol	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 21:53	1
Dimethyl phthalate	ND		9.9	4.1	ug/L		07/16/24 10:32	07/17/24 21:53	1
Di-n-butyl phthalate	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4-Dinitrophenol	ND		30	4.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4-Dinitrotoluene	ND		9.9	5.0	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,6-Dinitrotoluene	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
1,4-Dioxane	ND		9.9	4.2	ug/L		07/16/24 10:32	07/17/24 21:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		07/16/24 10:32	07/17/24 21:53	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		07/16/24 10:32	07/17/24 21:53	1
Hexachloroethane	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 21:53	1
Indene	ND		9.9	3.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
Isophorone	ND		9.9	5.1	ug/L		07/16/24 10:32	07/17/24 21:53	1
2-Methylphenol	ND		9.9	3.2	ug/L		07/16/24 10:32	07/17/24 21:53	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
2-Nitroaniline	ND		9.9	4.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
3-Nitroaniline	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Nitroaniline	ND	*+	9.9	4.0	ug/L		07/16/24 10:32	07/17/24 21:53	1
Nitrobenzene	ND		9.9	4.6	ug/L		07/16/24 10:32	07/17/24 21:53	1
2-Nitrophenol	ND		9.9	4.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
4-Nitrophenol	**4.5**	**J**	9.9	3.3	ug/L		07/16/24 10:32	07/17/24 21:53	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		07/16/24 10:32	07/17/24 21:53	1

Client Sample ID: MW6A-ROX-071024-EB

Date Collected: 07/10/24 08:15
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	2.5	ug/L		07/16/24 10:32	07/17/24 21:53	1
N-Nitrosodiphenylamine	ND		9.9	3.7	ug/L		07/16/24 10:32	07/17/24 21:53	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 21:53	1
Phenol	ND		9.9	4.1	ug/L		07/16/24 10:32	07/17/24 21:53	1
Pyridine	ND		9.9	9.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
Quinoline	ND		9.9	2.4	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4,5-Trichlorophenol	ND		9.9	3.9	ug/L		07/16/24 10:32	07/17/24 21:53	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		07/16/24 10:32	07/17/24 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*07/16/24 10:32*	*07/17/24 21:53*	*1*
2-Fluorophenol	*26*		*10 - 105*	*07/16/24 10:32*	*07/17/24 21:53*	*1*
Nitrobenzene-d5	*60*		*16 - 127*	*07/16/24 10:32*	*07/17/24 21:53*	*1*
Phenol-d5	*23*		*10 - 129*	*07/16/24 10:32*	*07/17/24 21:53*	*1*
Terphenyl-d14	*95*		*13 - 150*	*07/16/24 10:32*	*07/17/24 21:53*	*1*
2,4,6-Tribromophenol	*68*		*10 - 150*	*07/16/24 10:32*	*07/17/24 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-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/15/24 08:26	07/15/24 13:10	1
1,2-Dibromoethane	ND	*+	0.021	0.015	ug/L		07/15/24 08:26	07/15/24 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 13:10*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6A-ROX-071024
Date Collected: 07/10/24 09:55
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-4
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			07/15/24 15:27	1
Acrolein	ND		20	3.3	ug/L			07/15/24 15:27	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 15:27	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 15:27	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 15:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 15:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 15:27	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 15:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 15:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 15:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 15:27	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 15:27	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 15:27	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 15:27	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 15:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 15:27	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 15:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 15:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 15:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 15:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 15:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 15:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 15:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 15:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 15:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 15:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 15:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 15:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 15:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 15:27	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 15:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 15:27	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 15:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 15:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 15:27	1
Methyl tert-butyl ether	**0.29**	**J**	1.0	0.22	ug/L			07/15/24 15:27	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 15:27	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 15:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 15:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 15:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 15:27	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 15:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 15:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 15:27	1

Client Sample ID: MW6A-ROX-071024
Date Collected: 07/10/24 09:55
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-4
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			07/15/24 15:27	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 15:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 15:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 15:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 15:27	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 15:27	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 15:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 15:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 15:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 15:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 15:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 15:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 15:27	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 15:27	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 15:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 15:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 15:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 15:27	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 15:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 15:27	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*07/15/24 15:27*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/15/24 15:27*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 15:27*	*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	0.10	ug/L		07/16/24 10:32	07/17/24 14:22	1
Acenaphthylene	**0.20**		0.20	0.045	ug/L		07/16/24 10:32	07/17/24 14:22	1
Anthracene	ND		0.20	0.048	ug/L		07/16/24 10:32	07/17/24 14:22	1
Benzo[a]anthracene	**0.039**	**J**	0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:22	1
Benzo[a]pyrene	ND		0.20	0.065	ug/L		07/16/24 10:32	07/17/24 14:22	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 14:22	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 14:22	1
Benzo[k]fluoranthene	ND		0.20	0.063	ug/L		07/16/24 10:32	07/17/24 14:22	1
Chrysene	**0.036**	**J**	0.20	0.033	ug/L		07/16/24 10:32	07/17/24 14:22	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.049	ug/L		07/16/24 10:32	07/17/24 14:22	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:22	1
Fluorene	ND		0.20	0.090	ug/L		07/16/24 10:32	07/17/24 14:22	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:22	1
Phenanthrene	ND		0.20	0.091	ug/L		07/16/24 10:32	07/17/24 14:22	1
Pyrene	**0.055**	**J**	0.20	0.039	ug/L		07/16/24 10:32	07/17/24 14:22	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/16/24 10:32	07/17/24 14:22	1
2-Methylnaphthalene	**0.10**	**J U**	0.20	0.067	ug/L		07/16/24 10:32	07/17/24 14:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*07/16/24 10:32*	*07/17/24 14:22*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*07/16/24 10:32*	*07/17/24 14:22*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6A-ROX-071024
Date Collected: 07/10/24 09:55
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-4
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*	*07/16/24 10:32*	*07/17/24 14:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
Benzenethiol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:18	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 22:18	1
Benzyl alcohol	ND		10	7.4	ug/L		07/16/24 10:32	07/17/24 22:18	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 22:18	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Chloroaniline	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		07/16/24 10:32	07/17/24 22:18	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 22:18	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 22:18	1
Diethyl phthalate	ND		10	4.5	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4-Dimethylphenol	ND	UJ	10	5.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
Dimethyl phthalate	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4-Dinitrophenol	ND		30	4.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 22:18	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		07/16/24 10:32	07/17/24 22:18	1
1,4-Dioxane	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 22:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
Hexachlorobenzene	ND		10	9.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
Hexachlorocyclopentadiene	ND	UJ	20	4.6	ug/L		07/16/24 10:32	07/17/24 22:18	1
Hexachloroethane	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
Indene	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 22:18	1
Isophorone	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:32	07/17/24 22:18	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
2-Nitroaniline	ND		10	5.1	ug/L		07/16/24 10:32	07/17/24 22:18	1
3-Nitroaniline	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Nitroaniline	ND	*+	10	4.1	ug/L		07/16/24 10:32	07/17/24 22:18	1
Nitrobenzene	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 22:18	1
2-Nitrophenol	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:32	07/17/24 22:18	1

Client Sample ID: MW6A-ROX-071024

Date Collected: 07/10/24 09:55
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 22:18	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 22:18	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 22:18	1
Phenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 22:18	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:18	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 22:18	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:32	07/17/24 22:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*07/16/24 10:32*	*07/17/24 22:18*	*1*
2-Fluorophenol	*58*		*10 - 105*	*07/16/24 10:32*	*07/17/24 22:18*	*1*
Nitrobenzene-d5	*78*		*16 - 127*	*07/16/24 10:32*	*07/17/24 22:18*	*1*
Phenol-d5	*43*		*10 - 129*	*07/16/24 10:32*	*07/17/24 22:18*	*1*
Terphenyl-d14	*103*		*13 - 150*	*07/16/24 10:32*	*07/17/24 22:18*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*07/16/24 10:32*	*07/17/24 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-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/15/24 08:26	07/15/24 13:31	1
1,2-Dibromoethane	ND	*+	0.020	0.015	ug/L		07/15/24 08:26	07/15/24 13:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 13:31*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6B-ROX-071024
Date Collected: 07/10/24 10:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-5
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			07/15/24 15:51	1
Acrolein	ND		20	3.3	ug/L			07/15/24 15:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 15:51	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 15:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 15:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 15:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 15:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 15:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 15:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 15:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 15:51	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 15:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 15:51	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 15:51	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 15:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 15:51	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 15:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 15:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 15:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 15:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 15:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 15:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 15:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 15:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 15:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 15:51	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 15:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 15:51	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 15:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 15:51	1
Methyl tert-butyl ether	**0.47**	**J**	1.0	0.22	ug/L			07/15/24 15:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 15:51	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 15:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 15:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 15:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 15:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 15:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 15:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 15:51	1

Client Sample ID: MW6B-ROX-071024
Date Collected: 07/10/24 10:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-5
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			07/15/24 15:51	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 15:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 15:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 15:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 15:51	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 15:51	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 15:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 15:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 15:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 15:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 15:51	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 15:51	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 15:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 15:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 15:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 15:51	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 15:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 15:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*07/15/24 15:51*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/15/24 15:51*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/15/24 15:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.10	ug/L		07/16/24 10:32	07/17/24 14:43	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:32	07/17/24 14:43	1
Anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 14:43	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:43	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/16/24 10:32	07/17/24 14:43	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 14:43	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 14:43	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/16/24 10:32	07/17/24 14:43	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 14:43	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/16/24 10:32	07/17/24 14:43	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:43	1
Fluorene	ND		0.20	0.090	ug/L		07/16/24 10:32	07/17/24 14:43	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 14:43	1
Phenanthrene	ND		0.20	0.091	ug/L		07/16/24 10:32	07/17/24 14:43	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 14:43	1
1-Methylnaphthalene	ND		0.20	0.081	ug/L		07/16/24 10:32	07/17/24 14:43	1
2-Methylnaphthalene	**0.13**	**J**	0.20	0.066	ug/L		07/16/24 10:32	07/17/24 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*07/16/24 10:32*	*07/17/24 14:43*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*07/16/24 10:32*	*07/17/24 14:43*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6B-ROX-071024
Date Collected: 07/10/24 10:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-5
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*	*07/16/24 10:32*	*07/17/24 14:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
Benzenethiol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:43	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 22:43	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 22:43	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 22:43	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 22:43	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 22:43	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
Hexachlorobenzene	ND		10	9.8	ug/L		07/16/24 10:32	07/17/24 22:43	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/16/24 10:32	07/17/24 22:43	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
Indene	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:32	07/17/24 22:43	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Nitroaniline	ND	*+	10	4.1	ug/L		07/16/24 10:32	07/17/24 22:43	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 22:43	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 22:43	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:32	07/17/24 22:43	1

Client Sample ID: MW6B-ROX-071024

Date Collected: 07/10/24 10:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 22:43	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 22:43	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 22:43	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 22:43	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 22:43	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 22:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:32	07/17/24 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*21 - 114*	*07/16/24 10:32*	*07/17/24 22:43*	*1*
2-Fluorophenol	*50*		*10 - 105*	*07/16/24 10:32*	*07/17/24 22:43*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*07/16/24 10:32*	*07/17/24 22:43*	*1*
Phenol-d5	*37*		*10 - 129*	*07/16/24 10:32*	*07/17/24 22:43*	*1*
Terphenyl-d14	*79*		*13 - 150*	*07/16/24 10:32*	*07/17/24 22:43*	*1*
2,4,6-Tribromophenol	*47*		*10 - 150*	*07/16/24 10:32*	*07/17/24 22:43*	*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		0.031	0.018	ug/L		07/15/24 08:26	07/15/24 13:52	1
1,2-Dibromoethane	ND	*+	0.021	0.015	ug/L		07/15/24 08:26	07/15/24 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 13:52*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6C-ROX-071024
Date Collected: 07/10/24 12:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-6
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			07/15/24 16:16	1
Acrolein	ND		20	3.3	ug/L			07/15/24 16:16	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 16:16	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 16:16	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 16:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 16:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 16:16	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 16:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 16:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 16:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 16:16	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 16:16	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 16:16	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 16:16	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 16:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 16:16	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 16:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 16:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 16:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 16:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 16:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 16:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 16:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 16:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 16:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 16:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 16:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 16:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 16:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 16:16	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 16:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 16:16	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 16:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 16:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 16:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 16:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 16:16	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 16:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 16:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 16:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 16:16	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 16:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 16:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 16:16	1

Client Sample ID: MW6C-ROX-071024
Date Collected: 07/10/24 12:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-6
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			07/15/24 16:16	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 16:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 16:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 16:16	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 16:16	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 16:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 16:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 16:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 16:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 16:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 16:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 16:16	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 16:16	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 16:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 16:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 16:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 16:16	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 16:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 16:16	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*07/15/24 16:16*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/15/24 16:16*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/15/24 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		0.19	0.093	ug/L		07/16/24 10:32	07/17/24 15:04	1
Acenaphthylene	ND		0.19	0.041	ug/L		07/16/24 10:32	07/17/24 15:04	1
Anthracene	ND		0.19	0.044	ug/L		07/16/24 10:32	07/17/24 15:04	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 15:04	1
Benzo[a]pyrene	ND		0.19	0.060	ug/L		07/16/24 10:32	07/17/24 15:04	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/16/24 10:32	07/17/24 15:04	1
Benzo[g,h,i]perylene	ND		0.19	0.025	ug/L		07/16/24 10:32	07/17/24 15:04	1
Benzo[k]fluoranthene	ND		0.19	0.058	ug/L		07/16/24 10:32	07/17/24 15:04	1
Chrysene	ND		0.19	0.031	ug/L		07/16/24 10:32	07/17/24 15:04	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.045	ug/L		07/16/24 10:32	07/17/24 15:04	1
Fluoranthene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 15:04	1
Fluorene	ND		0.19	0.084	ug/L		07/16/24 10:32	07/17/24 15:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 15:04	1
Phenanthrene	ND		0.19	0.085	ug/L		07/16/24 10:32	07/17/24 15:04	1
Pyrene	ND		0.19	0.037	ug/L		07/16/24 10:32	07/17/24 15:04	1
1-Methylnaphthalene	ND		0.19	0.075	ug/L		07/16/24 10:32	07/17/24 15:04	1
2-Methylnaphthalene	**0.092**	**J**	0.19	0.062	ug/L		07/16/24 10:32	07/17/24 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*18 - 147*	*07/16/24 10:32*	*07/17/24 15:04*	*1*
2-Fluorobiphenyl	*79*		*15 - 128*	*07/16/24 10:32*	*07/17/24 15:04*	*1*

Client Sample ID: MW6C-ROX-071024
Date Collected: 07/10/24 12:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*82*		*10 - 144*	*07/16/24 10:32*	*07/17/24 15:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.2	ug/L		07/16/24 10:32	07/17/24 23:08	1
Benzenethiol	ND		9.4	9.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
Benzoic acid	ND		28	23	ug/L		07/16/24 10:32	07/17/24 23:08	1
Benzyl alcohol	ND		9.4	6.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		07/16/24 10:32	07/17/24 23:08	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		07/16/24 10:32	07/17/24 23:08	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Chloroaniline	ND		9.4	4.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		07/16/24 10:32	07/17/24 23:08	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		07/16/24 10:32	07/17/24 23:08	1
2-Chlorophenol	ND		9.4	3.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		07/16/24 10:32	07/17/24 23:08	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		07/16/24 10:32	07/17/24 23:08	1
Dibenzofuran	ND		9.4	3.8	ug/L		07/16/24 10:32	07/17/24 23:08	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
Diethyl phthalate	ND		9.4	4.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4-Dimethylphenol	ND	UJ	9.4	4.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
Dimethyl phthalate	ND		9.4	4.0	ug/L		07/16/24 10:32	07/17/24 23:08	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		07/16/24 10:32	07/17/24 23:08	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		07/16/24 10:32	07/17/24 23:08	1
1,4-Dioxane	ND		9.4	4.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
Hexachlorocyclopentadiene	ND	UJ	19	4.2	ug/L		07/16/24 10:32	07/17/24 23:08	1
Hexachloroethane	ND		9.4	4.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
Indene	ND		9.4	3.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
Isophorone	ND		9.4	4.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
2-Methylphenol	ND		9.4	3.0	ug/L		07/16/24 10:32	07/17/24 23:08	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
2-Nitroaniline	ND		9.4	4.7	ug/L		07/16/24 10:32	07/17/24 23:08	1
3-Nitroaniline	ND		9.4	4.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Nitroaniline	ND	*+	9.4	3.9	ug/L		07/16/24 10:32	07/17/24 23:08	1
Nitrobenzene	ND		9.4	4.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
2-Nitrophenol	ND		9.4	4.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
4-Nitrophenol	ND		9.4	3.1	ug/L		07/16/24 10:32	07/17/24 23:08	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		07/16/24 10:32	07/17/24 23:08	1

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

Job ID: 400-259040-1

Client Sample ID: MW6C-ROX-071024
Date Collected: 07/10/24 12:35
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-6
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		9.4	2.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		07/16/24 10:32	07/17/24 23:08	1
Pentachlorophenol	ND		19	11	ug/L		07/16/24 10:32	07/17/24 23:08	1
Phenol	ND		9.4	4.0	ug/L		07/16/24 10:32	07/17/24 23:08	1
Pyridine	ND		9.4	9.4	ug/L		07/16/24 10:32	07/17/24 23:08	1
Quinoline	ND		9.4	2.3	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		07/16/24 10:32	07/17/24 23:08	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		07/16/24 10:32	07/17/24 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*21 - 114*	*07/16/24 10:32*	*07/17/24 23:08*	*1*
2-Fluorophenol	*59*		*10 - 105*	*07/16/24 10:32*	*07/17/24 23:08*	*1*
Nitrobenzene-d5	*80*		*16 - 127*	*07/16/24 10:32*	*07/17/24 23:08*	*1*
Phenol-d5	*42*		*10 - 129*	*07/16/24 10:32*	*07/17/24 23:08*	*1*
Terphenyl-d14	*107*		*13 - 150*	*07/16/24 10:32*	*07/17/24 23:08*	*1*
2,4,6-Tribromophenol	*64*		*10 - 150*	*07/16/24 10:32*	*07/17/24 23:08*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/15/24 08:26	07/15/24 14:13	1
1,2-Dibromoethane	ND	*+	0.021	0.016	ug/L		07/15/24 08:26	07/15/24 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 14:13*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6D-ROX-071024
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-7
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			07/15/24 16:40	1
Acrolein	ND		20	3.3	ug/L			07/15/24 16:40	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 16:40	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 16:40	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 16:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 16:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 16:40	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 16:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 16:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 16:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 16:40	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 16:40	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 16:40	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 16:40	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 16:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 16:40	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 16:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 16:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 16:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 16:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 16:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 16:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 16:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 16:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 16:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 16:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 16:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 16:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 16:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 16:40	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 16:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 16:40	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 16:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 16:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 16:40	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 16:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 16:40	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 16:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 16:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 16:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 16:40	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 16:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 16:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 16:40	1

Client Sample ID: MW6D-ROX-071024

Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-7

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			07/15/24 16:40	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 16:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 16:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 16:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 16:40	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 16:40	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 16:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 16:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 16:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 16:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 16:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 16:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 16:40	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 16:40	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 16:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 16:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 16:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 16:40	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 16:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 16:40	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*07/15/24 16:40*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/15/24 16:40*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/15/24 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		07/16/24 10:32	07/17/24 15:26	1
Acenaphthylene	ND		0.21	0.046	ug/L		07/16/24 10:32	07/17/24 15:26	1
Anthracene	ND		0.21	0.049	ug/L		07/16/24 10:32	07/17/24 15:26	1
Benzo[a]anthracene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 15:26	1
Benzo[a]pyrene	ND		0.21	0.067	ug/L		07/16/24 10:32	07/17/24 15:26	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/16/24 10:32	07/17/24 15:26	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/16/24 10:32	07/17/24 15:26	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/16/24 10:32	07/17/24 15:26	1
Chrysene	ND		0.21	0.034	ug/L		07/16/24 10:32	07/17/24 15:26	1
Dibenz(a,h)anthracene	ND	UJ	0.21	0.050	ug/L		07/16/24 10:32	07/17/24 15:26	1
Fluoranthene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 15:26	1
Fluorene	ND		0.21	0.092	ug/L		07/16/24 10:32	07/17/24 15:26	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/16/24 10:32	07/17/24 15:26	1
Phenanthrene	ND		0.21	0.094	ug/L		07/16/24 10:32	07/17/24 15:26	1
Pyrene	ND		0.21	0.041	ug/L		07/16/24 10:32	07/17/24 15:26	1
1-Methylnaphthalene	ND		0.21	0.083	ug/L		07/16/24 10:32	07/17/24 15:26	1
2-Methylnaphthalene	ND		0.21	0.069	ug/L		07/16/24 10:32	07/17/24 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*111*		*18 - 147*	*07/16/24 10:32*	*07/17/24 15:26*	*1*
2-Fluorobiphenyl	*81*		*15 - 128*	*07/16/24 10:32*	*07/17/24 15:26*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6D-ROX-071024
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	85		10 - 144	07/16/24 10:32	07/17/24 15:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	9.0	ug/L		07/16/24 10:32	07/17/24 23:32	1
Benzenethiol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:32	1
Benzoic acid	ND		31	25	ug/L		07/16/24 10:32	07/17/24 23:32	1
Benzyl alcohol	ND		10	7.6	ug/L		07/16/24 10:32	07/17/24 23:32	1
Bis(2-chloroethoxy)methane	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
Bis(2-chloroethyl)ether	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 23:32	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
Bis(2-ethylhexyl) phthalate	ND		10	9.2	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Bromophenyl phenyl ether	ND		10	8.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Chloroaniline	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Chloro-3-methylphenol	ND		10	5.5	ug/L		07/16/24 10:32	07/17/24 23:32	1
2-Chloronaphthalene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
2-Chlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
Dibenzofuran	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 23:32	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4-Dichlorophenol	ND		10	4.5	ug/L		07/16/24 10:32	07/17/24 23:32	1
Diethyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4-Dimethylphenol	ND	UJ	10	5.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
Dimethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
Di-n-butyl phthalate	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4-Dinitrophenol	ND		31	4.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4-Dinitrotoluene	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,6-Dinitrotoluene	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 23:32	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		07/16/24 10:32	07/17/24 23:32	1
1,4-Dioxane	ND		10	4.5	ug/L		07/16/24 10:32	07/17/24 23:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
Hexachlorobenzene	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:32	1
Hexachlorocyclopentadiene	ND	UJ	21	4.7	ug/L		07/16/24 10:32	07/17/24 23:32	1
Hexachloroethane	ND		10	5.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
Indene	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 23:32	1
Isophorone	ND		10	5.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
2-Methylphenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 23:32	1
3 & 4 Methylphenol	ND		21	4.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
2-Nitroaniline	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 23:32	1
3-Nitroaniline	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Nitroaniline	ND	*+	10	4.3	ug/L		07/16/24 10:32	07/17/24 23:32	1
Nitrobenzene	ND		10	4.9	ug/L		07/16/24 10:32	07/17/24 23:32	1
2-Nitrophenol	ND		10	4.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
4-Nitrophenol	ND		10	3.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		07/16/24 10:32	07/17/24 23:32	1

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

Job ID: 400-259040-1

Client Sample ID: MW6D-ROX-071024
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-7
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	2.6	ug/L		07/16/24 10:32	07/17/24 23:32	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 23:32	1
Pentachlorophenol	ND		21	12	ug/L		07/16/24 10:32	07/17/24 23:32	1
Phenol	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 23:32	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:32	1
Quinoline	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4,5-Trichlorophenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 23:32	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*21 - 114*	*07/16/24 10:32*	*07/17/24 23:32*	*1*
2-Fluorophenol	*59*		*10 - 105*	*07/16/24 10:32*	*07/17/24 23:32*	*1*
Nitrobenzene-d5	*75*		*16 - 127*	*07/16/24 10:32*	*07/17/24 23:32*	*1*
Phenol-d5	*44*		*10 - 129*	*07/16/24 10:32*	*07/17/24 23:32*	*1*
Terphenyl-d14	*90*		*13 - 150*	*07/16/24 10:32*	*07/17/24 23:32*	*1*
2,4,6-Tribromophenol	*59*		*10 - 150*	*07/16/24 10:32*	*07/17/24 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-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/15/24 08:26	07/15/24 14:35	1
1,2-Dibromoethane	ND	*+	0.022	0.016	ug/L		07/15/24 08:26	07/15/24 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 14:35*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6D-ROX-071024-DUP
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-8
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			07/15/24 17:05	1
Acrolein	ND		20	3.3	ug/L			07/15/24 17:05	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 17:05	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 17:05	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 17:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 17:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 17:05	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 17:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 17:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 17:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 17:05	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 17:05	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 17:05	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 17:05	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 17:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 17:05	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 17:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 17:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 17:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 17:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 17:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 17:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 17:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 17:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 17:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 17:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 17:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 17:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 17:05	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 17:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 17:05	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 17:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 17:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 17:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 17:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 17:05	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 17:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 17:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 17:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 17:05	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 17:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 17:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 17:05	1

Client Sample ID: MW6D-ROX-071024-DUP
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-8
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			07/15/24 17:05	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 17:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 17:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 17:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 17:05	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 17:05	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 17:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 17:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 17:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 17:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 17:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 17:05	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 17:05	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 17:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 17:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 17:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 17:05	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 17:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 17:05	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 130*		*07/15/24 17:05*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/15/24 17:05*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 17:05*	*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	0.099	ug/L		07/16/24 10:32	07/17/24 15:47	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:32	07/17/24 15:47	1
Anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 15:47	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 15:47	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/16/24 10:32	07/17/24 15:47	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:32	07/17/24 15:47	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:32	07/17/24 15:47	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/16/24 10:32	07/17/24 15:47	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 15:47	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/16/24 10:32	07/17/24 15:47	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 15:47	1
Fluorene	ND		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 15:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 15:47	1
Phenanthrene	ND		0.20	0.090	ug/L		07/16/24 10:32	07/17/24 15:47	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 15:47	1
1-Methylnaphthalene	**0.098**	**J**	0.20	0.080	ug/L		07/16/24 10:32	07/17/24 15:47	1
2-Methylnaphthalene	**0.18**	**J**	0.20	0.066	ug/L		07/16/24 10:32	07/17/24 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*18 - 147*	*07/16/24 10:32*	*07/17/24 15:47*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*07/16/24 10:32*	*07/17/24 15:47*	*1*

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

Job ID: 400-259040-1

Client Sample ID: MW6D-ROX-071024-DUP
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*85*		*10 - 144*	*07/16/24 10:32*	*07/17/24 15:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
Benzenethiol	ND		10	9.9	ug/L		07/16/24 10:32	07/17/24 23:57	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 23:57	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 23:57	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:32	07/17/24 23:57	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 23:57	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:32	07/17/24 23:57	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 23:57	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 23:57	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 23:57	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/16/24 10:32	07/17/24 23:57	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
Indene	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:32	07/17/24 23:57	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Nitroaniline	ND	*+	10	4.1	ug/L		07/16/24 10:32	07/17/24 23:57	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 23:57	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 23:57	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:32	07/17/24 23:57	1

Client Sample ID: MW6D-ROX-071024-DUP
Date Collected: 07/10/24 13:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-8
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	2.5	ug/L		07/16/24 10:32	07/17/24 23:57	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 23:57	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 23:57	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 23:57	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 23:57	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 23:57	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:32	07/17/24 23:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*21 - 114*	*07/16/24 10:32*	*07/17/24 23:57*	*1*
2-Fluorophenol	*60*		*10 - 105*	*07/16/24 10:32*	*07/17/24 23:57*	*1*
Nitrobenzene-d5	*79*		*16 - 127*	*07/16/24 10:32*	*07/17/24 23:57*	*1*
Phenol-d5	*45*		*10 - 129*	*07/16/24 10:32*	*07/17/24 23:57*	*1*
Terphenyl-d14	*105*		*13 - 150*	*07/16/24 10:32*	*07/17/24 23:57*	*1*
2,4,6-Tribromophenol	*62*		*10 - 150*	*07/16/24 10:32*	*07/17/24 23:57*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/15/24 08:26	07/15/24 14:56	1
1,2-Dibromoethane	ND	*+	0.020	0.015	ug/L		07/15/24 08:26	07/15/24 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 14:56*	*1*

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-B
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-9
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			07/15/24 14:14	1
Acrolein	ND		20	3.3	ug/L			07/15/24 14:14	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 14:14	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 14:14	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 14:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 14:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 14:14	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 14:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 14:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 14:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 14:14	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 14:14	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 14:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/24 14:14	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 14:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 14:14	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 14:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 14:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 14:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 14:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 14:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 14:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 14:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 14:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 14:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 14:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 14:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 14:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 14:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 14:14	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 14:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 14:14	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 14:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 14:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 14:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 14:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 14:14	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 14:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 14:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 14:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 14:14	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 14:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 14:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 14:14	1

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-B
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-9
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			07/15/24 14:14	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 14:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 14:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 14:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 14:14	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 14:14	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 14:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 14:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 14:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 14:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 14:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 14:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 14:14	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 14:14	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 14:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 14:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 14:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 14:14	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 14:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 14:14	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 14:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/15/24 14:14*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/15/24 14:14*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 14:14*	*1*

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8011-B
Date Collected: 07/10/24 12:00
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-10
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.037	0.021	ug/L		07/15/24 08:26	07/15/24 15:38	1
1,2-Dibromoethane	ND	*+	0.025	0.018	ug/L		07/15/24 08:26	07/15/24 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 15:38*	*1*

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024-EB
Date Collected: 07/10/24 08:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-11
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			07/15/24 14:38	1
Acrolein	ND		20	3.3	ug/L			07/15/24 14:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 14:38	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 14:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 14:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 14:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 14:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 14:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 14:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 14:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 14:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 14:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 14:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/24 14:38	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 14:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 14:38	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 14:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 14:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 14:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 14:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 14:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 14:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 14:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 14:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 14:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 14:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 14:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 14:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 14:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 14:38	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 14:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 14:38	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 14:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 14:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 14:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 14:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 14:38	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 14:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 14:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 14:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 14:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 14:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 14:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 14:38	1

Client Sample ID: ROST4PZE-ROX-071024-EB
Date Collected: 07/10/24 08:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-11
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			07/15/24 14:38	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 14:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 14:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 14:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 14:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 14:38	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 14:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 14:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 14:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 14:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 14:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 14:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 14:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 14:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 14:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 14:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 14:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 14:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 14:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 14:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*72 - 130*		*07/15/24 14:38*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/15/24 14:38*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/15/24 14:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		07/16/24 10:32	07/17/24 16:08	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/16/24 10:32	07/17/24 16:08	1
Anthracene	ND		0.20	0.046	ug/L		07/16/24 10:32	07/17/24 16:08	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 16:08	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/16/24 10:32	07/17/24 16:08	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/16/24 10:32	07/17/24 16:08	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/16/24 10:32	07/17/24 16:08	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/16/24 10:32	07/17/24 16:08	1
Chrysene	ND		0.20	0.032	ug/L		07/16/24 10:32	07/17/24 16:08	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 16:08	1
Fluoranthene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 16:08	1
Fluorene	ND		0.20	0.087	ug/L		07/16/24 10:32	07/17/24 16:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 16:08	1
Phenanthrene	ND		0.20	0.088	ug/L		07/16/24 10:32	07/17/24 16:08	1
Pyrene	ND		0.20	0.038	ug/L		07/16/24 10:32	07/17/24 16:08	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		07/16/24 10:32	07/17/24 16:08	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/16/24 10:32	07/17/24 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*124*		*18 - 147*	*07/16/24 10:32*	*07/17/24 16:08*	*1*
2-Fluorobiphenyl	*82*		*15 - 128*	*07/16/24 10:32*	*07/17/24 16:08*	*1*

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024-EB

Date Collected: 07/10/24 08:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-11

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*	*07/16/24 10:32*	*07/17/24 16:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
Benzenethiol	ND		9.8	9.7	ug/L		07/16/24 10:32	07/18/24 00:22	1
Benzoic acid	ND		29	23	ug/L		07/16/24 10:32	07/18/24 00:22	1
Benzyl alcohol	ND		9.8	7.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/16/24 10:32	07/18/24 00:22	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/16/24 10:32	07/18/24 00:22	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/16/24 10:32	07/18/24 00:22	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/16/24 10:32	07/18/24 00:22	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/16/24 10:32	07/18/24 00:22	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/16/24 10:32	07/18/24 00:22	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/16/24 10:32	07/18/24 00:22	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/16/24 10:32	07/18/24 00:22	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/16/24 10:32	07/18/24 00:22	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/16/24 10:32	07/18/24 00:22	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/16/24 10:32	07/18/24 00:22	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/16/24 10:32	07/18/24 00:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/16/24 10:32	07/18/24 00:22	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		07/16/24 10:32	07/18/24 00:22	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
Indene	ND		9.8	3.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
Isophorone	ND		9.8	5.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/16/24 10:32	07/18/24 00:22	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Nitroaniline	ND	*+	9.8	4.0	ug/L		07/16/24 10:32	07/18/24 00:22	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/16/24 10:32	07/18/24 00:22	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/16/24 10:32	07/18/24 00:22	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/16/24 10:32	07/18/24 00:22	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		07/16/24 10:32	07/18/24 00:22	1

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024-EB
Date Collected: 07/10/24 08:30
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-11
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	2.4	ug/L		07/16/24 10:32	07/18/24 00:22	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/16/24 10:32	07/18/24 00:22	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/18/24 00:22	1
Phenol	ND		9.8	4.1	ug/L		07/16/24 10:32	07/18/24 00:22	1
Pyridine	ND		9.8	9.8	ug/L		07/16/24 10:32	07/18/24 00:22	1
Quinoline	ND		9.8	2.3	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/16/24 10:32	07/18/24 00:22	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/16/24 10:32	07/18/24 00:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*21 - 114*	*07/16/24 10:32*	*07/18/24 00:22*	*1*
2-Fluorophenol	*61*		*10 - 105*	*07/16/24 10:32*	*07/18/24 00:22*	*1*
Nitrobenzene-d5	*80*		*16 - 127*	*07/16/24 10:32*	*07/18/24 00:22*	*1*
Phenol-d5	*46*		*10 - 129*	*07/16/24 10:32*	*07/18/24 00:22*	*1*
Terphenyl-d14	*104*		*13 - 150*	*07/16/24 10:32*	*07/18/24 00:22*	*1*
2,4,6-Tribromophenol	*58*		*10 - 150*	*07/16/24 10:32*	*07/18/24 00:22*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/15/24 08:26	07/15/24 15:59	1
1,2-Dibromoethane	ND	*+	0.022	0.016	ug/L		07/15/24 08:26	07/15/24 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 15:59*	*1*

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024
Date Collected: 07/10/24 09:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-12
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			07/15/24 17:29	1
Acrolein	ND		20	3.3	ug/L			07/15/24 17:29	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 17:29	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 17:29	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 17:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 17:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 17:29	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 17:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 17:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 17:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 17:29	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 17:29	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 17:29	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 17:29	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 17:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 17:29	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 17:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 17:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 17:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 17:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 17:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 17:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 17:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 17:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 17:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 17:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 17:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 17:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 17:29	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 17:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 17:29	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 17:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 17:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 17:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 17:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 17:29	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 17:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 17:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 17:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 17:29	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 17:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 17:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 17:29	1

Client Sample ID: ROST4PZE-ROX-071024

Lab Sample ID: 400-259040-12

Date Collected: 07/10/24 09:50

Matrix: Water

Date Received: 07/11/24 08:58

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			07/15/24 17:29	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 17:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 17:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 17:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 17:29	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 17:29	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 17:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 17:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 17:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 17:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 17:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 17:29	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 17:29	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 17:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 17:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 17:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 17:29	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 17:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 17:29	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*07/15/24 17:29*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/15/24 17:29*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*07/15/24 17:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.096	ug/L		07/16/24 10:32	07/17/24 16:29	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/16/24 10:32	07/17/24 16:29	1
Anthracene	**0.069**	**J**	0.19	0.046	ug/L		07/16/24 10:32	07/17/24 16:29	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/16/24 10:32	07/17/24 16:29	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/16/24 10:32	07/17/24 16:29	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/16/24 10:32	07/17/24 16:29	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/16/24 10:32	07/17/24 16:29	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/16/24 10:32	07/17/24 16:29	1
Chrysene	ND		0.19	0.032	ug/L		07/16/24 10:32	07/17/24 16:29	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.047	ug/L		07/16/24 10:32	07/17/24 16:29	1
Fluoranthene	**0.037**	**J**	0.19	0.033	ug/L		07/16/24 10:32	07/17/24 16:29	1
Fluorene	ND		0.19	0.087	ug/L		07/16/24 10:32	07/17/24 16:29	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/16/24 10:32	07/17/24 16:29	1
Phenanthrene	ND		0.19	0.088	ug/L		07/16/24 10:32	07/17/24 16:29	1
Pyrene	**0.072**	**J**	0.19	0.038	ug/L		07/16/24 10:32	07/17/24 16:29	1
1-Methylnaphthalene	ND		0.19	0.078	ug/L		07/16/24 10:32	07/17/24 16:29	1
2-Methylnaphthalene	ND		0.19	0.064	ug/L		07/16/24 10:32	07/17/24 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*97*		*18 - 147*	*07/16/24 10:32*	*07/17/24 16:29*	*1*
2-Fluorobiphenyl	*75*		*15 - 128*	*07/16/24 10:32*	*07/17/24 16:29*	*1*

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

Job ID: 400-259040-1

Client Sample ID: ROST4PZE-ROX-071024
Date Collected: 07/10/24 09:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-12
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*85*		*10 - 144*	*07/16/24 10:32*	*07/17/24 16:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
Benzenethiol	ND		9.7	9.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
Benzoic acid	ND		29	23	ug/L		07/16/24 10:32	07/18/24 00:46	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/16/24 10:32	07/18/24 00:46	1
bis (2-chloroisopropyl) ether	ND		9.7	1.8	ug/L		07/16/24 10:32	07/18/24 00:46	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.7	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Bromophenyl phenyl ether	ND		9.7	8.4	ug/L		07/16/24 10:32	07/18/24 00:46	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Chloroaniline	ND		9.7	4.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Chloro-3-methylphenol	ND		9.7	5.2	ug/L		07/16/24 10:32	07/18/24 00:46	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/16/24 10:32	07/18/24 00:46	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/16/24 10:32	07/18/24 00:46	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/16/24 10:32	07/18/24 00:46	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/16/24 10:32	07/18/24 00:46	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4-Dimethylphenol	ND	UJ	9.7	5.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4-Dinitrotoluene	ND		9.7	5.0	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/16/24 10:32	07/18/24 00:46	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/16/24 10:32	07/18/24 00:46	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/16/24 10:32	07/18/24 00:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/16/24 10:32	07/18/24 00:46	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/16/24 10:32	07/18/24 00:46	1
Hexachlorocyclopentadiene	ND	UJ	19	4.4	ug/L		07/16/24 10:32	07/18/24 00:46	1
Hexachloroethane	ND		9.7	5.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
Indene	ND		9.7	3.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
Isophorone	ND		9.7	5.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
2-Nitroaniline	ND		9.7	4.9	ug/L		07/16/24 10:32	07/18/24 00:46	1
3-Nitroaniline	ND		9.7	4.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Nitroaniline	ND	*+	9.7	4.0	ug/L		07/16/24 10:32	07/18/24 00:46	1
Nitrobenzene	ND		9.7	4.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
2-Nitrophenol	ND		9.7	4.5	ug/L		07/16/24 10:32	07/18/24 00:46	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/16/24 10:32	07/18/24 00:46	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/16/24 10:32	07/18/24 00:46	1

Client Sample ID: ROST4PZE-ROX-071024
Date Collected: 07/10/24 09:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-12
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		9.7	2.4	ug/L		07/16/24 10:32	07/18/24 00:46	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/16/24 10:32	07/18/24 00:46	1
Pentachlorophenol	ND		19	12	ug/L		07/16/24 10:32	07/18/24 00:46	1
Phenol	ND		9.7	4.1	ug/L		07/16/24 10:32	07/18/24 00:46	1
Pyridine	ND		9.7	9.7	ug/L		07/16/24 10:32	07/18/24 00:46	1
Quinoline	ND		9.7	2.3	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/16/24 10:32	07/18/24 00:46	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/16/24 10:32	07/18/24 00:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*21 - 114*	*07/16/24 10:32*	*07/18/24 00:46*	*1*
2-Fluorophenol	*63*		*10 - 105*	*07/16/24 10:32*	*07/18/24 00:46*	*1*
Nitrobenzene-d5	*87*		*16 - 127*	*07/16/24 10:32*	*07/18/24 00:46*	*1*
Phenol-d5	*48*		*10 - 129*	*07/16/24 10:32*	*07/18/24 00:46*	*1*
Terphenyl-d14	*111*		*13 - 150*	*07/16/24 10:32*	*07/18/24 00:46*	*1*
2,4,6-Tribromophenol	*77*		*10 - 150*	*07/16/24 10:32*	*07/18/24 00:46*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/15/24 08:26	07/15/24 16:21	1
1,2-Dibromoethane	ND	*+	0.020	0.015	ug/L		07/15/24 08:26	07/15/24 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 16:21*	*1*

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

Job ID: 400-259040-1

Client Sample ID: P56-ROX-071024
Date Collected: 07/10/24 11:40
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**15**	J *+ J	25	10	ug/L			07/15/24 17:53	1
Acrolein	ND		20	3.3	ug/L			07/15/24 17:53	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 17:53	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 17:53	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 17:53	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 17:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 17:53	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 17:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 17:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 17:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 17:53	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 17:53	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 17:53	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 17:53	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 17:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 17:53	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 17:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 17:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 17:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 17:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 17:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 17:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 17:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 17:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 17:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 17:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 17:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 17:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 17:53	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 17:53	1
Isopropylbenzene	**6.5**		1.0	0.53	ug/L			07/15/24 17:53	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 17:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 17:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 17:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 17:53	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 17:53	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 17:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 17:53	1
N-Propylbenzene	**6.3**		1.0	0.69	ug/L			07/15/24 17:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 17:53	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 17:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 17:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 17:53	1

Client Sample ID: P56-ROX-071024

Date Collected: 07/10/24 11:40
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-13

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	**1.2**		1.0	0.70	ug/L			07/15/24 17:53	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 17:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 17:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 17:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 17:53	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 17:53	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 17:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 17:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 17:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 17:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 17:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 17:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 17:53	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 17:53	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 17:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 17:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 17:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 17:53	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 17:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 17:53	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*07/15/24 17:53*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/15/24 17:53*	*1*
Toluene-d8 (Surr)	*87*		*64 - 132*		*07/15/24 17:53*	*1*

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	0.099	ug/L		07/16/24 10:33	07/17/24 16:50	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:33	07/17/24 16:50	1
Anthracene	**0.10**	**J**	0.20	0.047	ug/L		07/16/24 10:33	07/17/24 16:50	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 16:50	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/16/24 10:33	07/17/24 16:50	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:33	07/17/24 16:50	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:33	07/17/24 16:50	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/16/24 10:33	07/17/24 16:50	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:33	07/17/24 16:50	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/16/24 10:33	07/17/24 16:50	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 16:50	1
Fluorene	**0.28**		0.20	0.089	ug/L		07/16/24 10:33	07/17/24 16:50	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 16:50	1
Phenanthrene	**0.43**		0.20	0.090	ug/L		07/16/24 10:33	07/17/24 16:50	1
Pyrene	**0.049**	**J**	0.20	0.039	ug/L		07/16/24 10:33	07/17/24 16:50	1
1-Methylnaphthalene	**4.3**		0.20	0.080	ug/L		07/16/24 10:33	07/17/24 16:50	1
2-Methylnaphthalene	**1.8**		0.20	0.066	ug/L		07/16/24 10:33	07/17/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*18 - 147*	*07/16/24 10:33*	*07/17/24 16:50*	*1*
2-Fluorobiphenyl	*59*		*15 - 128*	*07/16/24 10:33*	*07/17/24 16:50*	*1*

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

Job ID: 400-259040-1

Client Sample ID: P56-ROX-071024
Date Collected: 07/10/24 11:40
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-13
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*72*		*10 - 144*	*07/16/24 10:33*	*07/17/24 16:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
Benzenethiol	ND		10	9.9	ug/L		07/16/24 10:33	07/18/24 01:11	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:33	07/18/24 01:11	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:33	07/18/24 01:11	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:33	07/18/24 01:11	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:33	07/18/24 01:11	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:33	07/18/24 01:11	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:33	07/18/24 01:11	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:33	07/18/24 01:11	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:33	07/18/24 01:11	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/16/24 10:33	07/18/24 01:11	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
Indene	ND		10	3.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:33	07/18/24 01:11	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Nitroaniline	ND	*+	10	4.1	ug/L		07/16/24 10:33	07/18/24 01:11	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:11	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:33	07/18/24 01:11	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:33	07/18/24 01:11	1

Client Sample ID: P56-ROX-071024

Date Collected: 07/10/24 11:40
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-13

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	2.5	ug/L		07/16/24 10:33	07/18/24 01:11	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:33	07/18/24 01:11	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:33	07/18/24 01:11	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:33	07/18/24 01:11	1
Pyridine	ND		10	10	ug/L		07/16/24 10:33	07/18/24 01:11	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:33	07/18/24 01:11	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:33	07/18/24 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*21 - 114*	*07/16/24 10:33*	*07/18/24 01:11*	*1*
2-Fluorophenol	*48*		*10 - 105*	*07/16/24 10:33*	*07/18/24 01:11*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*07/16/24 10:33*	*07/18/24 01:11*	*1*
Phenol-d5	*36*		*10 - 129*	*07/16/24 10:33*	*07/18/24 01:11*	*1*
Terphenyl-d14	*84*		*13 - 150*	*07/16/24 10:33*	*07/18/24 01:11*	*1*
2,4,6-Tribromophenol	*54*		*10 - 150*	*07/16/24 10:33*	*07/18/24 01:11*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		07/15/24 08:26	07/15/24 16:42	1
1,2-Dibromoethane	ND	*+	0.023	0.017	ug/L		07/15/24 08:26	07/15/24 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*07/15/24 08:26*	*07/15/24 16:42*	*1*

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

Job ID: 400-259040-1

Client Sample ID: P57-ROX-071024
Date Collected: 07/10/24 12:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-14
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			07/15/24 18:18	1
Acrolein	ND		20	3.3	ug/L			07/15/24 18:18	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 18:18	1
Benzene	**6.2**		1.0	0.24	ug/L			07/15/24 18:18	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 18:18	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 18:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 18:18	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 18:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 18:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 18:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 18:18	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 18:18	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 18:18	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			07/15/24 18:18	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 18:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 18:18	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 18:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 18:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 18:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 18:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 18:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 18:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 18:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 18:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 18:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 18:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 18:18	1
Ethylbenzene	**0.54**	**J**	1.0	0.50	ug/L			07/15/24 18:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 18:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 18:18	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 18:18	1
Isopropylbenzene	**18**		1.0	0.53	ug/L			07/15/24 18:18	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 18:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 18:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 18:18	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 18:18	1
m-Xylene & p-Xylene	**0.68**	**J**	5.0	0.63	ug/L			07/15/24 18:18	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 18:18	1
n-Butylbenzene	**1.3**		1.0	0.76	ug/L			07/15/24 18:18	1
N-Propylbenzene	**16**		1.0	0.69	ug/L			07/15/24 18:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 18:18	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 18:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 18:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/15/24 18:18	1

Client Sample ID: P57-ROX-071024
Date Collected: 07/10/24 12:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-14
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	**4.5**		1.0	0.70	ug/L			07/15/24 18:18	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 18:18	1
tert-Butylbenzene	**5.4**		1.0	0.63	ug/L			07/15/24 18:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 18:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 18:18	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 18:18	1
Toluene	**3.5**		1.0	0.90	ug/L			07/15/24 18:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 18:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 18:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 18:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 18:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 18:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 18:18	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 18:18	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 18:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 18:18	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 18:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 18:18	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 18:18	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 18:18	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*07/15/24 18:18*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/15/24 18:18*	*1*
Toluene-d8 (Surr)	*87*		*64 - 132*		*07/15/24 18:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.44**		0.20	0.099	ug/L		07/16/24 10:33	07/17/24 17:11	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:33	07/17/24 17:11	1
Anthracene	**0.073**	**J**	0.20	0.047	ug/L		07/16/24 10:33	07/17/24 17:11	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 17:11	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/16/24 10:33	07/17/24 17:11	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/16/24 10:33	07/17/24 17:11	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/16/24 10:33	07/17/24 17:11	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/16/24 10:33	07/17/24 17:11	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:33	07/17/24 17:11	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/16/24 10:33	07/17/24 17:11	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 17:11	1
Fluorene	**0.46**		0.20	0.089	ug/L		07/16/24 10:33	07/17/24 17:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/16/24 10:33	07/17/24 17:11	1
Phenanthrene	**0.42**		0.20	0.090	ug/L		07/16/24 10:33	07/17/24 17:11	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:33	07/17/24 17:11	1
1-Methylnaphthalene	**22**		0.20	0.080	ug/L		07/16/24 10:33	07/17/24 17:11	1
2-Methylnaphthalene	**13**		0.20	0.066	ug/L		07/16/24 10:33	07/17/24 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*18 - 147*	*07/16/24 10:33*	*07/17/24 17:11*	*1*
2-Fluorobiphenyl	*62*		*15 - 128*	*07/16/24 10:33*	*07/17/24 17:11*	*1*

Client Sample ID: P57-ROX-071024
Date Collected: 07/10/24 12:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-14
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*91*		*10 - 144*	*07/16/24 10:33*	*07/17/24 17:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
Benzenethiol	ND		10	9.9	ug/L		07/16/24 10:33	07/18/24 01:35	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:33	07/18/24 01:35	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:33	07/18/24 01:35	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:33	07/18/24 01:35	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:33	07/18/24 01:35	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:33	07/18/24 01:35	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:33	07/18/24 01:35	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:33	07/18/24 01:35	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:33	07/18/24 01:35	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/16/24 10:33	07/18/24 01:35	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
Indene	ND		10	3.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:33	07/18/24 01:35	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Nitroaniline	ND	*+	10	4.1	ug/L		07/16/24 10:33	07/18/24 01:35	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:33	07/18/24 01:35	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:33	07/18/24 01:35	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:33	07/18/24 01:35	1

Client Sample ID: P57-ROX-071024

Date Collected: 07/10/24 12:50
Date Received: 07/11/24 08:58

Lab Sample ID: 400-259040-14

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/16/24 10:33	07/18/24 01:35	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:33	07/18/24 01:35	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:33	07/18/24 01:35	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:33	07/18/24 01:35	1
Pyridine	ND		10	10	ug/L		07/16/24 10:33	07/18/24 01:35	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:33	07/18/24 01:35	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:33	07/18/24 01:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*21 - 114*	*07/16/24 10:33*	*07/18/24 01:35*	*1*
2-Fluorophenol	*60*		*10 - 105*	*07/16/24 10:33*	*07/18/24 01:35*	*1*
Nitrobenzene-d5	*79*		*16 - 127*	*07/16/24 10:33*	*07/18/24 01:35*	*1*
Phenol-d5	*45*		*10 - 129*	*07/16/24 10:33*	*07/18/24 01:35*	*1*
Terphenyl-d14	*103*		*13 - 150*	*07/16/24 10:33*	*07/18/24 01:35*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*07/16/24 10:33*	*07/18/24 01:35*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/15/24 08:26	07/15/24 17:03	1
1,2-Dibromoethane	ND	*+	0.021	0.016	ug/L		07/15/24 08:26	07/15/24 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*	*p*	*51 - 149*	*07/15/24 08:26*	*07/15/24 17:03*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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: 400-259040-1

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)
400-259040-1	TB-ROX-071024-8260-A	89	104	91
400-259040-3	MW6A-ROX-071024-EB	90	107	91
400-259040-4	MW6A-ROX-071024	91	108	91
400-259040-5	MW6B-ROX-071024	91	108	92
400-259040-6	MW6C-ROX-071024	89	107	92
400-259040-7	MW6D-ROX-071024	89	106	92
400-259040-8	MW6D-ROX-071024-DUP	88	106	91
400-259040-9	TB-ROX-071024-8260-B	90	108	91
400-259040-11	ROST4PZE-ROX-071024-EB	87	108	94
400-259040-12	ROST4PZE-ROX-071024	90	112	89
400-259040-13	P56-ROX-071024	91	108	87
400-259040-14	P57-ROX-071024	92	111	87
LCS 400-677844/1002	Lab Control Sample	96	104	95
MB 400-677844/6	Method Blank	84	107	91

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-259040-3	MW6A-ROX-071024-EB	85	26	60	23	95	68
400-259040-4	MW6A-ROX-071024	82	58	78	43	103	66
400-259040-5	MW6B-ROX-071024	57	50	57	37	79	47
400-259040-6	MW6C-ROX-071024	82	59	80	42	107	64
400-259040-7	MW6D-ROX-071024	77	59	75	44	90	59
400-259040-8	MW6D-ROX-071024-DUP	85	60	79	45	105	62
400-259040-11	ROST4PZE-ROX-071024-EB	86	61	80	46	104	58
400-259040-12	ROST4PZE-ROX-071024	89	63	87	48	111	77
400-259040-13	P56-ROX-071024	66	48	63	36	84	54
400-259040-14	P57-ROX-071024	84	60	79	45	103	74
LCS 400-677969/2-A	Lab Control Sample	85	66	82	58	105	69
LCS 400-677969/4-A	Lab Control Sample	81	62	81	47	105	63
LCSD 400-677969/3-A	Lab Control Sample Dup	84	62	81	53	102	68
LCSD 400-677969/5-A	Lab Control Sample Dup	80	57	77	41	99	60
MB 400-677969/1-A	Method Blank	83	58	83	42	104	62

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: 400-259040-1

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)
400-259040-3	MW6A-ROX-071024-EB	130	86	92
400-259040-4	MW6A-ROX-071024	100	72	86
400-259040-5	MW6B-ROX-071024	92	61	65
400-259040-6	MW6C-ROX-071024	104	79	82
400-259040-7	MW6D-ROX-071024	111	81	85
400-259040-8	MW6D-ROX-071024-DUP	115	82	85
400-259040-11	ROST4PZE-ROX-071024-EB	124	82	86
400-259040-12	ROST4PZE-ROX-071024	97	75	85
400-259040-13	P56-ROX-071024	93	59	72
400-259040-14	P57-ROX-071024	101	62	91
LCS 400-677969/2-A	Lab Control Sample	105	76	66
LCSD 400-677969/3-A	Lab Control Sample Dup	100	75	65
MB 400-677969/1-A	Method Blank	137	80	84

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)
400-259040-2	TB-ROX-071024-8011-A	81 p
400-259040-3	MW6A-ROX-071024-EB	83 p
400-259040-4	MW6A-ROX-071024	94 p
400-259040-5	MW6B-ROX-071024	97 p
400-259040-6	MW6C-ROX-071024	81 p
400-259040-7	MW6D-ROX-071024	98 p
400-259040-8	MW6D-ROX-071024-DUP	102 p
400-259040-10	TB-ROX-071024-8011-B	73 p
400-259040-11	ROST4PZE-ROX-071024-EB	104 p
400-259040-12	ROST4PZE-ROX-071024	111 p
400-259040-13	P56-ROX-071024	77
400-259040-14	P57-ROX-071024	70 p
LCS 400-677802/2-A	Lab Control Sample	141
LCSD 400-677802/3-A	Lab Control Sample Dup	146
MB 400-677802/1-A	Method Blank	127

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-259040-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-A
Lab Sample ID: 400-259040-1
Date Collected: 07/10/24 12:00
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 13:25	LSS	EET PEN

Client Sample ID: TB-ROX-071024-8011-A
Lab Sample ID: 400-259040-2
Date Collected: 07/10/24 12:00
Matrix: Water
Date Received: 07/11/24 08:58

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	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 12:49	S1K	EET PEN

Client Sample ID: MW6A-ROX-071024-EB
Lab Sample ID: 400-259040-3
Date Collected: 07/10/24 08:15
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 13:49	LSS	EET PEN
Total/NA	Prep	3510C			253.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 21:53	S1B	EET PEN
Total/NA	Prep	3510C			253.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 14:01	JAW	EET PEN
Total/NA	Prep	8011			34 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 13:10	S1K	EET PEN

Client Sample ID: MW6A-ROX-071024
Lab Sample ID: 400-259040-4
Date Collected: 07/10/24 09:55
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 15:27	LSS	EET PEN
Total/NA	Prep	3510C			247 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 22:18	S1B	EET PEN
Total/NA	Prep	3510C			247 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 14:22	JAW	EET PEN
Total/NA	Prep	8011			34.7 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 13:31	S1K	EET PEN

Client Sample ID: MW6B-ROX-071024
Lab Sample ID: 400-259040-5
Date Collected: 07/10/24 10:35
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 15:51	LSS	EET PEN
Total/NA	Prep	3510C			248.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 22:43	S1B	EET PEN

Client Sample ID: MW6B-ROX-071024

Lab Sample ID: 400-259040-5

Date Collected: 07/10/24 10:35

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			248.4 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 14:43	JAW	EET PEN
Total/NA	Prep	8011			33.9 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 13:52	S1K	EET PEN

Client Sample ID: MW6C-ROX-071024

Lab Sample ID: 400-259040-6

Date Collected: 07/10/24 12:35

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 16:16	LSS	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 23:08	S1B	EET PEN
Total/NA	Prep	3510C			265.2 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 15:04	JAW	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 14:13	S1K	EET PEN

Client Sample ID: MW6D-ROX-071024

Lab Sample ID: 400-259040-7

Date Collected: 07/10/24 13:30

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 16:40	LSS	EET PEN
Total/NA	Prep	3510C			240.6 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 23:32	S1B	EET PEN
Total/NA	Prep	3510C			240.6 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 15:26	JAW	EET PEN
Total/NA	Prep	8011			31.9 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 14:35	S1K	EET PEN

Client Sample ID: MW6D-ROX-071024-DUP

Lab Sample ID: 400-259040-8

Date Collected: 07/10/24 13:30

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 17:05	LSS	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 23:57	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 15:47	JAW	EET PEN
Total/NA	Prep	8011			34.4 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 14:56	S1K	EET PEN

Lab Chronicle

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

Job ID: 400-259040-1

Client Sample ID: TB-ROX-071024-8260-B
Lab Sample ID: 400-259040-9
Date Collected: 07/10/24 12:00
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 14:14	LSS	EET PEN

Client Sample ID: TB-ROX-071024-8011-B
Lab Sample ID: 400-259040-10
Date Collected: 07/10/24 12:00
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			28.4 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 15:38	S1K	EET PEN

Client Sample ID: ROST4PZE-ROX-071024-EB
Lab Sample ID: 400-259040-11
Date Collected: 07/10/24 08:30
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 14:38	LSS	EET PEN
Total/NA	Prep	3510C			255.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/18/24 00:22	S1B	EET PEN
Total/NA	Prep	3510C			255.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 16:08	JAW	EET PEN
Total/NA	Prep	8011			32.5 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 15:59	S1K	EET PEN

Client Sample ID: ROST4PZE-ROX-071024
Lab Sample ID: 400-259040-12
Date Collected: 07/10/24 09:50
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 17:29	LSS	EET PEN
Total/NA	Prep	3510C			256.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/18/24 00:46	S1B	EET PEN
Total/NA	Prep	3510C			256.8 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 16:29	JAW	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 16:21	S1K	EET PEN

Client Sample ID: P56-ROX-071024
Lab Sample ID: 400-259040-13
Date Collected: 07/10/24 11:40
Matrix: Water
Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 17:53	LSS	EET PEN
Total/NA	Prep	3510C			250.6 mL	1 mL	677969	07/16/24 10:33	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/18/24 01:11	S1B	EET PEN

Client Sample ID: P56-ROX-071024

Lab Sample ID: 400-259040-13

Date Collected: 07/10/24 11:40

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250.6 mL	1 mL	677969	07/16/24 10:33	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 16:50	JAW	EET PEN
Total/NA	Prep	8011			31.1 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 16:42	S1K	EET PEN

Client Sample ID: P57-ROX-071024

Lab Sample ID: 400-259040-14

Date Collected: 07/10/24 12:50

Matrix: Water

Date Received: 07/11/24 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	677844	07/15/24 18:18	LSS	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677969	07/16/24 10:33	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/18/24 01:35	S1B	EET PEN
Total/NA	Prep	3510C			251.2 mL	1 mL	677969	07/16/24 10:33	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 17:11	JAW	EET PEN
Total/NA	Prep	8011			32.7 mL	35 mL	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 17:03	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677802/1-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	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 11:46	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677844/6

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	677844	07/15/24 09:31	LSS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677969/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 17:44	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678076	07/17/24 11:14	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677802/2-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	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 12:07	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677844/1002
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	677844	07/15/24 07:38	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677969/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:09	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678076	07/17/24 11:35	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677969/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:59	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677802/3-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	677802	07/15/24 08:26	KR	EET PEN
Total/NA	Analysis	8011		1			677826	07/15/24 12:28	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677969/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 18:34	S1B	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678076	07/17/24 11:56	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-259040-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-677969/5-A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	677969	07/16/24 10:32	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678124	07/17/24 19:24	S1B	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 677844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-1	TB-ROX-071024-8260-A	Total/NA	Water	8260D	
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	8260D	
400-259040-4	MW6A-ROX-071024	Total/NA	Water	8260D	
400-259040-5	MW6B-ROX-071024	Total/NA	Water	8260D	
400-259040-6	MW6C-ROX-071024	Total/NA	Water	8260D	
400-259040-7	MW6D-ROX-071024	Total/NA	Water	8260D	
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	8260D	
400-259040-9	TB-ROX-071024-8260-B	Total/NA	Water	8260D	
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	8260D	
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	8260D	
400-259040-13	P56-ROX-071024	Total/NA	Water	8260D	
400-259040-14	P57-ROX-071024	Total/NA	Water	8260D	
MB 400-677844/6	Method Blank	Total/NA	Water	8260D	
LCS 400-677844/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 677969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	3510C	
400-259040-4	MW6A-ROX-071024	Total/NA	Water	3510C	
400-259040-5	MW6B-ROX-071024	Total/NA	Water	3510C	
400-259040-6	MW6C-ROX-071024	Total/NA	Water	3510C	
400-259040-7	MW6D-ROX-071024	Total/NA	Water	3510C	
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	3510C	
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	3510C	
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	3510C	
400-259040-13	P56-ROX-071024	Total/NA	Water	3510C	
400-259040-14	P57-ROX-071024	Total/NA	Water	3510C	
MB 400-677969/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-677969/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-677969/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 678076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	8270E SIM	677969
400-259040-4	MW6A-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-5	MW6B-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-6	MW6C-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-7	MW6D-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	8270E SIM	677969
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	8270E SIM	677969
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-13	P56-ROX-071024	Total/NA	Water	8270E SIM	677969
400-259040-14	P57-ROX-071024	Total/NA	Water	8270E SIM	677969
MB 400-677969/1-A	Method Blank	Total/NA	Water	8270E SIM	677969
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	677969
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	677969

GC/MS Semi VOA

Analysis Batch: 678124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	8270E	677969
400-259040-4	MW6A-ROX-071024	Total/NA	Water	8270E	677969
400-259040-5	MW6B-ROX-071024	Total/NA	Water	8270E	677969
400-259040-6	MW6C-ROX-071024	Total/NA	Water	8270E	677969
400-259040-7	MW6D-ROX-071024	Total/NA	Water	8270E	677969
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	8270E	677969
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	8270E	677969
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	8270E	677969
400-259040-13	P56-ROX-071024	Total/NA	Water	8270E	677969
400-259040-14	P57-ROX-071024	Total/NA	Water	8270E	677969
MB 400-677969/1-A	Method Blank	Total/NA	Water	8270E	677969
LCS 400-677969/2-A	Lab Control Sample	Total/NA	Water	8270E	677969
LCS 400-677969/4-A	Lab Control Sample	Total/NA	Water	8270E	677969
LCSD 400-677969/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	677969
LCSD 400-677969/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	677969

GC Semi VOA

Prep Batch: 677802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-2	TB-ROX-071024-8011-A	Total/NA	Water	8011	
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	8011	
400-259040-4	MW6A-ROX-071024	Total/NA	Water	8011	
400-259040-5	MW6B-ROX-071024	Total/NA	Water	8011	
400-259040-6	MW6C-ROX-071024	Total/NA	Water	8011	
400-259040-7	MW6D-ROX-071024	Total/NA	Water	8011	
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	8011	
400-259040-10	TB-ROX-071024-8011-B	Total/NA	Water	8011	
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	8011	
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	8011	
400-259040-13	P56-ROX-071024	Total/NA	Water	8011	
400-259040-14	P57-ROX-071024	Total/NA	Water	8011	
MB 400-677802/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677802/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677802/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 677826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259040-2	TB-ROX-071024-8011-A	Total/NA	Water	8011	677802
400-259040-3	MW6A-ROX-071024-EB	Total/NA	Water	8011	677802
400-259040-4	MW6A-ROX-071024	Total/NA	Water	8011	677802
400-259040-5	MW6B-ROX-071024	Total/NA	Water	8011	677802
400-259040-6	MW6C-ROX-071024	Total/NA	Water	8011	677802
400-259040-7	MW6D-ROX-071024	Total/NA	Water	8011	677802
400-259040-8	MW6D-ROX-071024-DUP	Total/NA	Water	8011	677802
400-259040-10	TB-ROX-071024-8011-B	Total/NA	Water	8011	677802
400-259040-11	ROST4PZE-ROX-071024-EB	Total/NA	Water	8011	677802
400-259040-12	ROST4PZE-ROX-071024	Total/NA	Water	8011	677802
400-259040-13	P56-ROX-071024	Total/NA	Water	8011	677802
400-259040-14	P57-ROX-071024	Total/NA	Water	8011	677802
MB 400-677802/1-A	Method Blank	Total/NA	Water	8011	677802

GC Semi VOA (Continued)

Analysis Batch: 677826 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-677802/2-A	Lab Control Sample	Total/NA	Water	8011	677802
LCSD 400-677802/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677802

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

Lab Sample ID: MB 400-677844/6
Matrix: Water
Analysis Batch: 677844

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			07/15/24 09:31	1
Acrolein	ND		20	3.3	ug/L			07/15/24 09:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/15/24 09:31	1
Benzene	ND		1.0	0.24	ug/L			07/15/24 09:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/15/24 09:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/15/24 09:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
Bromoform	ND		5.0	0.25	ug/L			07/15/24 09:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/15/24 09:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/15/24 09:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/15/24 09:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/15/24 09:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/15/24 09:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/15/24 09:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/15/24 09:31	1
Chloroform	ND		1.0	0.90	ug/L			07/15/24 09:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/15/24 09:31	1
Chloromethane	ND		1.0	0.40	ug/L			07/15/24 09:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/15/24 09:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/15/24 09:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/15/24 09:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/15/24 09:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/15/24 09:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/15/24 09:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/15/24 09:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/15/24 09:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 09:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/15/24 09:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/15/24 09:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/15/24 09:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/15/24 09:31	1
2-Hexanone	ND		25	4.3	ug/L			07/15/24 09:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/15/24 09:31	1
Methylene bromide	ND		5.0	0.22	ug/L			07/15/24 09:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/15/24 09:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/15/24 09:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/15/24 09:31	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/15/24 09:31	1
Naphthalene	ND		5.0	3.0	ug/L			07/15/24 09:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/15/24 09:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/15/24 09:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/15/24 09:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/15/24 09:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/15/24 09:31	1

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

Lab Sample ID: MB 400-677844/6
Matrix: Water
Analysis Batch: 677844

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			07/15/24 09:31	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/15/24 09:31	1
Styrene	ND		1.0	1.0	ug/L			07/15/24 09:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/15/24 09:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/15/24 09:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/15/24 09:31	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/15/24 09:31	1
Toluene	ND		1.0	0.90	ug/L			07/15/24 09:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/15/24 09:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/15/24 09:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/15/24 09:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/15/24 09:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/15/24 09:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/15/24 09:31	1
Trichloroethene	ND		1.0	0.15	ug/L			07/15/24 09:31	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/15/24 09:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/15/24 09:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/15/24 09:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/15/24 09:31	1
Vinyl acetate	ND		25	0.93	ug/L			07/15/24 09:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/15/24 09:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/15/24 09:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*72 - 130*		*07/15/24 09:31*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*07/15/24 09:31*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/15/24 09:31*	*1*

Lab Sample ID: LCS 400-677844/1002
Matrix: Water
Analysis Batch: 677844

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	348	*+	ug/L		174	43 - 150
Acrolein	500	652		ug/L		130	38 - 150
Acrylonitrile	500	488		ug/L		98	64 - 142
Benzene	50.0	47.3		ug/L		95	70 - 130
Bromobenzene	50.0	47.9		ug/L		96	70 - 132
Bromochloromethane	50.0	53.9		ug/L		108	70 - 130
Bromodichloromethane	50.0	50.1		ug/L		100	67 - 133
Bromoform	50.0	44.2		ug/L		88	57 - 140
Bromomethane	50.0	55.4		ug/L		111	10 - 150
2-Butanone (MEK)	200	281		ug/L		140	61 - 145
Carbon disulfide	50.0	40.6		ug/L		81	61 - 137
Carbon tetrachloride	50.0	49.5		ug/L		99	61 - 137
Chlorobenzene	50.0	49.1		ug/L		98	70 - 130
Chloroethane	50.0	54.1		ug/L		108	55 - 141
2-Chloroethyl vinyl ether	50.0	20.5		ug/L		41	10 - 150

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

Lab Sample ID: LCS 400-677844/1002
Matrix: Water
Analysis Batch: 677844

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	47.0		ug/L		94	69 - 130
1-Chlorohexane	50.0	48.1		ug/L		96	69 - 130
Chloromethane	50.0	52.3		ug/L		105	58 - 137
cis-1,2-Dichloroethene	50.0	47.5		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	51.3		ug/L		103	69 - 132
Dibromochloromethane	50.0	49.8		ug/L		100	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	51.5		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	51.3		ug/L		103	70 - 130
Dichlorodifluoromethane	50.0	53.3		ug/L		107	41 - 146
1,1-Dichloroethane	50.0	49.5		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	47.0		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	46.9		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	49.1		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	46.0		ug/L		92	70 - 130
2,2-Dichloropropane	50.0	45.7		ug/L		91	52 - 135
1,1-Dichloropropene	50.0	47.8		ug/L		96	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	42.5		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	53.1		ug/L		106	53 - 140
2-Hexanone	200	203		ug/L		102	65 - 137
Isopropylbenzene	50.0	51.6		ug/L		103	70 - 130
Methylene bromide	50.0	49.7		ug/L		99	70 - 130
Methylene Chloride	50.0	46.9		ug/L		94	66 - 135
4-Methyl-2-pentanone (MIBK)	200	193		ug/L		97	69 - 138
Methyl tert-butyl ether	50.0	46.6		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	46.6		ug/L		93	70 - 130
Naphthalene	50.0	43.1		ug/L		86	47 - 149
n-Butylbenzene	50.0	48.0		ug/L		96	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
o-Xylene	50.0	47.8		ug/L		96	70 - 130
p-Chlorotoluene	50.0	48.0		ug/L		96	70 - 130
p-Isopropyltoluene	50.0	49.5		ug/L		99	65 - 130
sec-Butylbenzene	50.0	49.3		ug/L		99	66 - 130
Styrene	50.0	48.2		ug/L		96	70 - 130
tert-Butylbenzene	50.0	47.6		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.0		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.6		ug/L		85	70 - 131
Tetrachloroethene	50.0	47.8		ug/L		96	65 - 130
Toluene	50.0	46.4		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	45.0		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	50.5		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	51.0		ug/L		102	60 - 140
1,1,1-Trichloroethane	50.0	48.5		ug/L		97	68 - 130
1,1,2-Trichloroethane	50.0	46.4		ug/L		93	70 - 130
Trichloroethene	50.0	53.4		ug/L		107	70 - 130
Trichlorofluoromethane	50.0	50.2		ug/L		100	65 - 138

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

Lab Sample ID: LCS 400-677844/1002
Matrix: Water
Analysis Batch: 677844

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	44.7		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	50.0	47.1		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	46.8		ug/L		94	69 - 130
Vinyl acetate	100	95.8		ug/L		96	26 - 150
Vinyl chloride	50.0	50.7		ug/L		101	59 - 136
Xylenes, Total	100	94.3		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzenethiol	ND		10	9.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzoic acid	ND		30	24	ug/L		07/16/24 10:32	07/17/24 17:44	1
Benzyl alcohol	ND		10	7.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chloroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Chlorophenol	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dibenzofuran	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Diethyl phthalate	ND		10	4.4	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/16/24 10:32	07/17/24 17:44	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
1,4-Dioxane	ND		10	4.3	ug/L		07/16/24 10:32	07/17/24 17:44	1

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/16/24 10:32	07/17/24 17:44	1
Hexachloroethane	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Indene	ND		10	3.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
Isophorone	ND		10	5.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Methylphenol	ND		10	3.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Nitroaniline	ND		10	5.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
3-Nitroaniline	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Nitroaniline	ND		10	4.1	ug/L		07/16/24 10:32	07/17/24 17:44	1
Nitrobenzene	ND		10	4.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
2-Nitrophenol	ND		10	4.6	ug/L		07/16/24 10:32	07/17/24 17:44	1
4-Nitrophenol	ND		10	3.3	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/16/24 10:32	07/17/24 17:44	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/16/24 10:32	07/17/24 17:44	1
Pentachlorophenol	ND		20	12	ug/L		07/16/24 10:32	07/17/24 17:44	1
Phenol	ND		10	4.2	ug/L		07/16/24 10:32	07/17/24 17:44	1
Pyridine	ND		10	10	ug/L		07/16/24 10:32	07/17/24 17:44	1
Quinoline	ND		10	2.4	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/16/24 10:32	07/17/24 17:44	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/16/24 10:32	07/17/24 17:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*21 - 114*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
2-Fluorophenol	*58*		*10 - 105*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Nitrobenzene-d5	*83*		*16 - 127*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Phenol-d5	*42*		*10 - 129*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
Terphenyl-d14	*104*		*13 - 150*	*07/16/24 10:32*	*07/17/24 17:44*	*1*
2,4,6-Tribromophenol	*62*		*10 - 150*	*07/16/24 10:32*	*07/17/24 17:44*	*1*

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	65.4		ug/L		54	10 - 127
Benzoic acid	492	250		ug/L		51	19 - 126
Benzyl alcohol	120	107		ug/L		89	17 - 109
Bis(2-chloroethoxy)methane	120	101		ug/L		84	24 - 125
Bis(2-chloroethyl)ether	120	120		ug/L		100	10 - 121
bis (2-chloroisopropyl) ether	120	133		ug/L		111	14 - 123
Bis(2-ethylhexyl) phthalate	120	125		ug/L		104	16 - 150
4-Bromophenyl phenyl ether	120	119		ug/L		99	17 - 150
Butyl benzyl phthalate	120	127		ug/L		106	21 - 150
4-Chloroaniline	120	57.4		ug/L		48	10 - 124
4-Chloro-3-methylphenol	120	103		ug/L		86	37 - 131

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	106		ug/L		88	24 - 132
2-Chlorophenol	120	106		ug/L		88	27 - 124
4-Chlorophenyl phenyl ether	120	112		ug/L		94	27 - 147
Dibenz[a,h]acridine	120	135		ug/L		113	40 - 140
Dibenzofuran	120	111		ug/L		92	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	97.8		ug/L		81	33 - 132
Diethyl phthalate	120	114		ug/L		95	37 - 145
2,4-Dimethylphenol	120	80.6		ug/L		67	38 - 132
Dimethyl phthalate	120	108		ug/L		90	32 - 137
Di-n-butyl phthalate	120	121		ug/L		101	27 - 150
4,6-Dinitro-ortho-cresol	240	257		ug/L		107	14 - 150
2,4-Dinitrophenol	240	271		ug/L		113	15 - 150
2,4-Dinitrotoluene	120	115		ug/L		96	35 - 136
2,6-Dinitrotoluene	120	110		ug/L		92	29 - 140
Di-n-octyl phthalate	120	121		ug/L		101	26 - 150
1,4-Dioxane	120	64.1		ug/L		53	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	127		ug/L		106	23 - 138
Hexachlorobenzene	120	122		ug/L		102	10 - 150
Hexachlorocyclopentadiene	120	67.4		ug/L		56	10 - 124
Hexachloroethane	120	96.3		ug/L		80	10 - 127
Indene	120	109		ug/L		91	18 - 150
Isophorone	120	103		ug/L		86	28 - 127
2-Methylphenol	120	109		ug/L		90	34 - 124
3 & 4 Methylphenol	120	102		ug/L		85	32 - 122
2-Nitroaniline	120	119		ug/L		99	24 - 139
3-Nitroaniline	120	110		ug/L		91	10 - 128
4-Nitroaniline	120	146	*+	ug/L		122	28 - 118
Nitrobenzene	120	95.5		ug/L		80	29 - 120
2-Nitrophenol	120	94.8		ug/L		79	25 - 148
4-Nitrophenol	240	190		ug/L		79	12 - 129
N-Nitrosodimethylamine	120	90.0		ug/L		75	10 - 115
N-Nitrosodi-n-propylamine	120	116		ug/L		97	24 - 142
N-Nitrosodiphenylamine	119	113		ug/L		95	29 - 138
Pentachlorophenol	240	251		ug/L		105	19 - 150
Phenol	120	78.7		ug/L		66	11 - 95
Pyridine	240	71.3		ug/L		30	10 - 82
Quinoline	120	108		ug/L		90	10 - 141
2,4,5-Trichlorophenol	120	109		ug/L		91	30 - 144
2,4,6-Trichlorophenol	120	104		ug/L		87	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*21 - 114*
2-Fluorophenol	*66*		*10 - 105*
Nitrobenzene-d5	*82*		*16 - 127*
Phenol-d5	*58*		*10 - 129*
Terphenyl-d14	*105*		*13 - 150*

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*69*		*10 - 150*

Lab Sample ID: LCS 400-677969/4-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	80.1		ug/L		67	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*81*		*21 - 114*
2-Fluorophenol	*62*		*10 - 105*
Nitrobenzene-d5	*81*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*105*		*13 - 150*
2,4,6-Tribromophenol	*63*		*10 - 150*

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	69.1		ug/L		58	10 - 127	6	40
Benzoic acid			492	225		ug/L		46	19 - 126	10	40
Benzyl alcohol			120	99.8		ug/L		83	17 - 109	7	40
Bis(2-chloroethoxy)methane			120	99.8		ug/L		83	24 - 125	1	40
Bis(2-chloroethyl)ether			120	116		ug/L		96	10 - 121	4	40
bis (2-chloroisopropyl) ether			120	129		ug/L		107	14 - 123	3	40
Bis(2-ethylhexyl) phthalate			120	121		ug/L		101	16 - 150	3	40
4-Bromophenyl phenyl ether			120	114		ug/L		95	17 - 150	5	40
Butyl benzyl phthalate			120	124		ug/L		104	21 - 150	2	40
4-Chloroaniline			120	57.5		ug/L		48	10 - 124	0	40
4-Chloro-3-methylphenol			120	102		ug/L		85	37 - 131	1	40
2-Chloronaphthalene			120	105		ug/L		87	24 - 132	1	40
2-Chlorophenol			120	101		ug/L		84	27 - 124	4	40
4-Chlorophenyl phenyl ether			120	111		ug/L		92	27 - 147	2	40
Dibenz[a,h]acridine			120	127		ug/L		106	40 - 140	6	40
Dibenzofuran			120	109		ug/L		91	30 - 135	2	40
3,3'-Dichlorobenzidine			160	139		ug/L		87	10 - 150	3	40
2,4-Dichlorophenol			120	96.9		ug/L		81	33 - 132	1	40
Diethyl phthalate			120	113		ug/L		94	37 - 145	1	40
2,4-Dimethylphenol			120	78.6		ug/L		65	38 - 132	3	40
Dimethyl phthalate			120	106		ug/L		88	32 - 137	2	40
Di-n-butyl phthalate			120	119		ug/L		99	27 - 150	1	40
4,6-Dinitro-ortho-cresol			240	251		ug/L		105	14 - 150	2	40
2,4-Dinitrophenol			240	270		ug/L		112	15 - 150	0	40
2,4-Dinitrotoluene			120	115		ug/L		96	35 - 136	0	40
2,6-Dinitrotoluene			120	109		ug/L		91	29 - 140	1	40

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

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	118		ug/L		98	26 - 150	3	40
1,4-Dioxane			120	61.1		ug/L		51	10 - 87	5	40
1,2-Diphenylhydrazine (as Azobenzene)			120	122		ug/L		101	23 - 138	4	40
Hexachlorobenzene			120	118		ug/L		98	10 - 150	3	40
Hexachlorocyclopentadiene			120	63.4		ug/L		53	10 - 124	6	40
Hexachloroethane			120	99.7		ug/L		83	10 - 127	3	40
Indene			120	106		ug/L		88	18 - 150	3	40
Isophorone			120	102		ug/L		85	28 - 127	1	40
2-Methylphenol			120	103		ug/L		86	34 - 124	5	40
3 & 4 Methylphenol			120	96.5		ug/L		80	32 - 122	6	40
2-Nitroaniline			120	119		ug/L		99	24 - 139	1	40
3-Nitroaniline			120	110		ug/L		91	10 - 128	0	40
4-Nitroaniline			120	147	*+	ug/L		123	28 - 118	1	40
Nitrobenzene			120	94.8		ug/L		79	29 - 120	1	40
2-Nitrophenol			120	94.6		ug/L		79	25 - 148	0	40
4-Nitrophenol			240	164		ug/L		68	12 - 129	15	40
N-Nitrosodimethylamine			120	83.8		ug/L		70	10 - 115	7	40
N-Nitrosodi-n-propylamine			120	113		ug/L		94	24 - 142	2	40
N-Nitrosodiphenylamine			119	110		ug/L		92	29 - 138	3	40
Pentachlorophenol			240	247		ug/L		103	19 - 150	1	40
Phenol			120	70.0		ug/L		58	11 - 95	12	40
Pyridine			240	78.0		ug/L		33	10 - 82	9	40
Quinoline			120	109		ug/L		91	10 - 141	0	40
2,4,5-Trichlorophenol			120	107		ug/L		90	30 - 144	2	40
2,4,6-Trichlorophenol			120	104		ug/L		86	27 - 147	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*84*		*21 - 114*
2-Fluorophenol	*62*		*10 - 105*
Nitrobenzene-d5	*81*		*16 - 127*
Phenol-d5	*53*		*10 - 129*
Terphenyl-d14	*102*		*13 - 150*
2,4,6-Tribromophenol	*68*		*10 - 150*

Lab Sample ID: LCSD 400-677969/5-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	90.3		ug/L		75	10 - 140	12	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*21 - 114*
2-Fluorophenol	*57*		*10 - 105*
Nitrobenzene-d5	*77*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*99*		*13 - 150*

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

Lab Sample ID: LCSD 400-677969/5-A
Matrix: Water
Analysis Batch: 678124

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*60*		*10 - 150*

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

Lab Sample ID: MB 400-677969/1-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677969

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/16/24 10:32	07/17/24 11:14	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/16/24 10:32	07/17/24 11:14	1
Anthracene	ND		0.20	0.047	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/16/24 10:32	07/17/24 11:14	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/16/24 10:32	07/17/24 11:14	1
Chrysene	ND		0.20	0.033	ug/L		07/16/24 10:32	07/17/24 11:14	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/16/24 10:32	07/17/24 11:14	1
Fluoranthene	ND		0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Fluorene	ND		0.20	0.089	ug/L		07/16/24 10:32	07/17/24 11:14	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/16/24 10:32	07/17/24 11:14	1
Phenanthrene	ND		0.20	0.090	ug/L		07/16/24 10:32	07/17/24 11:14	1
Pyrene	ND		0.20	0.039	ug/L		07/16/24 10:32	07/17/24 11:14	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/16/24 10:32	07/17/24 11:14	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/16/24 10:32	07/17/24 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*137*		*18 - 147*	*07/16/24 10:32*	*07/17/24 11:14*	*1*
2-Fluorobiphenyl	*80*		*15 - 128*	*07/16/24 10:32*	*07/17/24 11:14*	*1*
Nitrobenzene-d5	*84*		*10 - 144*	*07/16/24 10:32*	*07/17/24 11:14*	*1*

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	99.6		ug/L		83	10 - 140
Acenaphthylene	120	99.4		ug/L		83	10 - 140
Anthracene	120	102		ug/L		85	19 - 140
Benzo[a]anthracene	120	101		ug/L		84	25 - 140
Benzo[a]pyrene	120	96.1		ug/L		80	24 - 140
Benzo[b]fluoranthene	120	109		ug/L		91	34 - 140
Benzo[g,h,i]perylene	120	92.3		ug/L		77	13 - 140
Benzo[k]fluoranthene	120	117		ug/L		98	21 - 140
Chrysene	120	116		ug/L		96	28 - 140
Dibenz(a,h)anthracene	120	74.9		ug/L		62	10 - 140
Fluoranthene	120	103		ug/L		86	18 - 140

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

Lab Sample ID: LCS 400-677969/2-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	120	99.0		ug/L		83	16 - 140
Indeno[1,2,3-cd]pyrene	120	78.6		ug/L		66	10 - 140
Phenanthrene	120	108		ug/L		90	22 - 140
Pyrene	120	151		ug/L		126	38 - 140
1-Methylnaphthalene	120	95.6		ug/L		80	10 - 140
2-Methylnaphthalene	120	93.9		ug/L		78	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*105*		*18 - 147*
2-Fluorobiphenyl	*76*		*15 - 128*
Nitrobenzene-d5	*66*		*10 - 144*

Lab Sample ID: LCSD 400-677969/3-A
Matrix: Water
Analysis Batch: 678076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677969

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	97.7		ug/L		81	10 - 140	2	40
Acenaphthylene	120	99.5		ug/L		83	10 - 140	0	40
Anthracene	120	99.2		ug/L		83	19 - 140	3	40
Benzo[a]anthracene	120	95.8		ug/L		80	25 - 140	5	40
Benzo[a]pyrene	120	87.2		ug/L		73	24 - 140	10	40
Benzo[b]fluoranthene	120	107		ug/L		90	34 - 140	2	40
Benzo[g,h,i]perylene	120	93.7		ug/L		78	13 - 140	1	40
Benzo[k]fluoranthene	120	110		ug/L		91	21 - 140	7	40
Chrysene	120	112		ug/L		94	28 - 140	3	40
Dibenz(a,h)anthracene	120	80.6		ug/L		67	10 - 140	7	40
Fluoranthene	120	101		ug/L		84	18 - 140	2	40
Fluorene	120	97.9		ug/L		82	16 - 140	1	40
Indeno[1,2,3-cd]pyrene	120	80.3		ug/L		67	10 - 140	2	40
Phenanthrene	120	103		ug/L		86	22 - 140	5	40
Pyrene	120	148		ug/L		124	38 - 140	2	40
1-Methylnaphthalene	120	95.5		ug/L		80	10 - 140	0	40
2-Methylnaphthalene	120	95.0		ug/L		79	10 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*75*		*15 - 128*
Nitrobenzene-d5	*65*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677802/1-A
Matrix: Water
Analysis Batch: 677826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677802

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		07/15/24 08:26	07/15/24 11:46	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-677802/1-A
Matrix: Water
Analysis Batch: 677826

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677802

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/15/24 08:26	07/15/24 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*127*		*51 - 149*	*07/15/24 08:26*	*07/15/24 11:46*	*1*

Lab Sample ID: LCS 400-677802/2-A
Matrix: Water
Analysis Batch: 677826

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677802

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.127		ug/L		126	60 - 140		
1,2-Dibromoethane			0.100	0.149	*+	ug/L		149	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*141*		*51 - 149*

Lab Sample ID: LCSD 400-677802/3-A
Matrix: Water
Analysis Batch: 677826

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677802

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.124		ug/L		124	60 - 140	2	30
1,2-Dibromoethane			0.100	0.144	*+	ug/L		143	60 - 140	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*146*		*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: 7/10/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): M. Massa, L. Badmus

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°	Cooler #1	Cooler #2	Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Please include "J" values on Reports.
* Please provide sample receipt upon login.
* Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

400-259040 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-071024-8260-A	7/10/2024	0000	Water	2					2	X			
	TB-ROX-071024-8011-A	7/10/2024	0000	Water	2					2		X		
	MW6A-ROX-071024-EB	7/10/2024	0815	Water	6			2		8	X	X	X	X
	MW6A-ROX-071024	7/10/2024	0955	Water	6			2		8	X	X	X	X
	MW6B-ROX-071024	7/10/2024	1035	Water	6			2		8	X	X	X	X
	MW6C-ROX-071024	7/10/2024	1235	Water	6			2		8	X	X	X	X
	MW6D-ROX-071024	7/10/2024	1330	Water	6			2		8	X	X	X	X
	MW6D-ROX-071024-DUP	7/10/2024	1330	Water	6			2		8	X	X	X	X

7/10/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY MASSA	FEDEX: 7252 0540 4533, 7252 0540 4500	7/10/2024	1600
		7/11/24 8:58	8:58

Version: 27Sept23

CUSTODY SEALS: 2355747, 2355746, 2355748, 2355749

2.0°C, 2.3°C IR10

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7/19/2024

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/10/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 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 60721927 – 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): C. McDavid, T. Jenkins
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Please include "J" values on Reports.**
*** Please provide sample receipt upon login.**
*** Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-071024-8260-B	7/10/2024	0000	Water	2					2	X			
	TB-ROX-071024-8011-B	7/10/2024	0000	Water	2					2		X		
	ROST4PZE-ROX-071024-EB	7/10/2024	0830	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-071024	7/10/2024	0950	Water	6			2		8	X	X	X	X
	P56-ROX-071024	7/10/2024	1140	Water	6			2		8	X	X	X	X
	P57-ROX-071024	7/10/2024	1250	Water	6			2		8	X	X	X	X

07-10-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: See page 1	7/10/2024	1600
		7/11/24	8:58

Version: 27Sept23

CUSTODY SEALS: See page 1

2.0°C, 2.3°C 1110

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7/19/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-259040-1

Login Number: 259040
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	2.0°C, 2.3°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: 400-259040-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-259171-1

Data Reviewer: Adelina Gita

Peer Reviewer: Delaine Austin

Date Reviewed: 8/20/2024

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

Sample Identification	Sample Identification
TB-ROX-071124-8260	TB-ROX-071124-8011
MW13-ROX-071124	P114R-ROX-071124
MW2-ROX-071124	MW2-ROX-071124-DUP

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated that several VOC LCS recoveries for were outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. The internal standard area recovery for perylene-d_{12} and chrysene-d_{12} were outside criteria in a PAH method blank. Results for ethylbenzene in field duplicate pair MW2-ROX-071124/MW2-ROX-071124-DUP were qualified as estimated **(J/J)** due to field duplicate RPD above evaluation criteria. The continuing calibration verification (CCV) for multiple analytes, were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-678099/1002	VOCs	Acetone	**226**	NA	43-150
LCS 400-678099/1002	VOCs	Trichlorofluoromethane	**146**	NA	65-138
LCS 400-678192/1002	VOCs	Acetone	**233**	NA	43-150
LCS 400-678339/1002	VOCs	Acetone	**234**	NA	43-150

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-678242/1-A	PAHs	Terphenyl-d_{14}	**148**	18-147

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MB 400-678242/1-A	PAHs	Chrysene-d_{12}	**4182**	8919	4460-17838
MB 400-678242/1-A	PAHs	Perylene-d_{12}	**2188**	6967	3484-13934

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW2-ROX-071124	MW2-ROX-071124-DUP

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW2-ROX-071124	MW2-ROX-071124-DUP	VOCs	Ethylbenzene	**32**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for vinyl chloride, 2,4-dimethylphenol, dibenz(a,h)anthracene and hexachlorocyclopentadiene, were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW2-ROX-071124	VOCs	Vinyl chloride	**UJ**
MW2-ROX-071124-DUP	VOCs	Vinyl chloride	**UJ**
MW13-ROX-071124	SVOCs	2,4-Dimethylphenol	**UJ**
P114R-ROX-071124	SVOCs	2,4-Dimethylphenol	**UJ**
MW2-ROX-071124	SVOCs	2,4-Dimethylphenol	**UJ**
MW2-ROX-071124-DUP	SVOCs	2,4-Dimethylphenol	**UJ**
MW13-ROX-071124	SVOCs	Hexachlorocyclopentadiene	**UJ**
P114R-ROX-071124	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW2-ROX-071124	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW2-ROX-071124-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-071124	PAHs	Dibenz(a,h)anthracene	**UJ**
P114R-ROX-071124	PAHs	Dibenz(a,h)anthracene	**UJ**
MW2-ROX-071124	PAHs	Dibenz(a,h)anthracene	**UJ**
MW2-ROX-071124-DUP	PAHs	Dibenz(a,h)anthracene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/22/2024 12:43:27 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-259171-1

Reviewed 08/20/2024
AG

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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

Authorization



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Job Narrative
400-259171-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/13/2024 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 4.9°C.

GC/MS VOA
Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: P114R-ROX-071124 (400-259171-4). 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 400-678099 recovered above the upper control limit for Acetone, Trichlorofluoromethane, Acrolein, 2,2-Dichloropropane, 1,1,1-Trichloroethane, Carbon tetrachloride 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 continuing calibration verification (CCV) associated with batch 400-678192 recovered above the upper control limit for Acetone. 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 400-678192 recovered outside control limits for the following analytes: Acetone. 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 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-071124-8260 (400-259171-1) and MW13-ROX-071124 (400-259171-3). 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 400-678339 recovered above the upper control limit for Acetone. 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 400-678339 recovered outside acceptance criteria, low biased, for 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 laboratory control sample (LCS) for analytical batch 400-678339 recovered outside control limits for the following analyte: Acetone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-678099 recovered outside control limits for the following analytes: Acetone and Trichlorofluoromethane. 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 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: MW2-ROX-071124 (400-259171-5) and MW2-

ROX-071124-DUP (400-259171-6). The requested target analyte list includes 2-Chloroethyl vinyl ether Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The following samples were diluted due to the abundance of non-target analytes: MW2-ROX-071124 (400-259171-5) and MW2-ROX-071124-DUP (400-259171-6). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 400-678442 recovered outside acceptance criteria, low biased, for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-678446 recovered outside acceptance criteria, low biased, for Dibenz(a,h)anthracene. 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: Internal standard responses were outside of acceptance limits for the method blank: (MB 400-678242/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the method blank are non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The surrogate recovery for the blank associated with preparation batch 400-678242 and analytical batch 400-678446 was outside the upper control limits.

Method 8270E_SIM: Sample was not sent for re-extract for verification of detects as historical data confirms results. MW13-ROX-071124 (400-259171-3), P114R-ROX-071124 (400-259171-4), MW2-ROX-071124 (400-259171-5) and MW2-ROX-071124-DUP (400-259171-6)

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 400-677968 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: 400-259171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-259171-1	TB-ROX-071124-8260	Water	07/11/24 00:00	07/13/24 07:54
400-259171-2	TB-ROX-071124-8011	Water	07/11/24 00:00	07/13/24 07:54
400-259171-3	MW13-ROX-071124	Water	07/11/24 10:20	07/13/24 07:54
400-259171-4	P114R-ROX-071124	Water	07/11/24 11:40	07/13/24 07:54
400-259171-5	MW2-ROX-071124	Water	07/11/24 13:40	07/13/24 07:54
400-259171-6	MW2-ROX-071124-DUP	Water	07/11/24 13:40	07/13/24 07:54

Detection Summary

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

Job ID: 400-259171-1

Client Sample ID: TB-ROX-071124-8260 — Lab Sample ID: 400-259171-1

No Detections.

Client Sample ID: TB-ROX-071124-8011 — Lab Sample ID: 400-259171-2

No Detections.

Client Sample ID: MW13-ROX-071124 — Lab Sample ID: 400-259171-3

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
Anthracene	0.052	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA

Client Sample ID: P114R-ROX-071124 — Lab Sample ID: 400-259171-4

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
Acenaphthene	0.18	J	0.20	0.099	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW2-ROX-071124 — Lab Sample ID: 400-259171-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	37	J	2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	40		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene	14		10	1.3	ug/L	2		8260D	Total/NA
Naphthalene	7.0	J	10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	4.0		2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	62		2.0	1.4	ug/L	2		8260D	Total/NA
o-Xylene	2.0	J	10	1.2	ug/L	2		8260D	Total/NA
p-Isopropyltoluene	3.7		2.0	1.4	ug/L	2		8260D	Total/NA
sec-Butylbenzene	5.5		2.0	1.4	ug/L	2		8260D	Total/NA
Toluene	2.2		2.0	1.8	ug/L	2		8260D	Total/NA
1,2,4-Trimethylbenzene	6.7		2.0	1.6	ug/L	2		8260D	Total/NA
1,3,5-Trimethylbenzene	12		2.0	1.1	ug/L	2		8260D	Total/NA
Xylenes, Total	16	J	20	3.2	ug/L	2		8260D	Total/NA
1-Methylnaphthalene	4.8		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	6.7		0.19	0.063	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW2-ROX-071124-DUP — Lab Sample ID: 400-259171-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	51	J	2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	43		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene	22		10	1.3	ug/L	2		8260D	Total/NA
Naphthalene	7.9	J	10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	4.3		2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	68		2.0	1.4	ug/L	2		8260D	Total/NA
o-Xylene	2.5	J	10	1.2	ug/L	2		8260D	Total/NA
p-Isopropyltoluene	3.9		2.0	1.4	ug/L	2		8260D	Total/NA
sec-Butylbenzene	6.1		2.0	1.4	ug/L	2		8260D	Total/NA
Toluene	2.5		2.0	1.8	ug/L	2		8260D	Total/NA
1,2,4-Trimethylbenzene	8.3		2.0	1.6	ug/L	2		8260D	Total/NA
1,3,5-Trimethylbenzene	15		2.0	1.1	ug/L	2		8260D	Total/NA
Xylenes, Total	25		20	3.2	ug/L	2		8260D	Total/NA
1-Methylnaphthalene	5.6		0.20	0.079	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	7.8		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 QUARTERLY GW

Job ID: 400-259171-1

Client Sample ID: TB-ROX-071124-8260
Date Collected: 07/11/24 00:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-1
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			07/18/24 09:08	1
Acrolein	ND		20	3.3	ug/L			07/18/24 09:08	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 09:08	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 09:08	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 09:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 09:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 09:08	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 09:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/24 09:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 09:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 09:08	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 09:08	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 09:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 09:08	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 09:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 09:08	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 09:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 09:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 09:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 09:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 09:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 09:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 09:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 09:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 09:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 09:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 09:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 09:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 09:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 09:08	1
2-Hexanone	ND		25	4.3	ug/L			07/18/24 09:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 09:08	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 09:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 09:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 09:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 09:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 09:08	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 09:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 09:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 09:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 09:08	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 09:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 09:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 09:08	1

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

Job ID: 400-259171-1

Client Sample ID: TB-ROX-071124-8260
Date Collected: 07/11/24 00:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-1
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			07/18/24 09:08	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 09:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 09:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 09:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 09:08	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 09:08	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 09:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 09:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 09:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 09:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 09:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 09:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 09:08	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 09:08	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 09:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 09:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 09:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 09:08	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 09:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 09:08	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/18/24 09:08*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*07/18/24 09:08*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/18/24 09:08*	*1*

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

Job ID: 400-259171-1

Client Sample ID: TB-ROX-071124-8011
Date Collected: 07/11/24 00:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.035	0.020	ug/L		07/16/24 08:21	07/16/24 12:54	1
1,2-Dibromoethane	ND		0.023	0.018	ug/L		07/16/24 08:21	07/16/24 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*137*		*51 - 149*	*07/16/24 08:21*	*07/16/24 12:54*	*1*

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

Job ID: 400-259171-1

Client Sample ID: MW13-ROX-071124
Date Collected: 07/11/24 10:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-3
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			07/18/24 09:33	1
Acrolein	ND		20	3.3	ug/L			07/18/24 09:33	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 09:33	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 09:33	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 09:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 09:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 09:33	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 09:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/24 09:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 09:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 09:33	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 09:33	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 09:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 09:33	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 09:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 09:33	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 09:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 09:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 09:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 09:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 09:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 09:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 09:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 09:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 09:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 09:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 09:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 09:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 09:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 09:33	1
2-Hexanone	ND		25	4.3	ug/L			07/18/24 09:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 09:33	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 09:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 09:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 09:33	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			07/18/24 09:33	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 09:33	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 09:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 09:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 09:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 09:33	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 09:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 09:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 09:33	1

Client Sample ID: MW13-ROX-071124
Date Collected: 07/11/24 10:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-3
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			07/18/24 09:33	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 09:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 09:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 09:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 09:33	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 09:33	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 09:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 09:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 09:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 09:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 09:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 09:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 09:33	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 09:33	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 09:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 09:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 09:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 09:33	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 09:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 09:33	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 09:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/18/24 09:33*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/18/24 09:33*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/18/24 09:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		07/18/24 11:45	07/19/24 19:16	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 19:16	1
Anthracene	**0.052**	**J**	0.20	0.046	ug/L		07/18/24 11:45	07/19/24 19:16	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 19:16	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/24 11:45	07/19/24 19:16	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/24 11:45	07/19/24 19:16	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/18/24 11:45	07/19/24 19:16	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/18/24 11:45	07/19/24 19:16	1
Chrysene	ND		0.20	0.032	ug/L		07/18/24 11:45	07/19/24 19:16	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 19:16	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 19:16	1
Fluorene	ND		0.20	0.087	ug/L		07/18/24 11:45	07/19/24 19:16	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 19:16	1
Phenanthrene	ND		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 19:16	1
Pyrene	ND		0.20	0.038	ug/L		07/18/24 11:45	07/19/24 19:16	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		07/18/24 11:45	07/19/24 19:16	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/18/24 11:45	07/19/24 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*07/18/24 11:45*	*07/19/24 19:16*	*1*
2-Fluorobiphenyl	*50*		*15 - 128*	*07/18/24 11:45*	*07/19/24 19:16*	*1*

Client Sample ID: MW13-ROX-071124
Date Collected: 07/11/24 10:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-3
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*	*07/18/24 11:45*	*07/19/24 19:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
Benzenethiol	ND		9.8	9.7	ug/L		07/18/24 11:45	07/19/24 21:08	1
Benzoic acid	ND		29	24	ug/L		07/18/24 11:45	07/19/24 21:08	1
Benzyl alcohol	ND		9.8	7.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 21:08	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/18/24 11:45	07/19/24 21:08	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/18/24 11:45	07/19/24 21:08	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/18/24 11:45	07/19/24 21:08	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 21:08	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/18/24 11:45	07/19/24 21:08	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 21:08	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4-Dimethylphenol	ND	UJ	9.8	5.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 21:08	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/18/24 11:45	07/19/24 21:08	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/18/24 11:45	07/19/24 21:08	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
Indene	ND		9.8	3.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
Isophorone	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/18/24 11:45	07/19/24 21:08	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 21:08	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 21:08	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 21:08	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		07/18/24 11:45	07/19/24 21:08	1

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

Job ID: 400-259171-1

Client Sample ID: MW13-ROX-071124
Date Collected: 07/11/24 10:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.5	ug/L		07/18/24 11:45	07/19/24 21:08	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 21:08	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 21:08	1
Phenol	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 21:08	1
Pyridine	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 21:08	1
Quinoline	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 21:08	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/24 11:45	07/19/24 21:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*07/18/24 11:45*	*07/19/24 21:08*	*1*
2-Fluorophenol	*39*		*10 - 105*	*07/18/24 11:45*	*07/19/24 21:08*	*1*
Nitrobenzene-d5	*52*		*16 - 127*	*07/18/24 11:45*	*07/19/24 21:08*	*1*
Phenol-d5	*30*		*10 - 129*	*07/18/24 11:45*	*07/19/24 21:08*	*1*
Terphenyl-d14	*80*		*13 - 150*	*07/18/24 11:45*	*07/19/24 21:08*	*1*
2,4,6-Tribromophenol	*61*		*10 - 150*	*07/18/24 11:45*	*07/19/24 21:08*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.035	0.020	ug/L		07/16/24 08:21	07/16/24 13:16	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/16/24 08:21	07/16/24 13:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*07/16/24 08:21*	*07/16/24 13:16*	*1*

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

Job ID: 400-259171-1

Client Sample ID: P114R-ROX-071124
Date Collected: 07/11/24 11:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-4
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			07/17/24 19:55	1
Acrolein	ND		20	3.3	ug/L			07/17/24 19:55	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/24 19:55	1
Benzene	ND		1.0	0.24	ug/L			07/17/24 19:55	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/24 19:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/24 19:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
Bromoform	ND		5.0	0.25	ug/L			07/17/24 19:55	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/24 19:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/24 19:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/24 19:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/17/24 19:55	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/17/24 19:55	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/24 19:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/24 19:55	1
Chloroform	ND		1.0	0.90	ug/L			07/17/24 19:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/17/24 19:55	1
Chloromethane	ND		1.0	0.40	ug/L			07/17/24 19:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/17/24 19:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/24 19:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/17/24 19:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/24 19:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/24 19:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/24 19:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/24 19:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/17/24 19:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/24 19:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/17/24 19:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/24 19:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/24 19:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/24 19:55	1
2-Hexanone	ND		25	4.3	ug/L			07/17/24 19:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/24 19:55	1
Methylene bromide	ND		5.0	0.22	ug/L			07/17/24 19:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/24 19:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/24 19:55	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			07/17/24 19:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/17/24 19:55	1
Naphthalene	ND		5.0	3.0	ug/L			07/17/24 19:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/24 19:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/24 19:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/24 19:55	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/24 19:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/24 19:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/17/24 19:55	1

Client Sample ID: P114R-ROX-071124
Date Collected: 07/11/24 11:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-4
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			07/17/24 19:55	1
Styrene	ND		1.0	1.0	ug/L			07/17/24 19:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/24 19:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/17/24 19:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/24 19:55	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/17/24 19:55	1
Toluene	ND		1.0	0.90	ug/L			07/17/24 19:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/24 19:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/17/24 19:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/17/24 19:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/24 19:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/17/24 19:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/17/24 19:55	1
Trichloroethene	ND		1.0	0.15	ug/L			07/17/24 19:55	1
Trichlorofluoromethane	ND	*+	1.0	0.25	ug/L			07/17/24 19:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/24 19:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/24 19:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/24 19:55	1
Vinyl acetate	ND		25	0.93	ug/L			07/17/24 19:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/24 19:55	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/24 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/17/24 19:55*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/17/24 19:55*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/17/24 19:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.18**	**J**	0.20	0.099	ug/L		07/18/24 11:45	07/19/24 19:36	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/24 11:45	07/19/24 19:36	1
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 19:36	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 19:36	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/24 11:45	07/19/24 19:36	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/24 11:45	07/19/24 19:36	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/24 11:45	07/19/24 19:36	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/24 11:45	07/19/24 19:36	1
Chrysene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 19:36	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 19:36	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 19:36	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 19:36	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 19:36	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 19:36	1
Pyrene	ND		0.20	0.039	ug/L		07/18/24 11:45	07/19/24 19:36	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/24 11:45	07/19/24 19:36	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*80*		*18 - 147*	*07/18/24 11:45*	*07/19/24 19:36*	*1*
2-Fluorobiphenyl	*51*		*15 - 128*	*07/18/24 11:45*	*07/19/24 19:36*	*1*

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

Job ID: 400-259171-1

Client Sample ID: P114R-ROX-071124
Date Collected: 07/11/24 11:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*45*		*10 - 144*	*07/18/24 11:45*	*07/19/24 19:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/19/24 21:33	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 21:33	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 21:33	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/19/24 21:33	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/19/24 21:33	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/19/24 21:33	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 21:33	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 21:33	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/19/24 21:33	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/18/24 11:45	07/19/24 21:33	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/19/24 21:33	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 21:33	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 21:33	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 21:33	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/19/24 21:33	1

Client Sample ID: P114R-ROX-071124
Date Collected: 07/11/24 11:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/18/24 11:45	07/19/24 21:33	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 21:33	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 21:33	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 21:33	1
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/19/24 21:33	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 21:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/19/24 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*07/18/24 11:45*	*07/19/24 21:33*	*1*
2-Fluorophenol	*40*		*10 - 105*	*07/18/24 11:45*	*07/19/24 21:33*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*07/18/24 11:45*	*07/19/24 21:33*	*1*
Phenol-d5	*30*		*10 - 129*	*07/18/24 11:45*	*07/19/24 21:33*	*1*
Terphenyl-d14	*94*		*13 - 150*	*07/18/24 11:45*	*07/19/24 21:33*	*1*
2,4,6-Tribromophenol	*71*		*10 - 150*	*07/18/24 11:45*	*07/19/24 21:33*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/16/24 08:21	07/16/24 13:37	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/16/24 08:21	07/16/24 13:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*07/16/24 08:21*	*07/16/24 13:37*	*1*

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50	20	ug/L			07/19/24 16:45	2
Acrolein	ND		40	6.6	ug/L			07/19/24 16:45	2
Acrylonitrile	ND		20	5.6	ug/L			07/19/24 16:45	2
Benzene	ND		2.0	0.48	ug/L			07/19/24 16:45	2
Bromobenzene	ND		2.0	1.1	ug/L			07/19/24 16:45	2
Bromochloromethane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
Bromoform	ND		10	0.50	ug/L			07/19/24 16:45	2
Bromomethane	ND		2.0	2.0	ug/L			07/19/24 16:45	2
2-Butanone (MEK)	ND		50	5.2	ug/L			07/19/24 16:45	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/19/24 16:45	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/19/24 16:45	2
Chlorobenzene	ND		2.0	0.84	ug/L			07/19/24 16:45	2
Chloroethane	ND		2.0	1.5	ug/L			07/19/24 16:45	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/19/24 16:45	2
Chloroform	ND		2.0	1.8	ug/L			07/19/24 16:45	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/19/24 16:45	2
Chloromethane	ND		2.0	0.80	ug/L			07/19/24 16:45	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/19/24 16:45	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/19/24 16:45	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/19/24 16:45	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/19/24 16:45	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/19/24 16:45	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/19/24 16:45	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/19/24 16:45	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
1,2-Dichloroethane	ND		2.0	1.1	ug/L			07/19/24 16:45	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/19/24 16:45	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
1,1-Dichloropropene	ND		2.0	0.18	ug/L			07/19/24 16:45	2
Ethylbenzene	**37**	J	2.0	1.0	ug/L			07/19/24 16:45	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/19/24 16:45	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/19/24 16:45	2
2-Hexanone	ND		50	8.5	ug/L			07/19/24 16:45	2
Isopropylbenzene	**40**		2.0	1.1	ug/L			07/19/24 16:45	2
Methylene bromide	ND		10	0.44	ug/L			07/19/24 16:45	2
Methylene Chloride	ND		10	6.0	ug/L			07/19/24 16:45	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/19/24 16:45	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/19/24 16:45	2
m-Xylene & p-Xylene	**14**		10	1.3	ug/L			07/19/24 16:45	2
Naphthalene	**7.0**	J	10	6.0	ug/L			07/19/24 16:45	2
n-Butylbenzene	**4.0**		2.0	1.5	ug/L			07/19/24 16:45	2
N-Propylbenzene	**62**		2.0	1.4	ug/L			07/19/24 16:45	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/24 16:45	2
o-Xylene	**2.0**	J	10	1.2	ug/L			07/19/24 16:45	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/24 16:45	2
p-Isopropyltoluene	**3.7**		2.0	1.4	ug/L			07/19/24 16:45	2

Client Sample ID: MW2-ROX-071124
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**5.5**		2.0	1.4	ug/L			07/19/24 16:45	2
Styrene	ND		2.0	2.0	ug/L			07/19/24 16:45	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			07/19/24 16:45	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.76	ug/L			07/19/24 16:45	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/19/24 16:45	2
Tetrachloroethene	ND		2.0	0.66	ug/L			07/19/24 16:45	2
Toluene	**2.2**		2.0	1.8	ug/L			07/19/24 16:45	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/19/24 16:45	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/19/24 16:45	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/19/24 16:45	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/19/24 16:45	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/19/24 16:45	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/19/24 16:45	2
Trichloroethene	ND		2.0	0.30	ug/L			07/19/24 16:45	2
Trichlorofluoromethane	ND		2.0	0.50	ug/L			07/19/24 16:45	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/19/24 16:45	2
1,2,4-Trimethylbenzene	**6.7**		2.0	1.6	ug/L			07/19/24 16:45	2
1,3,5-Trimethylbenzene	**12**		2.0	1.1	ug/L			07/19/24 16:45	2
Vinyl acetate	ND		50	1.9	ug/L			07/19/24 16:45	2
Vinyl chloride	ND	UJ	2.0	1.0	ug/L			07/19/24 16:45	2
Xylenes, Total	**16**	**J**	20	3.2	ug/L			07/19/24 16:45	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/19/24 16:45*	*2*
Dibromofluoromethane	*107*		*75 - 126*		*07/19/24 16:45*	*2*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/19/24 16:45*	*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	0.095	ug/L		07/18/24 11:45	07/19/24 19:57	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/18/24 11:45	07/19/24 19:57	1
Anthracene	ND		0.19	0.045	ug/L		07/18/24 11:45	07/19/24 19:57	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 19:57	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/18/24 11:45	07/19/24 19:57	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/18/24 11:45	07/19/24 19:57	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/24 11:45	07/19/24 19:57	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/18/24 11:45	07/19/24 19:57	1
Chrysene	ND		0.19	0.032	ug/L		07/18/24 11:45	07/19/24 19:57	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/18/24 11:45	07/19/24 19:57	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 19:57	1
Fluorene	ND		0.19	0.086	ug/L		07/18/24 11:45	07/19/24 19:57	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 19:57	1
Phenanthrene	ND		0.19	0.087	ug/L		07/18/24 11:45	07/19/24 19:57	1
Pyrene	ND		0.19	0.038	ug/L		07/18/24 11:45	07/19/24 19:57	1
1-Methylnaphthalene	**4.8**		0.19	0.077	ug/L		07/18/24 11:45	07/19/24 19:57	1
2-Methylnaphthalene	**6.7**		0.19	0.063	ug/L		07/18/24 11:45	07/19/24 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*18 - 147*	*07/18/24 11:45*	*07/19/24 19:57*	*1*
2-Fluorobiphenyl	*39*		*15 - 128*	*07/18/24 11:45*	*07/19/24 19:57*	*1*

Client Sample ID: MW2-ROX-071124
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-5
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*	*07/18/24 11:45*	*07/19/24 19:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
Benzenethiol	ND		9.6	9.5	ug/L		07/18/24 11:45	07/19/24 21:58	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 21:58	1
Benzyl alcohol	ND		9.6	7.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
Bis(2-chloroethyl)ether	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		07/18/24 11:45	07/19/24 21:58	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Bromophenyl phenyl ether	ND		9.6	8.3	ug/L		07/18/24 11:45	07/19/24 21:58	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Chloroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		07/18/24 11:45	07/19/24 21:58	1
2-Chloronaphthalene	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 21:58	1
2-Chlorophenol	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Chlorophenyl phenyl ether	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		07/18/24 11:45	07/19/24 21:58	1
Dibenzofuran	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 21:58	1
Diethyl phthalate	ND		9.6	4.2	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4-Dimethylphenol	ND	UJ	9.6	5.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,6-Dinitrotoluene	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
1,4-Dioxane	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 21:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 21:58	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		07/18/24 11:45	07/19/24 21:58	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/18/24 11:45	07/19/24 21:58	1
Hexachloroethane	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
Indene	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 21:58	1
Isophorone	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
2-Methylphenol	ND		9.6	3.1	ug/L		07/18/24 11:45	07/19/24 21:58	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
2-Nitroaniline	ND		9.6	4.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
3-Nitroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Nitroaniline	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 21:58	1
Nitrobenzene	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 21:58	1
2-Nitrophenol	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
4-Nitrophenol	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 21:58	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		07/18/24 11:45	07/19/24 21:58	1

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		07/18/24 11:45	07/19/24 21:58	1
N-Nitrosodiphenylamine	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
Pentachlorophenol	ND		19	11	ug/L		07/18/24 11:45	07/19/24 21:58	1
Phenol	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 21:58	1
Pyridine	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 21:58	1
Quinoline	ND		9.6	2.3	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 21:58	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/18/24 11:45	07/19/24 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*07/18/24 11:45*	*07/19/24 21:58*	*1*
2-Fluorophenol	*39*		*10 - 105*	*07/18/24 11:45*	*07/19/24 21:58*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*07/18/24 11:45*	*07/19/24 21:58*	*1*
Phenol-d5	*30*		*10 - 129*	*07/18/24 11:45*	*07/19/24 21:58*	*1*
Terphenyl-d14	*81*		*13 - 150*	*07/18/24 11:45*	*07/19/24 21:58*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 21:58*	*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		0.031	0.017	ug/L		07/16/24 08:21	07/16/24 13:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/24 08:21	07/16/24 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*07/16/24 08:21*	*07/16/24 13:58*	*1*

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124-DUP
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50	20	ug/L			07/19/24 17:09	2
Acrolein	ND		40	6.6	ug/L			07/19/24 17:09	2
Acrylonitrile	ND		20	5.6	ug/L			07/19/24 17:09	2
Benzene	ND		2.0	0.48	ug/L			07/19/24 17:09	2
Bromobenzene	ND		2.0	1.1	ug/L			07/19/24 17:09	2
Bromochloromethane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
Bromoform	ND		10	0.50	ug/L			07/19/24 17:09	2
Bromomethane	ND		2.0	2.0	ug/L			07/19/24 17:09	2
2-Butanone (MEK)	ND		50	5.2	ug/L			07/19/24 17:09	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/19/24 17:09	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/19/24 17:09	2
Chlorobenzene	ND		2.0	0.84	ug/L			07/19/24 17:09	2
Chloroethane	ND		2.0	1.5	ug/L			07/19/24 17:09	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/19/24 17:09	2
Chloroform	ND		2.0	1.8	ug/L			07/19/24 17:09	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/19/24 17:09	2
Chloromethane	ND		2.0	0.80	ug/L			07/19/24 17:09	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/19/24 17:09	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/19/24 17:09	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/19/24 17:09	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/19/24 17:09	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/19/24 17:09	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/19/24 17:09	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/19/24 17:09	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
1,2-Dichloroethane	ND		2.0	1.1	ug/L			07/19/24 17:09	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/19/24 17:09	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
1,1-Dichloropropene	ND		2.0	0.18	ug/L			07/19/24 17:09	2
Ethylbenzene	**51**	J	2.0	1.0	ug/L			07/19/24 17:09	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/19/24 17:09	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/19/24 17:09	2
2-Hexanone	ND		50	8.5	ug/L			07/19/24 17:09	2
Isopropylbenzene	**43**		2.0	1.1	ug/L			07/19/24 17:09	2
Methylene bromide	ND		10	0.44	ug/L			07/19/24 17:09	2
Methylene Chloride	ND		10	6.0	ug/L			07/19/24 17:09	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/19/24 17:09	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/19/24 17:09	2
m-Xylene & p-Xylene	**22**		10	1.3	ug/L			07/19/24 17:09	2
Naphthalene	**7.9**	J	10	6.0	ug/L			07/19/24 17:09	2
n-Butylbenzene	**4.3**		2.0	1.5	ug/L			07/19/24 17:09	2
N-Propylbenzene	**68**		2.0	1.4	ug/L			07/19/24 17:09	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/24 17:09	2
o-Xylene	**2.5**	J	10	1.2	ug/L			07/19/24 17:09	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/19/24 17:09	2
p-Isopropyltoluene	**3.9**		2.0	1.4	ug/L			07/19/24 17:09	2

Client Sample ID: MW2-ROX-071124-DUP

Lab Sample ID: 400-259171-6

Date Collected: 07/11/24 13:40

Matrix: Water

Date Received: 07/13/24 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	**6.1**		2.0	1.4	ug/L			07/19/24 17:09	2
Styrene	ND		2.0	2.0	ug/L			07/19/24 17:09	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			07/19/24 17:09	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.76	ug/L			07/19/24 17:09	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/19/24 17:09	2
Tetrachloroethene	ND		2.0	0.66	ug/L			07/19/24 17:09	2
Toluene	**2.5**		2.0	1.8	ug/L			07/19/24 17:09	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/19/24 17:09	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/19/24 17:09	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/19/24 17:09	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/19/24 17:09	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/19/24 17:09	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/19/24 17:09	2
Trichloroethene	ND		2.0	0.30	ug/L			07/19/24 17:09	2
Trichlorofluoromethane	ND		2.0	0.50	ug/L			07/19/24 17:09	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/19/24 17:09	2
1,2,4-Trimethylbenzene	**8.3**		2.0	1.6	ug/L			07/19/24 17:09	2
1,3,5-Trimethylbenzene	**15**		2.0	1.1	ug/L			07/19/24 17:09	2
Vinyl acetate	ND		50	1.9	ug/L			07/19/24 17:09	2
Vinyl chloride	ND	UJ	2.0	1.0	ug/L			07/19/24 17:09	2
Xylenes, Total	**25**		20	3.2	ug/L			07/19/24 17:09	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/19/24 17:09*	*2*
Dibromofluoromethane	*108*		*75 - 126*		*07/19/24 17:09*	*2*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/19/24 17:09*	*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	0.098	ug/L		07/18/24 11:45	07/19/24 20:19	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 20:19	1
Anthracene	ND		0.20	0.046	ug/L		07/18/24 11:45	07/19/24 20:19	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:19	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/24 11:45	07/19/24 20:19	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/24 11:45	07/19/24 20:19	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/24 11:45	07/19/24 20:19	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/18/24 11:45	07/19/24 20:19	1
Chrysene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:19	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 20:19	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:19	1
Fluorene	ND		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 20:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:19	1
Phenanthrene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 20:19	1
Pyrene	ND		0.20	0.038	ug/L		07/18/24 11:45	07/19/24 20:19	1
1-Methylnaphthalene	**5.6**		0.20	0.079	ug/L		07/18/24 11:45	07/19/24 20:19	1
2-Methylnaphthalene	**7.8**		0.20	0.065	ug/L		07/18/24 11:45	07/19/24 20:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*18 - 147*	*07/18/24 11:45*	*07/19/24 20:19*	*1*
2-Fluorobiphenyl	*41*		*15 - 128*	*07/18/24 11:45*	*07/19/24 20:19*	*1*

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124-DUP
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-6
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*	*07/18/24 11:45*	*07/19/24 20:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	8.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
Benzenethiol	ND		9.9	9.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 22:23	1
Benzyl alcohol	ND		9.9	7.2	ug/L		07/18/24 11:45	07/19/24 22:23	1
Bis(2-chloroethoxy)methane	ND		9.9	4.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
Bis(2-chloroethyl)ether	ND		9.9	3.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
bis (2-chloroisopropyl) ether	ND		9.9	1.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
Bis(2-ethylhexyl) phthalate	ND		9.9	8.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Bromophenyl phenyl ether	ND		9.9	8.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
Butyl benzyl phthalate	ND		9.9	5.7	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Chloroaniline	ND		9.9	4.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Chloro-3-methylphenol	ND		9.9	5.2	ug/L		07/18/24 11:45	07/19/24 22:23	1
2-Chloronaphthalene	ND		9.9	3.7	ug/L		07/18/24 11:45	07/19/24 22:23	1
2-Chlorophenol	ND		9.9	4.0	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Chlorophenyl phenyl ether	ND		9.9	3.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
Dibenz[a,h]acridine	ND		9.9	2.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
Dibenzofuran	ND		9.9	3.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4-Dichlorophenol	ND		9.9	4.2	ug/L		07/18/24 11:45	07/19/24 22:23	1
Diethyl phthalate	ND		9.9	4.3	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4-Dimethylphenol	ND	UJ	9.9	5.1	ug/L		07/18/24 11:45	07/19/24 22:23	1
Dimethyl phthalate	ND		9.9	4.1	ug/L		07/18/24 11:45	07/19/24 22:23	1
Di-n-butyl phthalate	ND		9.9	4.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
4,6-Dinitro-ortho-cresol	ND		9.9	9.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4-Dinitrophenol	ND		30	4.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4-Dinitrotoluene	ND		9.9	5.0	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,6-Dinitrotoluene	ND		9.9	3.8	ug/L		07/18/24 11:45	07/19/24 22:23	1
Di-n-octyl phthalate	ND		9.9	5.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
1,4-Dioxane	ND		9.9	4.2	ug/L		07/18/24 11:45	07/19/24 22:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	3.3	ug/L		07/18/24 11:45	07/19/24 22:23	1
Hexachlorobenzene	ND		9.9	9.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/18/24 11:45	07/19/24 22:23	1
Hexachloroethane	ND		9.9	5.1	ug/L		07/18/24 11:45	07/19/24 22:23	1
Indene	ND		9.9	3.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
Isophorone	ND		9.9	5.1	ug/L		07/18/24 11:45	07/19/24 22:23	1
2-Methylphenol	ND		9.9	3.2	ug/L		07/18/24 11:45	07/19/24 22:23	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
2-Nitroaniline	ND		9.9	4.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
3-Nitroaniline	ND		9.9	4.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Nitroaniline	ND		9.9	4.0	ug/L		07/18/24 11:45	07/19/24 22:23	1
Nitrobenzene	ND		9.9	4.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
2-Nitrophenol	ND		9.9	4.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
4-Nitrophenol	ND		9.9	3.3	ug/L		07/18/24 11:45	07/19/24 22:23	1
N-Nitrosodimethylamine	ND		9.9	2.2	ug/L		07/18/24 11:45	07/19/24 22:23	1

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124-DUP

Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-6

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		9.9	2.5	ug/L		07/18/24 11:45	07/19/24 22:23	1
N-Nitrosodiphenylamine	ND		9.9	3.6	ug/L		07/18/24 11:45	07/19/24 22:23	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 22:23	1
Phenol	ND		9.9	4.1	ug/L		07/18/24 11:45	07/19/24 22:23	1
Pyridine	ND		9.9	9.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
Quinoline	ND		9.9	2.4	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4,5-Trichlorophenol	ND		9.9	3.9	ug/L		07/18/24 11:45	07/19/24 22:23	1
2,4,6-Trichlorophenol	ND		9.9	3.4	ug/L		07/18/24 11:45	07/19/24 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*21 - 114*	*07/18/24 11:45*	*07/19/24 22:23*	*1*
2-Fluorophenol	*45*		*10 - 105*	*07/18/24 11:45*	*07/19/24 22:23*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/18/24 11:45*	*07/19/24 22:23*	*1*
Phenol-d5	*33*		*10 - 129*	*07/18/24 11:45*	*07/19/24 22:23*	*1*
Terphenyl-d14	*83*		*13 - 150*	*07/18/24 11:45*	*07/19/24 22:23*	*1*
2,4,6-Tribromophenol	*60*		*10 - 150*	*07/18/24 11:45*	*07/19/24 22:23*	*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		0.034	0.019	ug/L		07/16/24 08:21	07/16/24 14:39	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/16/24 08:21	07/16/24 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*07/16/24 08:21*	*07/16/24 14:39*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

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

Job ID: 400-259171-1

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)
400-259171-1	TB-ROX-071124-8260	98	116	90
400-259171-3	MW13-ROX-071124	97	113	90
400-259171-4	P114R-ROX-071124	97	112	91
400-259171-5	MW2-ROX-071124	100	107	99
400-259171-6	MW2-ROX-071124-DUP	98	108	99
LCS 400-678099/1002	Lab Control Sample	100	113	96
LCS 400-678192/1002	Lab Control Sample	98	115	90
LCS 400-678339/1002	Lab Control Sample	96	107	93
MB 400-678099/29	Method Blank	99	114	92
MB 400-678192/4	Method Blank	99	112	90
MB 400-678339/4	Method Blank	98	112	93

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-259171-3	MW13-ROX-071124	58	39	52	30	80	61
400-259171-4	P114R-ROX-071124	61	40	55	30	94	71
400-259171-5	MW2-ROX-071124	58	39	56	30	81	57
400-259171-6	MW2-ROX-071124-DUP	66	45	61	33	83	60
LCS 400-678242/2-A	Lab Control Sample	68	51	65	45	92	62
LCS 400-678242/4-A	Lab Control Sample	66	46	63	35	88	58
LCSD 400-678242/3-A	Lab Control Sample Dup	72	52	66	47	97	66
LCSD 400-678242/5-A	Lab Control Sample Dup	66	48	65	36	90	56
MB 400-678242/1-A	Method Blank	67	46	66	33	88	57

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)
400-259171-3	MW13-ROX-071124	79	50	61
400-259171-4	P114R-ROX-071124	80	51	45
400-259171-5	MW2-ROX-071124	101	39	66
400-259171-6	MW2-ROX-071124-DUP	100	41	70

Surrogate Summary

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

Job ID: 400-259171-1

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 400-678242/2-A	Lab Control Sample	100	66	58
LCSD 400-678242/3-A	Lab Control Sample Dup	100	70	60
MB 400-678242/1-A	Method Blank	148 S1+ *3	72	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-259171-2	TB-ROX-071124-8011	137
400-259171-3	MW13-ROX-071124	98
400-259171-4	P114R-ROX-071124	96
400-259171-5	MW2-ROX-071124	74
400-259171-6	MW2-ROX-071124-DUP	88
LCS 400-677939/2-A	Lab Control Sample	128
LCSD 400-677939/3-A	Lab Control Sample Dup	146
MB 400-677939/1-A	Method Blank	135

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-259171-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-259171-1

Client Sample ID: TB-ROX-071124-8260
Date Collected: 07/11/24 00:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-1
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	678192	07/18/24 09:08	WPD	EET PEN

Client Sample ID: TB-ROX-071124-8011
Date Collected: 07/11/24 00:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-2
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			30 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 12:54	S1K	EET PEN

Client Sample ID: MW13-ROX-071124
Date Collected: 07/11/24 10:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678192	07/18/24 09:33	WPD	EET PEN
Total/NA	Prep	3510C			254.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 21:08	KJA	EET PEN
Total/NA	Prep	3510C			254.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 19:16	JAW	EET PEN
Total/NA	Prep	8011			30.4 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 13:16	S1K	EET PEN

Client Sample ID: P114R-ROX-071124
Date Collected: 07/11/24 11:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678099	07/17/24 19:55	BPO	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 21:33	KJA	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 19:36	JAW	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 13:37	S1K	EET PEN

Client Sample ID: MW2-ROX-071124
Date Collected: 07/11/24 13:40
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259171-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2	5 mL	5 mL	678339	07/19/24 16:45	WPD	EET PEN
Total/NA	Prep	3510C			260 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 21:58	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-259171-1

Client Sample ID: MW2-ROX-071124

Lab Sample ID: 400-259171-5

Date Collected: 07/11/24 13:40

Matrix: Water

Date Received: 07/13/24 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	3510C			260 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 19:57	JAW	EET PEN
Total/NA	Prep	8011			34.3 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 13:58	S1K	EET PEN

Client Sample ID: MW2-ROX-071124-DUP

Lab Sample ID: 400-259171-6

Date Collected: 07/11/24 13:40

Matrix: Water

Date Received: 07/13/24 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		2	5 mL	5 mL	678339	07/19/24 17:09	WPD	EET PEN
Total/NA	Prep	3510C			253.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 22:23	KJA	EET PEN
Total/NA	Prep	3510C			253.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 20:19	JAW	EET PEN
Total/NA	Prep	8011			31 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 14:39	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677939/1-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 11:51	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678099/29

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	678099	07/17/24 11:46	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678192/4

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	678192	07/18/24 08:44	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678242/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:07	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 15:45	JAW	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678339/4

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	678339	07/19/24 08:38	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677939/2-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 12:12	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678099/1002

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	678099	07/17/24 10:30	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678192/1002

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	678192	07/18/24 07:45	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:32	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:06	JAW	EET PEN

Lab Chronicle

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

Job ID: 400-259171-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/4-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:22	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678339/1002
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	678339	07/19/24 07:42	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677939/3-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 12:33	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:57	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:27	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:47	KJA	EET PEN

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

GC/MS VOA

Analysis Batch: 678099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-4	P114R-ROX-071124	Total/NA	Water	8260D	
MB 400-678099/29	Method Blank	Total/NA	Water	8260D	
LCS 400-678099/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-1	TB-ROX-071124-8260	Total/NA	Water	8260D	
400-259171-3	MW13-ROX-071124	Total/NA	Water	8260D	
MB 400-678192/4	Method Blank	Total/NA	Water	8260D	
LCS 400-678192/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-5	MW2-ROX-071124	Total/NA	Water	8260D	
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	8260D	
MB 400-678339/4	Method Blank	Total/NA	Water	8260D	
LCS 400-678339/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 678242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-3	MW13-ROX-071124	Total/NA	Water	3510C	
400-259171-4	P114R-ROX-071124	Total/NA	Water	3510C	
400-259171-5	MW2-ROX-071124	Total/NA	Water	3510C	
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	3510C	
MB 400-678242/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 678442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-3	MW13-ROX-071124	Total/NA	Water	8270E	678242
400-259171-4	P114R-ROX-071124	Total/NA	Water	8270E	678242
400-259171-5	MW2-ROX-071124	Total/NA	Water	8270E	678242
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	8270E	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E	678242
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242

Analysis Batch: 678446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-3	MW13-ROX-071124	Total/NA	Water	8270E SIM	678242
400-259171-4	P114R-ROX-071124	Total/NA	Water	8270E SIM	678242
400-259171-5	MW2-ROX-071124	Total/NA	Water	8270E SIM	678242
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	8270E SIM	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E SIM	678242

GC/MS Semi VOA (Continued)

Analysis Batch: 678446 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	678242

GC Semi VOA

Prep Batch: 677939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-2	TB-ROX-071124-8011	Total/NA	Water	8011	
400-259171-3	MW13-ROX-071124	Total/NA	Water	8011	
400-259171-4	P114R-ROX-071124	Total/NA	Water	8011	
400-259171-5	MW2-ROX-071124	Total/NA	Water	8011	
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	8011	
MB 400-677939/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677939/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677939/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 677968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259171-2	TB-ROX-071124-8011	Total/NA	Water	8011	677939
400-259171-3	MW13-ROX-071124	Total/NA	Water	8011	677939
400-259171-4	P114R-ROX-071124	Total/NA	Water	8011	677939
400-259171-5	MW2-ROX-071124	Total/NA	Water	8011	677939
400-259171-6	MW2-ROX-071124-DUP	Total/NA	Water	8011	677939
MB 400-677939/1-A	Method Blank	Total/NA	Water	8011	677939
LCS 400-677939/2-A	Lab Control Sample	Total/NA	Water	8011	677939
LCSD 400-677939/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677939

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

Lab Sample ID: MB 400-678099/29
Matrix: Water
Analysis Batch: 678099

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			07/17/24 11:46	1
Acrolein	ND		20	3.3	ug/L			07/17/24 11:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/17/24 11:46	1
Benzene	ND		1.0	0.24	ug/L			07/17/24 11:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/17/24 11:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/17/24 11:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
Bromoform	ND		5.0	0.25	ug/L			07/17/24 11:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/17/24 11:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/17/24 11:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/17/24 11:46	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/17/24 11:46	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/17/24 11:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/17/24 11:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/17/24 11:46	1
Chloroform	ND		1.0	0.90	ug/L			07/17/24 11:46	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/17/24 11:46	1
Chloromethane	ND		1.0	0.40	ug/L			07/17/24 11:46	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/17/24 11:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/17/24 11:46	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/17/24 11:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/17/24 11:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/17/24 11:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/17/24 11:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/17/24 11:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/17/24 11:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/17/24 11:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/17/24 11:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/17/24 11:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/17/24 11:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/17/24 11:46	1
2-Hexanone	ND		25	4.3	ug/L			07/17/24 11:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/17/24 11:46	1
Methylene bromide	ND		5.0	0.22	ug/L			07/17/24 11:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/17/24 11:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/17/24 11:46	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/17/24 11:46	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/17/24 11:46	1
Naphthalene	ND		5.0	3.0	ug/L			07/17/24 11:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/17/24 11:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/17/24 11:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/17/24 11:46	1
o-Xylene	ND		5.0	0.60	ug/L			07/17/24 11:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/17/24 11:46	1

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

Lab Sample ID: MB 400-678099/29
Matrix: Water
Analysis Batch: 678099

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			07/17/24 11:46	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/17/24 11:46	1
Styrene	ND		1.0	1.0	ug/L			07/17/24 11:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/17/24 11:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/17/24 11:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/17/24 11:46	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/17/24 11:46	1
Toluene	ND		1.0	0.90	ug/L			07/17/24 11:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/17/24 11:46	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/17/24 11:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/17/24 11:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/17/24 11:46	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/17/24 11:46	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/17/24 11:46	1
Trichloroethene	ND		1.0	0.15	ug/L			07/17/24 11:46	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/17/24 11:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/17/24 11:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/17/24 11:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/17/24 11:46	1
Vinyl acetate	ND		25	0.93	ug/L			07/17/24 11:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/17/24 11:46	1
Xylenes, Total	ND		10	1.6	ug/L			07/17/24 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/17/24 11:46*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/17/24 11:46*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/17/24 11:46*	*1*

Lab Sample ID: LCS 400-678099/1002
Matrix: Water
Analysis Batch: 678099

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	452	*+	ug/L		226	43 - 150
Acrolein	250	325		ug/L		130	38 - 150
Acrylonitrile	500	510		ug/L		102	64 - 142
Benzene	50.0	49.8		ug/L		100	70 - 130
Bromobenzene	50.0	49.8		ug/L		100	70 - 132
Bromochloromethane	50.0	52.8		ug/L		106	70 - 130
Bromodichloromethane	50.0	59.2		ug/L		118	67 - 133
Bromoform	50.0	53.0		ug/L		106	57 - 140
Bromomethane	25.0	31.8		ug/L		127	10 - 150
2-Butanone (MEK)	200	252		ug/L		126	61 - 145
Carbon disulfide	50.0	43.8		ug/L		88	61 - 137
Carbon tetrachloride	50.0	60.4		ug/L		121	61 - 137
Chlorobenzene	50.0	49.6		ug/L		99	70 - 130
Chloroethane	25.0	25.7		ug/L		103	55 - 141
2-Chloroethyl vinyl ether	25.0	30.8		ug/L		123	10 - 150

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

Lab Sample ID: LCS 400-678099/1002
Matrix: Water
Analysis Batch: 678099

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	58.7		ug/L		117	69 - 130
1-Chlorohexane	50.0	53.3		ug/L		107	69 - 130
Chloromethane	25.0	29.7		ug/L		119	58 - 137
cis-1,2-Dichloroethene	50.0	56.1		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	55.6		ug/L		111	69 - 132
Dibromochloromethane	50.0	53.2		ug/L		106	67 - 135
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dichlorodifluoromethane	25.0	14.9		ug/L		60	41 - 146
1,1-Dichloroethane	50.0	52.1		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	59.7		ug/L		119	69 - 130
1,1-Dichloroethene	50.0	44.7		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	62.4		ug/L		125	52 - 135
1,1-Dichloropropene	50.0	55.3		ug/L		111	70 - 130
Ethylbenzene	50.0	49.2		ug/L		98	70 - 130
Ethyl methacrylate	50.0	46.3		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	59.6		ug/L		119	53 - 140
2-Hexanone	200	221		ug/L		111	65 - 137
Isopropylbenzene	50.0	46.9		ug/L		94	70 - 130
Methylene bromide	50.0	54.5		ug/L		109	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	212		ug/L		106	69 - 138
Methyl tert-butyl ether	50.0	53.2		ug/L		106	66 - 130
m-Xylene & p-Xylene	50.0	51.7		ug/L		103	70 - 130
Naphthalene	50.0	34.4		ug/L		69	47 - 149
n-Butylbenzene	50.0	49.8		ug/L		100	67 - 130
N-Propylbenzene	50.0	48.4		ug/L		97	70 - 130
o-Chlorotoluene	50.0	47.4		ug/L		95	70 - 130
o-Xylene	50.0	49.3		ug/L		99	70 - 130
p-Chlorotoluene	50.0	49.2		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	49.4		ug/L		99	65 - 130
sec-Butylbenzene	50.0	48.4		ug/L		97	66 - 130
Styrene	50.0	49.7		ug/L		99	70 - 130
tert-Butylbenzene	50.0	49.7		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.6		ug/L		111	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.4		ug/L		87	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	47.3		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	54.8		ug/L		110	70 - 130
trans-1,3-Dichloropropene	50.0	53.2		ug/L		106	63 - 130
1,2,3-Trichlorobenzene	50.0	52.1		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	49.8		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	62.2		ug/L		124	68 - 130
1,1,2-Trichloroethane	50.0	46.8		ug/L		94	70 - 130
Trichloroethene	50.0	56.4		ug/L		113	70 - 130
Trichlorofluoromethane	25.0	37.3	*+	ug/L		149	65 - 138

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

Lab Sample ID: LCS 400-678099/1002
Matrix: Water
Analysis Batch: 678099

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	46.9		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	50.0	48.1		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	49.3		ug/L		99	69 - 130
Vinyl acetate	50.0	61.1		ug/L		122	26 - 150
Vinyl chloride	25.0	22.7		ug/L		91	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*113*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: MB 400-678192/4
Matrix: Water
Analysis Batch: 678192

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/18/24 08:44	1
Acrolein	ND		20	3.3	ug/L			07/18/24 08:44	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 08:44	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 08:44	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 08:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 08:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 08:44	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 08:44	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 08:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/24 08:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 08:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 08:44	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 08:44	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 08:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 08:44	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 08:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 08:44	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 08:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 08:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 08:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 08:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 08:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 08:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 08:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 08:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 08:44	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 08:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 08:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 08:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 08:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 08:44	1

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

Lab Sample ID: MB 400-678192/4
Matrix: Water
Analysis Batch: 678192

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	0.090	ug/L			07/18/24 08:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 08:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 08:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 08:44	1
2-Hexanone	ND		25	4.3	ug/L			07/18/24 08:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 08:44	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 08:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 08:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 08:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 08:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 08:44	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 08:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 08:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 08:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 08:44	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 08:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 08:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 08:44	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/24 08:44	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 08:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 08:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 08:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 08:44	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 08:44	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 08:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 08:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 08:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 08:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 08:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 08:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 08:44	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 08:44	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 08:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 08:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 08:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 08:44	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 08:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 08:44	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 08:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/18/24 08:44*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/18/24 08:44*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/18/24 08:44*	*1*

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

Lab Sample ID: LCS 400-678192/1002
Matrix: Water
Analysis Batch: 678192

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	465	*+	ug/L		233	43 - 150
Acrolein	250	259		ug/L		104	38 - 150
Acrylonitrile	500	486		ug/L		97	64 - 142
Benzene	50.0	48.6		ug/L		97	70 - 130
Bromobenzene	50.0	46.5		ug/L		93	70 - 132
Bromochloromethane	50.0	52.0		ug/L		104	70 - 130
Bromodichloromethane	50.0	55.0		ug/L		110	67 - 133
Bromoform	50.0	47.7		ug/L		95	57 - 140
Bromomethane	25.0	29.8		ug/L		119	10 - 150
2-Butanone (MEK)	200	274		ug/L		137	61 - 145
Carbon disulfide	50.0	42.1		ug/L		84	61 - 137
Carbon tetrachloride	50.0	57.3		ug/L		115	61 - 137
Chlorobenzene	50.0	45.5		ug/L		91	70 - 130
Chloroethane	25.0	22.7		ug/L		91	55 - 141
2-Chloroethyl vinyl ether	25.0	25.9		ug/L		104	10 - 150
Chloroform	50.0	58.5		ug/L		117	69 - 130
1-Chlorohexane	50.0	46.8		ug/L		94	69 - 130
Chloromethane	25.0	27.0		ug/L		108	58 - 137
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	52.3		ug/L		105	69 - 132
Dibromochloromethane	50.0	48.7		ug/L		97	67 - 135
1,2-Dichlorobenzene	50.0	48.1		ug/L		96	67 - 130
1,3-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.5		ug/L		93	70 - 130
Dichlorodifluoromethane	25.0	19.4		ug/L		78	41 - 146
1,1-Dichloroethane	50.0	56.3		ug/L		113	70 - 130
1,2-Dichloroethane	50.0	55.6		ug/L		111	69 - 130
1,1-Dichloroethene	50.0	54.6		ug/L		109	63 - 134
1,2-Dichloropropane	50.0	51.1		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	45.2		ug/L		90	70 - 130
2,2-Dichloropropane	50.0	57.7		ug/L		115	52 - 135
1,1-Dichloropropene	50.0	51.2		ug/L		102	70 - 130
Ethylbenzene	50.0	44.5		ug/L		89	70 - 130
Ethyl methacrylate	50.0	42.2		ug/L		84	68 - 130
Hexachlorobutadiene	50.0	54.2		ug/L		108	53 - 140
2-Hexanone	200	208		ug/L		104	65 - 137
Isopropylbenzene	50.0	42.6		ug/L		85	70 - 130
Methylene bromide	50.0	53.3		ug/L		107	70 - 130
Methylene Chloride	50.0	47.6		ug/L		95	66 - 135
4-Methyl-2-pentanone (MIBK)	200	200		ug/L		100	69 - 138
Methyl tert-butyl ether	50.0	51.3		ug/L		103	66 - 130
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 130
Naphthalene	50.0	29.7		ug/L		59	47 - 149
n-Butylbenzene	50.0	45.4		ug/L		91	67 - 130
N-Propylbenzene	50.0	44.8		ug/L		90	70 - 130
o-Chlorotoluene	50.0	43.9		ug/L		88	70 - 130
o-Xylene	50.0	43.8		ug/L		88	70 - 130
p-Chlorotoluene	50.0	45.1		ug/L		90	70 - 130

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

Lab Sample ID: LCS 400-678192/1002
Matrix: Water
Analysis Batch: 678192

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	45.7		ug/L		91	65 - 130
sec-Butylbenzene	50.0	45.7		ug/L		91	66 - 130
Styrene	50.0	45.5		ug/L		91	70 - 130
tert-Butylbenzene	50.0	45.4		ug/L		91	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.1		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.5		ug/L		85	70 - 131
Tetrachloroethene	50.0	44.3		ug/L		89	65 - 130
Toluene	50.0	42.8		ug/L		86	70 - 130
trans-1,2-Dichloroethene	50.0	44.8		ug/L		90	70 - 130
trans-1,3-Dichloropropene	50.0	47.7		ug/L		95	63 - 130
1,2,3-Trichlorobenzene	50.0	48.6		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.0		ug/L		96	60 - 140
1,1,1-Trichloroethane	50.0	56.3		ug/L		113	68 - 130
1,1,2-Trichloroethane	50.0	42.4		ug/L		85	70 - 130
Trichloroethene	50.0	54.1		ug/L		108	70 - 130
Trichlorofluoromethane	25.0	28.9		ug/L		116	65 - 138
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	44.8		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	50.0	45.5		ug/L		91	69 - 130
Vinyl acetate	50.0	49.2		ug/L		98	26 - 150
Vinyl chloride	25.0	20.5		ug/L		82	59 - 136
Xylenes, Total	100	89.7		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*115*		*75 - 126*
Toluene-d8 (Surr)	*90*		*64 - 132*

Lab Sample ID: MB 400-678339/4
Matrix: Water
Analysis Batch: 678339

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/24 08:38	1
Acrolein	ND		20	3.3	ug/L			07/19/24 08:38	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/24 08:38	1
Benzene	ND		1.0	0.24	ug/L			07/19/24 08:38	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/24 08:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/24 08:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
Bromoform	ND		5.0	0.25	ug/L			07/19/24 08:38	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/24 08:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/24 08:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/24 08:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/19/24 08:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/19/24 08:38	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/24 08:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/24 08:38	1

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

Lab Sample ID: MB 400-678339/4
Matrix: Water
Analysis Batch: 678339

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			07/19/24 08:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/19/24 08:38	1
Chloromethane	ND		1.0	0.40	ug/L			07/19/24 08:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/19/24 08:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/24 08:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/19/24 08:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/24 08:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/24 08:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/24 08:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/24 08:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/19/24 08:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 08:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/19/24 08:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/24 08:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/24 08:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/24 08:38	1
2-Hexanone	ND		25	4.3	ug/L			07/19/24 08:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/24 08:38	1
Methylene bromide	ND		5.0	0.22	ug/L			07/19/24 08:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/24 08:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/24 08:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/19/24 08:38	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 08:38	1
Naphthalene	ND		5.0	3.0	ug/L			07/19/24 08:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/24 08:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/24 08:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/24 08:38	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 08:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/24 08:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/24 08:38	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/24 08:38	1
Styrene	ND		1.0	1.0	ug/L			07/19/24 08:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/24 08:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/19/24 08:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/24 08:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/19/24 08:38	1
Toluene	ND		1.0	0.90	ug/L			07/19/24 08:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 08:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/19/24 08:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/19/24 08:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/24 08:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/19/24 08:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/19/24 08:38	1
Trichloroethene	ND		1.0	0.15	ug/L			07/19/24 08:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/19/24 08:38	1

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

Lab Sample ID: MB 400-678339/4
Matrix: Water
Analysis Batch: 678339

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			07/19/24 08:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/24 08:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/24 08:38	1
Vinyl acetate	ND		25	0.93	ug/L			07/19/24 08:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/24 08:38	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 08:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/19/24 08:38*	*1*
Dibromofluoromethane	*112*		*75 - 126*		*07/19/24 08:38*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*07/19/24 08:38*	*1*

Lab Sample ID: LCS 400-678339/1002
Matrix: Water
Analysis Batch: 678339

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	468	*+	ug/L		234	43 - 150
Acrolein	250	231		ug/L		92	38 - 150
Acrylonitrile	500	497		ug/L		99	64 - 142
Benzene	50.0	48.0		ug/L		96	70 - 130
Bromobenzene	50.0	47.4		ug/L		95	70 - 132
Bromochloromethane	50.0	50.4		ug/L		101	70 - 130
Bromodichloromethane	50.0	53.3		ug/L		107	67 - 133
Bromoform	50.0	49.8		ug/L		100	57 - 140
Bromomethane	25.0	25.8		ug/L		103	10 - 150
2-Butanone (MEK)	200	262		ug/L		131	61 - 145
Carbon disulfide	50.0	41.0		ug/L		82	61 - 137
Carbon tetrachloride	50.0	55.8		ug/L		112	61 - 137
Chlorobenzene	50.0	48.2		ug/L		96	70 - 130
Chloroethane	25.0	20.3		ug/L		81	55 - 141
2-Chloroethyl vinyl ether	25.0	22.5		ug/L		90	10 - 150
Chloroform	50.0	56.6		ug/L		113	69 - 130
1-Chlorohexane	50.0	48.8		ug/L		98	69 - 130
Chloromethane	25.0	24.1		ug/L		96	58 - 137
cis-1,2-Dichloroethene	50.0	53.2		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	52.5		ug/L		105	69 - 132
Dibromochloromethane	50.0	50.4		ug/L		101	67 - 135
1,2-Dichlorobenzene	50.0	49.5		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	48.7		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.5		ug/L		95	70 - 130
Dichlorodifluoromethane	25.0	18.9		ug/L		76	41 - 146
1,1-Dichloroethane	50.0	56.1		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	54.3		ug/L		109	69 - 130
1,1-Dichloroethene	50.0	54.6		ug/L		109	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	47.2		ug/L		94	70 - 130
2,2-Dichloropropane	50.0	55.5		ug/L		111	52 - 135

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

Lab Sample ID: LCS 400-678339/1002
Matrix: Water
Analysis Batch: 678339

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	52.5		ug/L		105	70 - 130
Ethylbenzene	50.0	46.0		ug/L		92	70 - 130
Ethyl methacrylate	50.0	44.6		ug/L		89	68 - 130
Hexachlorobutadiene	50.0	57.2		ug/L		114	53 - 140
2-Hexanone	200	230		ug/L		115	65 - 137
Isopropylbenzene	50.0	44.6		ug/L		89	70 - 130
Methylene bromide	50.0	55.1		ug/L		110	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	206		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	52.0		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	70 - 130
Naphthalene	50.0	29.0		ug/L		58	47 - 149
n-Butylbenzene	50.0	48.1		ug/L		96	67 - 130
N-Propylbenzene	50.0	46.6		ug/L		93	70 - 130
o-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
o-Xylene	50.0	46.6		ug/L		93	70 - 130
p-Chlorotoluene	50.0	46.5		ug/L		93	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	47.1		ug/L		94	66 - 130
Styrene	50.0	46.5		ug/L		93	70 - 130
tert-Butylbenzene	50.0	46.3		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	44.6		ug/L		89	70 - 131
Tetrachloroethene	50.0	45.6		ug/L		91	65 - 130
Toluene	50.0	44.8		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	48.4		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	56.4		ug/L		113	68 - 130
1,1,2-Trichloroethane	50.0	46.0		ug/L		92	70 - 130
Trichloroethene	50.0	54.5		ug/L		109	70 - 130
Trichlorofluoromethane	25.0	28.8		ug/L		115	65 - 138
1,2,3-Trichloropropane	50.0	45.7		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	46.5		ug/L		93	70 - 130
1,3,5-Trimethylbenzene	50.0	46.6		ug/L		93	69 - 130
Vinyl acetate	50.0	46.2		ug/L		92	26 - 150
Vinyl chloride	25.0	18.4		ug/L		74	59 - 136
Xylenes, Total	100	94.1		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*107*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 16:07	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/19/24 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Phenol-d5	*33*		*10 - 129*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.0		ug/L		51	10 - 127
Benzoic acid	492	225		ug/L		46	19 - 126
Benzyl alcohol	120	77.9		ug/L		65	17 - 109
Bis(2-chloroethoxy)methane	120	74.9		ug/L		62	24 - 125
Bis(2-chloroethyl)ether	120	86.2		ug/L		72	10 - 121
bis (2-chloroisopropyl) ether	120	95.8		ug/L		80	14 - 123
Bis(2-ethylhexyl) phthalate	120	98.2		ug/L		82	16 - 150
4-Bromophenyl phenyl ether	120	89.6		ug/L		75	17 - 150
Butyl benzyl phthalate	120	102		ug/L		85	21 - 150
4-Chloroaniline	120	46.1		ug/L		38	10 - 124
4-Chloro-3-methylphenol	120	82.0		ug/L		68	37 - 131
2-Chloronaphthalene	120	79.1		ug/L		66	24 - 132
2-Chlorophenol	120	75.2		ug/L		63	27 - 124
4-Chlorophenyl phenyl ether	120	88.3		ug/L		74	27 - 147
Dibenz[a,h]acridine	120	115		ug/L		96	40 - 140
Dibenzofuran	120	84.2		ug/L		70	30 - 135
3,3'-Dichlorobenzidine	160	124		ug/L		78	10 - 150
2,4-Dichlorophenol	120	73.4		ug/L		61	33 - 132
Diethyl phthalate	120	92.0		ug/L		77	37 - 145
2,4-Dimethylphenol	120	80.0		ug/L		67	38 - 132
Dimethyl phthalate	120	85.0		ug/L		71	32 - 137
Di-n-butyl phthalate	120	97.2		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	200		ug/L		84	14 - 150
2,4-Dinitrophenol	240	228		ug/L		95	15 - 150
2,4-Dinitrotoluene	120	90.6		ug/L		75	35 - 136
2,6-Dinitrotoluene	120	86.3		ug/L		72	29 - 140
Di-n-octyl phthalate	120	94.5		ug/L		79	26 - 150
1,4-Dioxane	120	47.3		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	92.8		ug/L		77	23 - 138
Hexachlorobenzene	120	96.6		ug/L		81	10 - 150

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

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	76.3		ug/L		64	10 - 124
Hexachloroethane	120	67.0		ug/L		56	10 - 127
Indene	120	85.8		ug/L		71	18 - 150
Isophorone	120	78.0		ug/L		65	28 - 127
2-Methylphenol	120	79.6		ug/L		66	34 - 124
3 & 4 Methylphenol	120	76.4		ug/L		64	32 - 122
2-Nitroaniline	120	90.8		ug/L		76	24 - 139
3-Nitroaniline	120	86.5		ug/L		72	10 - 128
4-Nitroaniline	120	103		ug/L		86	28 - 118
Nitrobenzene	120	70.1		ug/L		58	29 - 120
2-Nitrophenol	120	69.1		ug/L		58	25 - 148
4-Nitrophenol	240	159		ug/L		66	12 - 129
N-Nitrosodimethylamine	120	65.8		ug/L		55	10 - 115
N-Nitrosodi-n-propylamine	120	84.2		ug/L		70	24 - 142
N-Nitrosodiphenylamine	119	87.2		ug/L		73	29 - 138
Pentachlorophenol	240	201		ug/L		84	19 - 150
Phenol	120	54.1		ug/L		45	11 - 95
Pyridine	240	75.3		ug/L		31	10 - 82
Quinoline	120	94.8		ug/L		79	10 - 141
2,4,5-Trichlorophenol	120	84.4		ug/L		70	30 - 144
2,4,6-Trichlorophenol	120	79.1		ug/L		66	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*51*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*62*		*10 - 150*

Lab Sample ID: LCS 400-678242/4-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	91.2		ug/L		76	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*58*		*10 - 150*

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8		ug/L		46	10 - 127	11	40
Benzoic acid			492	229		ug/L		46	19 - 126	2	40
Benzyl alcohol			120	78.8		ug/L		66	17 - 109	1	40
Bis(2-chloroethoxy)methane			120	76.0		ug/L		63	24 - 125	2	40
Bis(2-chloroethyl)ether			120	86.9		ug/L		72	10 - 121	1	40
bis (2-chloroisopropyl) ether			120	95.2		ug/L		79	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	16 - 150	3	40
4-Bromophenyl phenyl ether			120	93.5		ug/L		78	17 - 150	4	40
Butyl benzyl phthalate			120	106		ug/L		89	21 - 150	4	40
4-Chloroaniline			120	44.7		ug/L		37	10 - 124	3	40
4-Chloro-3-methylphenol			120	84.4		ug/L		70	37 - 131	3	40
2-Chloronaphthalene			120	82.0		ug/L		68	24 - 132	4	40
2-Chlorophenol			120	76.4		ug/L		64	27 - 124	2	40
4-Chlorophenyl phenyl ether			120	92.2		ug/L		77	27 - 147	4	40
Dibenz[a,h]acridine			120	118		ug/L		99	40 - 140	3	40
Dibenzofuran			120	88.6		ug/L		74	30 - 135	5	40
3,3'-Dichlorobenzidine			160	123		ug/L		77	10 - 150	1	40
2,4-Dichlorophenol			120	76.0		ug/L		63	33 - 132	3	40
Diethyl phthalate			120	96.9		ug/L		81	37 - 145	5	40
2,4-Dimethylphenol			120	82.7		ug/L		69	38 - 132	3	40
Dimethyl phthalate			120	88.8		ug/L		74	32 - 137	4	40
Di-n-butyl phthalate			120	101		ug/L		84	27 - 150	3	40
4,6-Dinitro-ortho-cresol			240	220		ug/L		92	14 - 150	9	40
2,4-Dinitrophenol			240	248		ug/L		103	15 - 150	8	40
2,4-Dinitrotoluene			120	96.5		ug/L		80	35 - 136	6	40
2,6-Dinitrotoluene			120	91.0		ug/L		76	29 - 140	5	40
Di-n-octyl phthalate			120	96.4		ug/L		80	26 - 150	2	40
1,4-Dioxane			120	46.1		ug/L		38	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	96.0		ug/L		80	23 - 138	3	40
Hexachlorobenzene			120	100		ug/L		84	10 - 150	4	40
Hexachlorocyclopentadiene			120	79.6		ug/L		66	10 - 124	4	40
Hexachloroethane			120	67.0		ug/L		56	10 - 127	0	40
Indene			120	85.9		ug/L		72	18 - 150	0	40
Isophorone			120	79.5		ug/L		66	28 - 127	2	40
2-Methylphenol			120	82.0		ug/L		68	34 - 124	3	40
3 & 4 Methylphenol			120	78.2		ug/L		65	32 - 122	2	40
2-Nitroaniline			120	95.1		ug/L		79	24 - 139	5	40
3-Nitroaniline			120	90.5		ug/L		75	10 - 128	5	40
4-Nitroaniline			120	127		ug/L		106	28 - 118	21	40
Nitrobenzene			120	70.7		ug/L		59	29 - 120	1	40
2-Nitrophenol			120	71.4		ug/L		60	25 - 148	3	40
4-Nitrophenol			240	167		ug/L		70	12 - 129	5	40
N-Nitrosodimethylamine			120	65.3		ug/L		54	10 - 115	1	40
N-Nitrosodi-n-propylamine			120	84.6		ug/L		71	24 - 142	1	40
N-Nitrosodiphenylamine			119	89.7		ug/L		75	29 - 138	3	40
Pentachlorophenol			240	213		ug/L		89	19 - 150	6	40
Phenol			120	56.4		ug/L		47	11 - 95	4	40
Pyridine			240	56.0		ug/L		23	10 - 82	29	40

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	95.7		ug/L		80	10 - 141	1	40
2,4,5-Trichlorophenol			120	89.2		ug/L		74	30 - 144	6	40
2,4,6-Trichlorophenol			120	83.4		ug/L		69	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*66*		*10 - 150*

Lab Sample ID: LCSD 400-678242/5-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	99.4		ug/L		83	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*48*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*90*		*13 - 150*
2,4,6-Tribromophenol	*56*		*10 - 150*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/24 11:45	07/19/24 15:45	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/24 11:45	07/19/24 15:45	1
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]anthracene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/18/24 11:45	07/19/24 15:45	1
Chrysene	ND	*3	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 15:45	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 15:45	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 15:45	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND	*3	0.20	0.039	ug/L		07/18/24 11:45	07/19/24 15:45	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/24 11:45	07/19/24 15:45	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*148*	*S1+ *3*	*18 - 147*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*07/18/24 11:45*	*07/19/24 15:45*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	83.2		ug/L		69	10 - 140
Acenaphthylene	120	84.2		ug/L		70	10 - 140
Anthracene	120	94.9		ug/L		79	19 - 140
Benzo[a]anthracene	120	91.5		ug/L		76	25 - 140
Benzo[a]pyrene	120	85.0		ug/L		71	24 - 140
Benzo[b]fluoranthene	120	95.4		ug/L		80	34 - 140
Benzo[g,h,i]perylene	120	75.4		ug/L		63	13 - 140
Benzo[k]fluoranthene	120	104		ug/L		87	21 - 140
Chrysene	120	107		ug/L		89	28 - 140
Dibenz(a,h)anthracene	120	65.7		ug/L		55	10 - 140
Fluoranthene	120	94.4		ug/L		79	18 - 140
Fluorene	120	84.5		ug/L		70	16 - 140
Indeno[1,2,3-cd]pyrene	120	60.5		ug/L		50	10 - 140
Phenanthrene	120	93.4		ug/L		78	22 - 140
Pyrene	120	134		ug/L		112	38 - 140
1-Methylnaphthalene	120	79.6		ug/L		66	10 - 140
2-Methylnaphthalene	120	75.9		ug/L		63	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*66*		*15 - 128*
Nitrobenzene-d5	*58*		*10 - 144*

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	88.5		ug/L		74	10 - 140	6	40
Acenaphthylene	120	87.8		ug/L		73	10 - 140	4	40
Anthracene	120	96.0		ug/L		80	19 - 140	1	40
Benzo[a]anthracene	120	91.3		ug/L		76	25 - 140	0	40
Benzo[a]pyrene	120	83.4		ug/L		70	24 - 140	2	40
Benzo[b]fluoranthene	120	98.5		ug/L		82	34 - 140	3	40

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			120	87.8		ug/L		73	13 - 140	15	40
Benzo[k]fluoranthene			120	102		ug/L		85	21 - 140	2	40
Chrysene			120	104		ug/L		87	28 - 140	3	40
Dibenz(a,h)anthracene			120	74.6		ug/L		62	10 - 140	13	40
Fluoranthene			120	96.8		ug/L		81	18 - 140	2	40
Fluorene			120	86.5		ug/L		72	16 - 140	2	40
Indeno[1,2,3-cd]pyrene			120	70.9		ug/L		59	10 - 140	16	40
Phenanthrene			120	96.0		ug/L		80	22 - 140	3	40
Pyrene			120	135		ug/L		113	38 - 140	1	40
1-Methylnaphthalene			120	81.8		ug/L		68	10 - 140	3	40
2-Methylnaphthalene			120	78.1		ug/L		65	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*60*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677939/1-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/24 08:21	07/16/24 11:51	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/24 08:21	07/16/24 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*135*		*51 - 149*	*07/16/24 08:21*	*07/16/24 11:51*	*1*

Lab Sample ID: LCS 400-677939/2-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.114		ug/L		113	60 - 140		
1,2-Dibromoethane			0.100	0.100	p	ug/L		100	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*128*		*51 - 149*

Lab Sample ID: LCSD 400-677939/3-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677939

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.121		ug/L		120	60 - 140	6	30
1,2-Dibromoethane			0.100	0.0937	p	ug/L		93	60 - 140	7	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-677939/3-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677939

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	146		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
Melissa Remiger	25278
PO #	**GSAP Project ID**
60721927 – 3.3.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 7/11/2024

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 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): C. McDavid, T. Jenkins

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- **Please include "J" values on Reports.**
- **Please provide sample receipt upon login.**
- **Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

400-259171 COC

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-071124-8260	7/11/2024	0000	Water	2					2	X			
	TB-ROX-071124-8011	7/11/2024	0000	Water	2					2		X		
	MW13-ROX-071124	7/11/2024	1020	Water	6			2		8	X	X	X	X
	P114R-ROX-071124	7/11/2024	1140	Water	6			2		8	X	X	X	X
	MW2-ROX-071124	7/11/2024	1340	Water	6			2		8	X	X	X	X
	MW2-ROX-071124-DUP	7/11/2024	1340	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0540 4511	7/11/2024	1600
		7/13/24	7:54

CUSTODY SEALS: 2460010, 2460011

4.9°C IMP

Version: 27Sept23

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7/22/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-259171-1

Login Number: 259171
List Number: 1
Creator: Pardonner, Brett

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	2460010
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	4.9°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: 400-259171-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-259188-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Delaine Austin

Date Reviewed: 8/21/2024

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

Sample Identification	Sample Identification
TB-ROX-071224-8260-A	TB-ROX-071224-8011-B
TB-ROX-071224-8011-A	P74-ROX-071224
MW4-ROX-071224-EB	P74-ROX-071224-DUP
MW4-ROX-071224	P93D-ROX-071224
MW22-ROX-071224	P93A-ROX-071224
TB-ROX-071224-8260-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 LCS recovery for 2-butanone (MEK) was outside evaluation criteria. The surrogate recovery for terphenyl-d_{14} was outside criteria in a PAH method blank. The internal standard area recovery for perylene-d_{12} and chrysene-d_{12} were outside criteria in a PAH method blank and equipment blank MW4-ROX-071224-EB. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-678204/1002	VOCs	Acetone	**170**	N/A	43-150
LCS 400-678204/1002	VOCs	2-Butanone (MEK)	**175**	N/A	61-145
LCS 400-678204/1002	VOCs	2-Hexanone	**149**	N/A	65-137

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.

Sample ID	Parameter	Analyte	Qualification
P74-ROX-071224	VOCs	2-Butanone (MEK)	**J**
P74-ROX-071224-DUP	VOCs	2-Butanone (MEK)	**J**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-678242/1-A	PAHs	Terphenyl-d_{14}	**148**	18-147

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MW4-ROX-071224-EB	PAHs	Perylene-d_{12}	**3400**	8022	4011 - 16044
MB 400-678242/1-A	PAHs	Chrysene-d_{12}	**4182**	8919	4460 - 17838
MB 400-678242/1-A	PAHs	Perylene-d_{12}	**2188**	6967	3484 - 13934

Method blanks equipment blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P74-ROX-071224	P74-ROX-071224-DUP

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for vinyl chloride, 2,4-dimethylphenol and dibenz(a,h)anthracene were outside evaluation criteria, biased low. 2-Butanone (MEK) in samples P74-ROX-071224 and P74-ROX-071224-DUP were previously qualified in Section 5.0 of this data review due to LCS outside evaluation criteria; no further qualification of 2-butanone was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-071224	VOCs	Vinyl chloride	**UJ**
MW4-ROX-071224	VOCs	Vinyl chloride	**UJ**
MW22-ROX-071224	VOCs	Vinyl chloride	**UJ**
P74-ROX-071224	VOCs	Vinyl chloride	**UJ**
P74-ROX-071224-DUP	VOCs	Vinyl chloride	**UJ**
P93A-ROX-071224	VOCs	Vinyl chloride	**UJ**
MW4-ROX-071224	SVOCs	2,4-Dimethylphenol	**UJ**
MW22-ROX-071224	SVOCs	2,4-Dimethylphenol	**UJ**
P74-ROX-071224	SVOCs	2,4-Dimethylphenol	**UJ**
P74-ROX-071224-DUP	SVOCs	2,4-Dimethylphenol	**UJ**
P93D-ROX-071224	SVOCs	2,4-Dimethylphenol	**UJ**
P93A-ROX-071224	SVOCs	2,4-Dimethylphenol	**UJ**
MW4-ROX-071224	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW22-ROX-071224	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-071224	SVOCs	Hexachlorocyclopentadiene	**UJ**

Sample ID	Parameter	Analyte	Qualification
P74-ROX-071224-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93D-ROX-071224	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93A-ROX-071224	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW4-ROX-071224	PAHs	Dibenz(a,h)anthracene	**UJ**
MW22-ROX-071224	PAHs	Dibenz(a,h)anthracene	**UJ**
P74-ROX-071224	PAHs	Dibenz(a,h)anthracene	**UJ**
P74-ROX-071224-DUP	PAHs	Dibenz(a,h)anthracene	**UJ**
P93D-ROX-071224	PAHs	Dibenz(a,h)anthracene	**UJ**
P93A-ROX-071224	PAHs	Dibenz(a,h)anthracene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/22/2024 12:15:17 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-259188-1

Reviewed 08/21/2024
AN

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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(615)301-5038

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Job Narrative
400-259188-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/13/2024 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 0.3°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-678204 recovered above the upper control limit for 2-Butanone (MEK), Acetone, Bromochloromethane, Hexachlorobutadiene and Trichloroethene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-678204 recovered outside control limits for the following analytes: 2-Butanone (MEK), 2-Hexanone and Acetone. This analyte was biased high in the LCS and was not detected above the reporting limit 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: MW22-ROX-071224 (400-259188-5), P74-ROX-071224 (400-259188-8), P74-ROX-071224-DUP (400-259188-9) and P93A-ROX-071224 (400-259188-11). 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-071224-8260-A (400-259188-1), MW4-ROX-071224-EB (400-259188-3), MW4-ROX-071224 (400-259188-4), MW22-ROX-071224 (400-259188-5), TB-ROX-071224-8260-B (400-259188-6), P74-ROX-071224 (400-259188-8), P74-ROX-071224-DUP (400-259188-9), P93D-ROX-071224 (400-259188-10) and P93A-ROX-071224 (400-259188-11). 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 continuing calibration verification (CCV) associated with batch 400-678204 recovered outside acceptance criteria, low biased, for 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 following samples were diluted to bring the concentration of target analytes within the calibration range: MW22-ROX-071224 (400-259188-5), P74-ROX-071224 (400-259188-8) and P74-ROX-071224-DUP (400-259188-9). 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 continuing calibration verification (CCV) associated with batch 400-678442 recovered outside acceptance criteria, low biased, for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: Internal standard responses were outside of acceptance limits for the method blank: (MB 400-678242/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the method blank are non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The surrogate recovery for the blank associated with preparation batch 400-678242 and analytical batch 400-678446 was outside the upper control limits.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-678446 recovered outside acceptance criteria, low biased, for Dibenz(a,h)anthracene. 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: Internal standard responses were outside of acceptance limits for the following sample: MW4-ROX-071224-EB (400-259188-3). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the sample(s) are non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: Sample was not sent for re-extract for verification of detects as historical data confirms results. MW4-ROX-071224 (400-259188-4), MW22-ROX-071224 (400-259188-5), P74-ROX-071224 (400-259188-8), P74-ROX-071224-DUP (400-259188-9) and P93A-ROX-071224 (400-259188-11)

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 400-677968 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: 400-259188-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-259188-1	TB-ROX-071224-8260-A	Water	07/12/24 12:00	07/13/24 07:54
400-259188-2	TB-ROX-071224-8011-A	Water	07/12/24 12:00	07/13/24 07:54
400-259188-3	MW4-ROX-071224-EB	Water	07/12/24 08:30	07/13/24 07:54
400-259188-4	MW4-ROX-071224	Water	07/12/24 10:10	07/13/24 07:54
400-259188-5	MW22-ROX-071224	Water	07/12/24 12:20	07/13/24 07:54
400-259188-6	TB-ROX-071224-8260-B	Water	07/12/24 12:00	07/13/24 07:54
400-259188-7	TB-ROX-071224-8011-B	Water	07/12/24 12:00	07/13/24 07:54
400-259188-8	P74-ROX-071224	Water	07/12/24 11:30	07/13/24 07:54
400-259188-9	P74-ROX-071224-DUP	Water	07/12/24 11:30	07/13/24 07:54
400-259188-10	P93D-ROX-071224	Water	07/12/24 12:45	07/13/24 07:54
400-259188-11	P93A-ROX-071224	Water	07/12/24 13:25	07/13/24 07:54

Detection Summary

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8260-A — Lab Sample ID: 400-259188-1

No Detections.

Client Sample ID: TB-ROX-071224-8011-A — Lab Sample ID: 400-259188-2

No Detections.

Client Sample ID: MW4-ROX-071224-EB — Lab Sample ID: 400-259188-3

No Detections.

Client Sample ID: MW4-ROX-071224 — Lab Sample ID: 400-259188-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.6		1.0	0.22	ug/L	1		8260D	Total/NA
Acenaphthylene	0.046	J	0.20	0.044	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	0.089	J	0.20	0.080	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW22-ROX-071224 — Lab Sample ID: 400-259188-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	44		2.0	0.48	ug/L	2		8260D	Total/NA
Ethylbenzene	400		2.0	1.0	ug/L	2		8260D	Total/NA
Isopropylbenzene	42		2.0	1.1	ug/L	2		8260D	Total/NA
Naphthalene	130		10	6.0	ug/L	2		8260D	Total/NA
n-Butylbenzene	5.4		2.0	1.5	ug/L	2		8260D	Total/NA
N-Propylbenzene	65		2.0	1.4	ug/L	2		8260D	Total/NA
p-Isopropyltoluene	1.5	J	2.0	1.4	ug/L	2		8260D	Total/NA
sec-Butylbenzene	3.1		2.0	1.4	ug/L	2		8260D	Total/NA
tert-Butylbenzene	3.6		2.0	1.3	ug/L	2		8260D	Total/NA
Toluene	52		2.0	1.8	ug/L	2		8260D	Total/NA
1,2,4-Trimethylbenzene	110		2.0	1.6	ug/L	2		8260D	Total/NA
1,3,5-Trimethylbenzene	74		2.0	1.1	ug/L	2		8260D	Total/NA
m-Xylene & p-Xylene - DL	1000		50	6.3	ug/L	10		8260D	Total/NA
o-Xylene - DL	61		50	6.0	ug/L	10		8260D	Total/NA
Xylenes, Total - DL	1100		100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.11	J	0.22	0.11	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	12		0.22	0.088	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	17		0.22	0.072	ug/L	1		8270E SIM	Total/NA
Indene	7.0	J	11	4.0	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-071224-8260-B — Lab Sample ID: 400-259188-6

No Detections.

Client Sample ID: TB-ROX-071224-8011-B — Lab Sample ID: 400-259188-7

No Detections.

Client Sample ID: P74-ROX-071224 — Lab Sample ID: 400-259188-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	220		130	50	ug/L	5		8260D	Total/NA
Benzene	910		5.0	1.2	ug/L	5		8260D	Total/NA
2-Butanone (MEK)	54	J *+ J	130	13	ug/L	5		8260D	Total/NA
Ethylbenzene	66		5.0	2.5	ug/L	5		8260D	Total/NA
4-Methyl-2-pentanone (MIBK)	9.5	J	130	9.0	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	71		25	3.2	ug/L	5		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P74-ROX-071224 (Continued) — Lab Sample ID: 400-259188-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	18		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	6.6		5.0	4.1	ug/L	5		8260D	Total/NA
Xylenes, Total	73		50	8.0	ug/L	5		8260D	Total/NA
Anthracene	0.065	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.41		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Pyrene	0.061	J	0.20	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.6		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.7		0.20	0.064	ug/L	1		8270E SIM	Total/NA
3 & 4 Methylphenol	18	J	20	4.5	ug/L	1		8270E	Total/NA

Client Sample ID: P74-ROX-071224-DUP — Lab Sample ID: 400-259188-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	210		130	50	ug/L	5		8260D	Total/NA
Benzene	930		5.0	1.2	ug/L	5		8260D	Total/NA
2-Butanone (MEK)	59	J *+ J	130	13	ug/L	5		8260D	Total/NA
Ethylbenzene	70		5.0	2.5	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	75		25	3.2	ug/L	5		8260D	Total/NA
Toluene	19		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	6.9		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	2.9	J	5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	77		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.11	J	0.19	0.096	ug/L	1		8270E SIM	Total/NA
Anthracene	0.11	J	0.19	0.045	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.34		0.19	0.087	ug/L	1		8270E SIM	Total/NA
Pyrene	0.055	J	0.19	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.4		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.5		0.19	0.064	ug/L	1		8270E SIM	Total/NA
3 & 4 Methylphenol	19		19	4.4	ug/L	1		8270E	Total/NA

Client Sample ID: P93D-ROX-071224 — Lab Sample ID: 400-259188-10

No Detections.

Client Sample ID: P93A-ROX-071224 — Lab Sample ID: 400-259188-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	29000		200	48	ug/L	200		8260D	Total/NA
1-Methylnaphthalene	1.1		0.19	0.077	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	0.063	J	0.19	0.063	ug/L	1		8270E SIM	Total/NA
Phenol	130		9.6	4.0	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: 400-259188-1

Client Sample ID: TB-ROX-071224-8260-A
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-1
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			07/18/24 15:51	1
Acrolein	ND		20	3.3	ug/L			07/18/24 15:51	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 15:51	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 15:51	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 15:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 15:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 15:51	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 15:51	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/24 15:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 15:51	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 15:51	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 15:51	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 15:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 15:51	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 15:51	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 15:51	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 15:51	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 15:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 15:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 15:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 15:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 15:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 15:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 15:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 15:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 15:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 15:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 15:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 15:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 15:51	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/18/24 15:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 15:51	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 15:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 15:51	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 15:51	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 15:51	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 15:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 15:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 15:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 15:51	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 15:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 15:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 15:51	1

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8260-A
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-1
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			07/18/24 15:51	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 15:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 15:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 15:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 15:51	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 15:51	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 15:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 15:51	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 15:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 15:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 15:51	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 15:51	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 15:51	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 15:51	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 15:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 15:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 15:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 15:51	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 15:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 15:51	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 130*		*07/18/24 15:51*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/18/24 15:51*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*07/18/24 15:51*	*1*

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8011-A
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		07/16/24 08:21	07/16/24 15:01	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/16/24 08:21	07/16/24 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/16/24 08:21*	*07/16/24 15:01*	*1*

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

Job ID: 400-259188-1

Client Sample ID: MW4-ROX-071224-EB
Date Collected: 07/12/24 08:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-3
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			07/18/24 16:10	1
Acrolein	ND		20	3.3	ug/L			07/18/24 16:10	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 16:10	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 16:10	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 16:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 16:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 16:10	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 16:10	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/24 16:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 16:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 16:10	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 16:10	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 16:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 16:10	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 16:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 16:10	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 16:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 16:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 16:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 16:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 16:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 16:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 16:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 16:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 16:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 16:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 16:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 16:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 16:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 16:10	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/18/24 16:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 16:10	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 16:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 16:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 16:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 16:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 16:10	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 16:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 16:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 16:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 16:10	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 16:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 16:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 16:10	1

Client Sample ID: MW4-ROX-071224-EB
Date Collected: 07/12/24 08:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-3
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			07/18/24 16:10	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 16:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 16:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 16:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 16:10	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 16:10	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 16:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 16:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 16:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 16:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 16:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 16:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 16:10	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 16:10	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 16:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 16:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 16:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 16:10	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 16:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 16:10	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 130*		*07/18/24 16:10*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/18/24 16:10*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/18/24 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	0.097	ug/L		07/18/24 11:45	07/19/24 16:48	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 16:48	1
Anthracene	ND		0.20	0.046	ug/L		07/18/24 11:45	07/19/24 16:48	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 16:48	1
Benzo[a]pyrene	ND	*3	0.20	0.063	ug/L		07/18/24 11:45	07/19/24 16:48	1
Benzo[b]fluoranthene	ND	*3	0.20	0.036	ug/L		07/18/24 11:45	07/19/24 16:48	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.026	ug/L		07/18/24 11:45	07/19/24 16:48	1
Benzo[k]fluoranthene	ND	*3	0.20	0.061	ug/L		07/18/24 11:45	07/19/24 16:48	1
Chrysene	ND		0.20	0.032	ug/L		07/18/24 11:45	07/19/24 16:48	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 16:48	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 16:48	1
Fluorene	ND		0.20	0.087	ug/L		07/18/24 11:45	07/19/24 16:48	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 16:48	1
Phenanthrene	ND		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 16:48	1
Pyrene	ND		0.20	0.038	ug/L		07/18/24 11:45	07/19/24 16:48	1
1-Methylnaphthalene	ND		0.20	0.078	ug/L		07/18/24 11:45	07/19/24 16:48	1
2-Methylnaphthalene	ND		0.20	0.065	ug/L		07/18/24 11:45	07/19/24 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*126*		*18 - 147*	*07/18/24 11:45*	*07/19/24 16:48*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/18/24 11:45*	*07/19/24 16:48*	*1*

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

Job ID: 400-259188-1

Client Sample ID: MW4-ROX-071224-EB

Date Collected: 07/12/24 08:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-3

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*10 - 144*	*07/18/24 11:45*	*07/19/24 16:48*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
Benzenethiol	ND		9.8	9.7	ug/L		07/18/24 11:45	07/19/24 18:13	1
Benzoic acid	ND		29	24	ug/L		07/18/24 11:45	07/19/24 18:13	1
Benzyl alcohol	ND		9.8	7.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 18:13	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/18/24 11:45	07/19/24 18:13	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/18/24 11:45	07/19/24 18:13	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/18/24 11:45	07/19/24 18:13	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 18:13	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/18/24 11:45	07/19/24 18:13	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 18:13	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 18:13	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/18/24 11:45	07/19/24 18:13	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
Hexachlorocyclopentadiene	ND		20	4.4	ug/L		07/18/24 11:45	07/19/24 18:13	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
Indene	ND		9.8	3.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
Isophorone	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/18/24 11:45	07/19/24 18:13	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 18:13	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 18:13	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 18:13	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		07/18/24 11:45	07/19/24 18:13	1

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

Job ID: 400-259188-1

Client Sample ID: MW4-ROX-071224-EB

Date Collected: 07/12/24 08:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.5	ug/L		07/18/24 11:45	07/19/24 18:13	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 18:13	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 18:13	1
Phenol	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 18:13	1
Pyridine	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 18:13	1
Quinoline	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 18:13	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/24 11:45	07/19/24 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*07/18/24 11:45*	*07/19/24 18:13*	*1*
2-Fluorophenol	*49*		*10 - 105*	*07/18/24 11:45*	*07/19/24 18:13*	*1*
Nitrobenzene-d5	*65*		*16 - 127*	*07/18/24 11:45*	*07/19/24 18:13*	*1*
Phenol-d5	*36*		*10 - 129*	*07/18/24 11:45*	*07/19/24 18:13*	*1*
Terphenyl-d14	*87*		*13 - 150*	*07/18/24 11:45*	*07/19/24 18:13*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 18:13*	*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		0.033	0.019	ug/L		07/16/24 08:21	07/16/24 15:23	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		07/16/24 08:21	07/16/24 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*07/16/24 08:21*	*07/16/24 15:23*	*1*

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

Job ID: 400-259188-1

Client Sample ID: MW4-ROX-071224
Date Collected: 07/12/24 10:10
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-4
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			07/18/24 17:25	1
Acrolein	ND		20	3.3	ug/L			07/18/24 17:25	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 17:25	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 17:25	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 17:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 17:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 17:25	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 17:25	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/24 17:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 17:25	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 17:25	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 17:25	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 17:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 17:25	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 17:25	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 17:25	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 17:25	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 17:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 17:25	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 17:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 17:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 17:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 17:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 17:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 17:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 17:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 17:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 17:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 17:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 17:25	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/18/24 17:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 17:25	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 17:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 17:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 17:25	1
Methyl tert-butyl ether	**2.6**		1.0	0.22	ug/L			07/18/24 17:25	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 17:25	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 17:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 17:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 17:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 17:25	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 17:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 17:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 17:25	1

Client Sample ID: MW4-ROX-071224
Date Collected: 07/12/24 10:10
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-4
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			07/18/24 17:25	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 17:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 17:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 17:25	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 17:25	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 17:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 17:25	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 17:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 17:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 17:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 17:25	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 17:25	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 17:25	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 17:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 17:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 17:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 17:25	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 17:25	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			07/18/24 17:25	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 130*		*07/18/24 17:25*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/18/24 17:25*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*07/18/24 17:25*	*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		07/18/24 11:45	07/19/24 17:09	1
Acenaphthylene	**0.046**	**J**	0.20	0.044	ug/L		07/18/24 11:45	07/19/24 17:09	1
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 17:09	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 17:09	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/24 11:45	07/19/24 17:09	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/24 11:45	07/19/24 17:09	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/24 11:45	07/19/24 17:09	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/24 11:45	07/19/24 17:09	1
Chrysene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 17:09	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 17:09	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 17:09	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 17:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 17:09	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 17:09	1
Pyrene	ND		0.20	0.039	ug/L		07/18/24 11:45	07/19/24 17:09	1
1-Methylnaphthalene	**0.089**	**J**	0.20	0.080	ug/L		07/18/24 11:45	07/19/24 17:09	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*96*		*18 - 147*	*07/18/24 11:45*	*07/19/24 17:09*	*1*
2-Fluorobiphenyl	*65*		*15 - 128*	*07/18/24 11:45*	*07/19/24 17:09*	*1*

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

Job ID: 400-259188-1

Client Sample ID: MW4-ROX-071224
Date Collected: 07/12/24 10:10
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-4
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*	*07/18/24 11:45*	*07/19/24 17:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/19/24 18:38	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 18:38	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 18:38	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/19/24 18:38	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/19/24 18:38	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/19/24 18:38	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 18:38	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 18:38	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/19/24 18:38	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/18/24 11:45	07/19/24 18:38	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/19/24 18:38	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 18:38	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 18:38	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 18:38	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/19/24 18:38	1

Client Sample ID: MW4-ROX-071224
Date Collected: 07/12/24 10:10
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/18/24 11:45	07/19/24 18:38	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 18:38	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 18:38	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 18:38	1
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/19/24 18:38	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 18:38	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/19/24 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*07/18/24 11:45*	*07/19/24 18:38*	*1*
2-Fluorophenol	*42*		*10 - 105*	*07/18/24 11:45*	*07/19/24 18:38*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/18/24 11:45*	*07/19/24 18:38*	*1*
Phenol-d5	*29*		*10 - 129*	*07/18/24 11:45*	*07/19/24 18:38*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/18/24 11:45*	*07/19/24 18:38*	*1*
2,4,6-Tribromophenol	*62*		*10 - 150*	*07/18/24 11:45*	*07/19/24 18:38*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/16/24 08:21	07/16/24 16:07	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/16/24 08:21	07/16/24 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*07/16/24 08:21*	*07/16/24 16:07*	*1*

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

Job ID: 400-259188-1

Client Sample ID: MW22-ROX-071224
Date Collected: 07/12/24 12:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50	20	ug/L			07/18/24 17:44	2
Acrolein	ND		40	6.6	ug/L			07/18/24 17:44	2
Acrylonitrile	ND		20	5.6	ug/L			07/18/24 17:44	2
Benzene	**44**		2.0	0.48	ug/L			07/18/24 17:44	2
Bromobenzene	ND		2.0	1.1	ug/L			07/18/24 17:44	2
Bromochloromethane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
Bromodichloromethane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
Bromoform	ND		10	0.50	ug/L			07/18/24 17:44	2
Bromomethane	ND		2.0	2.0	ug/L			07/18/24 17:44	2
2-Butanone (MEK)	ND	*+	50	5.2	ug/L			07/18/24 17:44	2
Carbon disulfide	ND		2.0	1.0	ug/L			07/18/24 17:44	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			07/18/24 17:44	2
Chlorobenzene	ND		2.0	0.84	ug/L			07/18/24 17:44	2
Chloroethane	ND		2.0	1.5	ug/L			07/18/24 17:44	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			07/18/24 17:44	2
Chloroform	ND		2.0	1.8	ug/L			07/18/24 17:44	2
1-Chlorohexane	ND		2.0	0.64	ug/L			07/18/24 17:44	2
Chloromethane	ND		2.0	0.80	ug/L			07/18/24 17:44	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			07/18/24 17:44	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			07/18/24 17:44	2
Dibromochloromethane	ND		2.0	0.48	ug/L			07/18/24 17:44	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			07/18/24 17:44	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			07/18/24 17:44	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			07/18/24 17:44	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			07/18/24 17:44	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
1,2-Dichloroethane	ND		2.0	1.1	ug/L			07/18/24 17:44	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			07/18/24 17:44	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
1,1-Dichloropropene	ND		2.0	0.18	ug/L			07/18/24 17:44	2
Ethylbenzene	**400**		2.0	1.0	ug/L			07/18/24 17:44	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			07/18/24 17:44	2
Hexachlorobutadiene	ND		10	1.8	ug/L			07/18/24 17:44	2
2-Hexanone	ND	*+	50	8.5	ug/L			07/18/24 17:44	2
Isopropylbenzene	**42**		2.0	1.1	ug/L			07/18/24 17:44	2
Methylene bromide	ND		10	0.44	ug/L			07/18/24 17:44	2
Methylene Chloride	ND		10	6.0	ug/L			07/18/24 17:44	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			07/18/24 17:44	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			07/18/24 17:44	2
Naphthalene	**130**		10	6.0	ug/L			07/18/24 17:44	2
n-Butylbenzene	**5.4**		2.0	1.5	ug/L			07/18/24 17:44	2
N-Propylbenzene	**65**		2.0	1.4	ug/L			07/18/24 17:44	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			07/18/24 17:44	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			07/18/24 17:44	2
p-Isopropyltoluene	**1.5**	**J**	2.0	1.4	ug/L			07/18/24 17:44	2
sec-Butylbenzene	**3.1**		2.0	1.4	ug/L			07/18/24 17:44	2
Styrene	ND		2.0	2.0	ug/L			07/18/24 17:44	2

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

Job ID: 400-259188-1

Client Sample ID: MW22-ROX-071224

Lab Sample ID: 400-259188-5

Date Collected: 07/12/24 12:20

Matrix: Water

Date Received: 07/13/24 07:54

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	**3.6**		2.0	1.3	ug/L			07/18/24 17:44	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.76	ug/L			07/18/24 17:44	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			07/18/24 17:44	2
Tetrachloroethene	ND		2.0	0.66	ug/L			07/18/24 17:44	2
Toluene	**52**		2.0	1.8	ug/L			07/18/24 17:44	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			07/18/24 17:44	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			07/18/24 17:44	2
1,2,3-Trichlorobenzene	ND		2.0	1.8	ug/L			07/18/24 17:44	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			07/18/24 17:44	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			07/18/24 17:44	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			07/18/24 17:44	2
Trichloroethene	ND		2.0	0.30	ug/L			07/18/24 17:44	2
Trichlorofluoromethane	ND		2.0	0.50	ug/L			07/18/24 17:44	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			07/18/24 17:44	2
1,2,4-Trimethylbenzene	**110**		2.0	1.6	ug/L			07/18/24 17:44	2
1,3,5-Trimethylbenzene	**74**		2.0	1.1	ug/L			07/18/24 17:44	2
Vinyl acetate	ND		50	1.9	ug/L			07/18/24 17:44	2
Vinyl chloride	ND	UJ	2.0	1.0	ug/L			07/18/24 17:44	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*72 - 130*		*07/18/24 17:44*	*2*
Dibromofluoromethane	*98*		*75 - 126*		*07/18/24 17:44*	*2*
Toluene-d8 (Surr)	*96*		*64 - 132*		*07/18/24 17:44*	*2*

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	**1000**		50	6.3	ug/L			07/19/24 16:26	10
o-Xylene	**61**		50	6.0	ug/L			07/19/24 16:26	10
Xylenes, Total	**1100**		100	16	ug/L			07/19/24 16:26	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*72 - 130*		*07/19/24 16:26*	*10*
Dibromofluoromethane	*101*		*75 - 126*		*07/19/24 16:26*	*10*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/19/24 16:26*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.11**	**J**	0.22	0.11	ug/L		07/18/24 11:45	07/19/24 17:30	1
Acenaphthylene	ND		0.22	0.048	ug/L		07/18/24 11:45	07/19/24 17:30	1
Anthracene	ND		0.22	0.052	ug/L		07/18/24 11:45	07/19/24 17:30	1
Benzo[a]anthracene	ND		0.22	0.037	ug/L		07/18/24 11:45	07/19/24 17:30	1
Benzo[a]pyrene	ND		0.22	0.070	ug/L		07/18/24 11:45	07/19/24 17:30	1
Benzo[b]fluoranthene	ND		0.22	0.041	ug/L		07/18/24 11:45	07/19/24 17:30	1
Benzo[g,h,i]perylene	ND		0.22	0.030	ug/L		07/18/24 11:45	07/19/24 17:30	1
Benzo[k]fluoranthene	ND		0.22	0.068	ug/L		07/18/24 11:45	07/19/24 17:30	1
Chrysene	ND		0.22	0.036	ug/L		07/18/24 11:45	07/19/24 17:30	1
Dibenz(a,h)anthracene	ND	UJ	0.22	0.053	ug/L		07/18/24 11:45	07/19/24 17:30	1
Fluoranthene	ND		0.22	0.037	ug/L		07/18/24 11:45	07/19/24 17:30	1
Fluorene	ND		0.22	0.098	ug/L		07/18/24 11:45	07/19/24 17:30	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.037	ug/L		07/18/24 11:45	07/19/24 17:30	1

Client Sample ID: MW22-ROX-071224
Date Collected: 07/12/24 12:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-5
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		0.22	0.099	ug/L		07/18/24 11:45	07/19/24 17:30	1
Pyrene	ND		0.22	0.043	ug/L		07/18/24 11:45	07/19/24 17:30	1
1-Methylnaphthalene	**12**		0.22	0.088	ug/L		07/18/24 11:45	07/19/24 17:30	1
2-Methylnaphthalene	**17**		0.22	0.072	ug/L		07/18/24 11:45	07/19/24 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*18 - 147*	*07/18/24 11:45*	*07/19/24 17:30*	*1*
2-Fluorobiphenyl	*46*		*15 - 128*	*07/18/24 11:45*	*07/19/24 17:30*	*1*
Nitrobenzene-d5	*58*		*10 - 144*	*07/18/24 11:45*	*07/19/24 17:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
Benzenethiol	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:03	1
Benzoic acid	ND		33	26	ug/L		07/18/24 11:45	07/19/24 19:03	1
Benzyl alcohol	ND		11	8.0	ug/L		07/18/24 11:45	07/19/24 19:03	1
Bis(2-chloroethoxy)methane	ND		11	5.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
Bis(2-chloroethyl)ether	ND		11	4.3	ug/L		07/18/24 11:45	07/19/24 19:03	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		07/18/24 11:45	07/19/24 19:03	1
Bis(2-ethylhexyl) phthalate	ND		11	9.8	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Bromophenyl phenyl ether	ND		11	9.4	ug/L		07/18/24 11:45	07/19/24 19:03	1
Butyl benzyl phthalate	ND		11	6.4	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Chloroaniline	ND		11	5.2	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Chloro-3-methylphenol	ND		11	5.8	ug/L		07/18/24 11:45	07/19/24 19:03	1
2-Chloronaphthalene	ND		11	4.2	ug/L		07/18/24 11:45	07/19/24 19:03	1
2-Chlorophenol	ND		11	4.5	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Chlorophenyl phenyl ether	ND		11	4.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
Dibenz[a,h]acridine	ND		11	3.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
Dibenzofuran	ND		11	4.4	ug/L		07/18/24 11:45	07/19/24 19:03	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4-Dichlorophenol	ND		11	4.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
Diethyl phthalate	ND		11	4.8	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4-Dimethylphenol	ND	UJ	11	5.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
Dimethyl phthalate	ND		11	4.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
Di-n-butyl phthalate	ND		11	5.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4-Dinitrophenol	ND		33	5.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4-Dinitrotoluene	ND		11	5.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,6-Dinitrotoluene	ND		11	4.3	ug/L		07/18/24 11:45	07/19/24 19:03	1
Di-n-octyl phthalate	ND		11	6.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
1,4-Dioxane	ND		11	4.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
Hexachlorobenzene	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:03	1
Hexachlorocyclopentadiene	ND	UJ	22	4.9	ug/L		07/18/24 11:45	07/19/24 19:03	1
Hexachloroethane	ND		11	5.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
Indene	**7.0**	**J**	11	4.0	ug/L		07/18/24 11:45	07/19/24 19:03	1
Isophorone	ND		11	5.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
2-Methylphenol	ND		11	3.5	ug/L		07/18/24 11:45	07/19/24 19:03	1
3 & 4 Methylphenol	ND		22	5.1	ug/L		07/18/24 11:45	07/19/24 19:03	1

Client Sample ID: MW22-ROX-071224
Date Collected: 07/12/24 12:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-5
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		11	5.5	ug/L		07/18/24 11:45	07/19/24 19:03	1
3-Nitroaniline	ND		11	5.2	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Nitroaniline	ND		11	4.5	ug/L		07/18/24 11:45	07/19/24 19:03	1
Nitrobenzene	ND		11	5.2	ug/L		07/18/24 11:45	07/19/24 19:03	1
2-Nitrophenol	ND		11	5.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
4-Nitrophenol	ND		11	3.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		07/18/24 11:45	07/19/24 19:03	1
N-Nitrosodi-n-propylamine	ND		11	2.7	ug/L		07/18/24 11:45	07/19/24 19:03	1
N-Nitrosodiphenylamine	ND		11	4.1	ug/L		07/18/24 11:45	07/19/24 19:03	1
Pentachlorophenol	ND		22	13	ug/L		07/18/24 11:45	07/19/24 19:03	1
Phenol	ND		11	4.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
Pyridine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:03	1
Quinoline	ND		11	2.6	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4,5-Trichlorophenol	ND		11	4.4	ug/L		07/18/24 11:45	07/19/24 19:03	1
2,4,6-Trichlorophenol	ND		11	3.8	ug/L		07/18/24 11:45	07/19/24 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*07/18/24 11:45*	*07/19/24 19:03*	*1*
2-Fluorophenol	*29*		*10 - 105*	*07/18/24 11:45*	*07/19/24 19:03*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*07/18/24 11:45*	*07/19/24 19:03*	*1*
Phenol-d5	*30*		*10 - 129*	*07/18/24 11:45*	*07/19/24 19:03*	*1*
Terphenyl-d14	*91*		*13 - 150*	*07/18/24 11:45*	*07/19/24 19:03*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*07/18/24 11:45*	*07/19/24 19:03*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/16/24 08:21	07/16/24 16:28	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/16/24 08:21	07/16/24 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*07/16/24 08:21*	*07/16/24 16:28*	*1*

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8260-B
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-6
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			07/18/24 16:29	1
Acrolein	ND		20	3.3	ug/L			07/18/24 16:29	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 16:29	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 16:29	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 16:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 16:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 16:29	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 16:29	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/24 16:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 16:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 16:29	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 16:29	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 16:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 16:29	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 16:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 16:29	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 16:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 16:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 16:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 16:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 16:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 16:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 16:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 16:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 16:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 16:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 16:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 16:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 16:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 16:29	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/18/24 16:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 16:29	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 16:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 16:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 16:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 16:29	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 16:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 16:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 16:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 16:29	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 16:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 16:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 16:29	1

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8260-B
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-6
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			07/18/24 16:29	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 16:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 16:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 16:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 16:29	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 16:29	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 16:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 16:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 16:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 16:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 16:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 16:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 16:29	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 16:29	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 16:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 16:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 16:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 16:29	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 16:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 16:29	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 130*		*07/18/24 16:29*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/18/24 16:29*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*07/18/24 16:29*	*1*

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

Job ID: 400-259188-1

Client Sample ID: TB-ROX-071224-8011-B
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-7
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.035	0.020	ug/L		07/16/24 08:21	07/16/24 16:51	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/16/24 08:21	07/16/24 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*133*		*51 - 149*	*07/16/24 08:21*	*07/16/24 16:51*	*1*

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

Job ID: 400-259188-1

Client Sample ID: P74-ROX-071224
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**220**		130	50	ug/L			07/19/24 15:48	5
Acrolein	ND		100	17	ug/L			07/18/24 18:03	5
Acrylonitrile	ND		50	14	ug/L			07/18/24 18:03	5
Benzene	**910**		5.0	1.2	ug/L			07/18/24 18:03	5
Bromobenzene	ND		5.0	2.7	ug/L			07/18/24 18:03	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/18/24 18:03	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
Bromoform	ND		25	1.3	ug/L			07/18/24 18:03	5
Bromomethane	ND		5.0	4.9	ug/L			07/18/24 18:03	5
2-Butanone (MEK)	**54**	J *+ J	130	13	ug/L			07/18/24 18:03	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/18/24 18:03	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			07/18/24 18:03	5
Chlorobenzene	ND		5.0	2.1	ug/L			07/18/24 18:03	5
Chloroethane	ND		5.0	3.8	ug/L			07/18/24 18:03	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/18/24 18:03	5
Chloroform	ND		5.0	4.5	ug/L			07/18/24 18:03	5
1-Chlorohexane	ND		5.0	1.6	ug/L			07/18/24 18:03	5
Chloromethane	ND		5.0	2.0	ug/L			07/18/24 18:03	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			07/18/24 18:03	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/18/24 18:03	5
Dibromochloromethane	ND		5.0	1.2	ug/L			07/18/24 18:03	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/18/24 18:03	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/18/24 18:03	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/18/24 18:03	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/18/24 18:03	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
1,2-Dichloroethane	ND		5.0	2.8	ug/L			07/18/24 18:03	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/18/24 18:03	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			07/18/24 18:03	5
Ethylbenzene	**66**		5.0	2.5	ug/L			07/18/24 18:03	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/18/24 18:03	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/18/24 18:03	5
2-Hexanone	ND	*+	130	21	ug/L			07/18/24 18:03	5
Isopropylbenzene	ND		5.0	2.7	ug/L			07/18/24 18:03	5
Methylene bromide	ND		25	1.1	ug/L			07/18/24 18:03	5
Methylene Chloride	ND		25	15	ug/L			07/18/24 18:03	5
4-Methyl-2-pentanone (MIBK)	**9.5**	J	130	9.0	ug/L			07/18/24 18:03	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			07/18/24 18:03	5
m-Xylene & p-Xylene	**71**		25	3.2	ug/L			07/18/24 18:03	5
Naphthalene	ND		25	15	ug/L			07/18/24 18:03	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/18/24 18:03	5
N-Propylbenzene	ND		5.0	3.5	ug/L			07/18/24 18:03	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/18/24 18:03	5
o-Xylene	ND		25	3.0	ug/L			07/18/24 18:03	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/18/24 18:03	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/18/24 18:03	5

Client Sample ID: P74-ROX-071224
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-8
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		5.0	3.5	ug/L			07/18/24 18:03	5
Styrene	ND		5.0	5.0	ug/L			07/18/24 18:03	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/18/24 18:03	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			07/18/24 18:03	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/18/24 18:03	5
Tetrachloroethene	ND		5.0	1.7	ug/L			07/18/24 18:03	5
Toluene	**18**		5.0	4.5	ug/L			07/18/24 18:03	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/18/24 18:03	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			07/18/24 18:03	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			07/18/24 18:03	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/18/24 18:03	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			07/18/24 18:03	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			07/18/24 18:03	5
Trichloroethene	ND		5.0	0.75	ug/L			07/18/24 18:03	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			07/18/24 18:03	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/18/24 18:03	5
1,2,4-Trimethylbenzene	**6.6**		5.0	4.1	ug/L			07/18/24 18:03	5
1,3,5-Trimethylbenzene	ND		5.0	2.8	ug/L			07/18/24 18:03	5
Vinyl acetate	ND		130	4.7	ug/L			07/18/24 18:03	5
Vinyl chloride	ND	UJ	5.0	2.5	ug/L			07/18/24 18:03	5
Xylenes, Total	**73**		50	8.0	ug/L			07/18/24 18:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*72 - 130*		*07/18/24 18:03*	*5*
4-Bromofluorobenzene	*83*		*72 - 130*		*07/19/24 15:48*	*5*
Dibromofluoromethane	*98*		*75 - 126*		*07/18/24 18:03*	*5*
Dibromofluoromethane	*102*		*75 - 126*		*07/19/24 15:48*	*5*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/18/24 18:03*	*5*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/19/24 15:48*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.097	ug/L		07/18/24 11:45	07/19/24 17:51	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 17:51	1
Anthracene	**0.065**	**J**	0.20	0.046	ug/L		07/18/24 11:45	07/19/24 17:51	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 17:51	1
Benzo[a]pyrene	ND		0.20	0.062	ug/L		07/18/24 11:45	07/19/24 17:51	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/24 11:45	07/19/24 17:51	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/18/24 11:45	07/19/24 17:51	1
Benzo[k]fluoranthene	ND		0.20	0.060	ug/L		07/18/24 11:45	07/19/24 17:51	1
Chrysene	ND		0.20	0.032	ug/L		07/18/24 11:45	07/19/24 17:51	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 17:51	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 17:51	1
Fluorene	ND		0.20	0.087	ug/L		07/18/24 11:45	07/19/24 17:51	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 17:51	1
Phenanthrene	**0.41**		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 17:51	1
Pyrene	**0.061**	**J**	0.20	0.038	ug/L		07/18/24 11:45	07/19/24 17:51	1
1-Methylnaphthalene	**1.6**		0.20	0.078	ug/L		07/18/24 11:45	07/19/24 17:51	1
2-Methylnaphthalene	**1.7**		0.20	0.064	ug/L		07/18/24 11:45	07/19/24 17:51	1

Client Sample ID: P74-ROX-071224

Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-8

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*18 - 147*	*07/18/24 11:45*	*07/19/24 17:51*	*1*
2-Fluorobiphenyl	*41*		*15 - 128*	*07/18/24 11:45*	*07/19/24 17:51*	*1*
Nitrobenzene-d5	*59*		*10 - 144*	*07/18/24 11:45*	*07/19/24 17:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
Benzenethiol	ND		9.8	9.7	ug/L		07/18/24 11:45	07/19/24 19:28	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 19:28	1
Benzyl alcohol	ND		9.8	7.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 19:28	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/18/24 11:45	07/19/24 19:28	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/18/24 11:45	07/19/24 19:28	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/18/24 11:45	07/19/24 19:28	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/18/24 11:45	07/19/24 19:28	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 19:28	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/18/24 11:45	07/19/24 19:28	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 19:28	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 19:28	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4-Dimethylphenol	ND	UJ	9.8	5.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 19:28	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/18/24 11:45	07/19/24 19:28	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 19:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 19:28	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/18/24 11:45	07/19/24 19:28	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
Indene	ND		9.8	3.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
Isophorone	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
3 & 4 Methylphenol	**18**	**J**	20	4.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/18/24 11:45	07/19/24 19:28	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 19:28	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 19:28	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 19:28	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 19:28	1

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

Job ID: 400-259188-1

Client Sample ID: P74-ROX-071224
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-8
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		9.8	2.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 19:28	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 19:28	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 19:28	1
Phenol	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 19:28	1
Pyridine	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 19:28	1
Quinoline	ND		9.8	2.3	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 19:28	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/24 11:45	07/19/24 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*07/18/24 11:45*	*07/19/24 19:28*	*1*
2-Fluorophenol	*42*		*10 - 105*	*07/18/24 11:45*	*07/19/24 19:28*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/18/24 11:45*	*07/19/24 19:28*	*1*
Phenol-d5	*32*		*10 - 129*	*07/18/24 11:45*	*07/19/24 19:28*	*1*
Terphenyl-d14	*86*		*13 - 150*	*07/18/24 11:45*	*07/19/24 19:28*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*07/18/24 11:45*	*07/19/24 19:28*	*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		0.033	0.018	ug/L		07/16/24 08:21	07/16/24 17:12	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/16/24 08:21	07/16/24 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*122*		*51 - 149*	*07/16/24 08:21*	*07/16/24 17:12*	*1*

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

Job ID: 400-259188-1

Client Sample ID: P74-ROX-071224-DUP
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**210**		130	50	ug/L			07/19/24 16:07	5
Acrolein	ND		100	17	ug/L			07/18/24 18:22	5
Acrylonitrile	ND		50	14	ug/L			07/18/24 18:22	5
Benzene	**930**		5.0	1.2	ug/L			07/18/24 18:22	5
Bromobenzene	ND		5.0	2.7	ug/L			07/18/24 18:22	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/18/24 18:22	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
Bromoform	ND		25	1.3	ug/L			07/18/24 18:22	5
Bromomethane	ND		5.0	4.9	ug/L			07/18/24 18:22	5
2-Butanone (MEK)	**59**	J *+ J	130	13	ug/L			07/18/24 18:22	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/18/24 18:22	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			07/18/24 18:22	5
Chlorobenzene	ND		5.0	2.1	ug/L			07/18/24 18:22	5
Chloroethane	ND		5.0	3.8	ug/L			07/18/24 18:22	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/18/24 18:22	5
Chloroform	ND		5.0	4.5	ug/L			07/18/24 18:22	5
1-Chlorohexane	ND		5.0	1.6	ug/L			07/18/24 18:22	5
Chloromethane	ND		5.0	2.0	ug/L			07/18/24 18:22	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			07/18/24 18:22	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/18/24 18:22	5
Dibromochloromethane	ND		5.0	1.2	ug/L			07/18/24 18:22	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/18/24 18:22	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/18/24 18:22	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/18/24 18:22	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/18/24 18:22	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
1,2-Dichloroethane	ND		5.0	2.8	ug/L			07/18/24 18:22	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/18/24 18:22	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			07/18/24 18:22	5
Ethylbenzene	**70**		5.0	2.5	ug/L			07/18/24 18:22	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/18/24 18:22	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/18/24 18:22	5
2-Hexanone	ND	*+	130	21	ug/L			07/18/24 18:22	5
Isopropylbenzene	ND		5.0	2.7	ug/L			07/18/24 18:22	5
Methylene bromide	ND		25	1.1	ug/L			07/18/24 18:22	5
Methylene Chloride	ND		25	15	ug/L			07/18/24 18:22	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/18/24 18:22	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			07/18/24 18:22	5
m-Xylene & p-Xylene	**75**		25	3.2	ug/L			07/18/24 18:22	5
Naphthalene	ND		25	15	ug/L			07/18/24 18:22	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/18/24 18:22	5
N-Propylbenzene	ND		5.0	3.5	ug/L			07/18/24 18:22	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/18/24 18:22	5
o-Xylene	ND		25	3.0	ug/L			07/18/24 18:22	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/18/24 18:22	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/18/24 18:22	5

Client Sample ID: P74-ROX-071224-DUP
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-9
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			07/18/24 18:22	5
Styrene	ND		5.0	5.0	ug/L			07/18/24 18:22	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/18/24 18:22	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			07/18/24 18:22	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/18/24 18:22	5
Tetrachloroethene	ND		5.0	1.7	ug/L			07/18/24 18:22	5
Toluene	**19**		5.0	4.5	ug/L			07/18/24 18:22	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/18/24 18:22	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			07/18/24 18:22	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			07/18/24 18:22	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/18/24 18:22	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			07/18/24 18:22	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			07/18/24 18:22	5
Trichloroethene	ND		5.0	0.75	ug/L			07/18/24 18:22	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			07/18/24 18:22	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/18/24 18:22	5
1,2,4-Trimethylbenzene	**6.9**		5.0	4.1	ug/L			07/18/24 18:22	5
1,3,5-Trimethylbenzene	**2.9**	J	5.0	2.8	ug/L			07/18/24 18:22	5
Vinyl acetate	ND		130	4.7	ug/L			07/18/24 18:22	5
Vinyl chloride	ND	UJ	5.0	2.5	ug/L			07/18/24 18:22	5
Xylenes, Total	**77**		50	8.0	ug/L			07/18/24 18:22	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*72 - 130*		*07/18/24 18:22*	*5*
4-Bromofluorobenzene	*85*		*72 - 130*		*07/19/24 16:07*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*07/18/24 18:22*	*5*
Dibromofluoromethane	*100*		*75 - 126*		*07/19/24 16:07*	*5*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/18/24 18:22*	*5*
Toluene-d8 (Surr)	*94*		*64 - 132*		*07/19/24 16:07*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.11**	J	0.19	0.096	ug/L		07/18/24 11:45	07/19/24 18:12	1
Acenaphthylene	ND		0.19	0.043	ug/L		07/18/24 11:45	07/19/24 18:12	1
Anthracene	**0.11**	J	0.19	0.045	ug/L		07/18/24 11:45	07/19/24 18:12	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:12	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/18/24 11:45	07/19/24 18:12	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/18/24 11:45	07/19/24 18:12	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/24 11:45	07/19/24 18:12	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/18/24 11:45	07/19/24 18:12	1
Chrysene	ND		0.19	0.032	ug/L		07/18/24 11:45	07/19/24 18:12	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/18/24 11:45	07/19/24 18:12	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:12	1
Fluorene	ND		0.19	0.086	ug/L		07/18/24 11:45	07/19/24 18:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:12	1
Phenanthrene	**0.34**		0.19	0.087	ug/L		07/18/24 11:45	07/19/24 18:12	1
Pyrene	**0.055**	J	0.19	0.038	ug/L		07/18/24 11:45	07/19/24 18:12	1
1-Methylnaphthalene	**1.4**		0.19	0.077	ug/L		07/18/24 11:45	07/19/24 18:12	1
2-Methylnaphthalene	**1.5**		0.19	0.064	ug/L		07/18/24 11:45	07/19/24 18:12	1

Client Sample ID: P74-ROX-071224-DUP

Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-9

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*85*		*18 - 147*	*07/18/24 11:45*	*07/19/24 18:12*	*1*
2-Fluorobiphenyl	*40*		*15 - 128*	*07/18/24 11:45*	*07/19/24 18:12*	*1*
Nitrobenzene-d5	*57*		*10 - 144*	*07/18/24 11:45*	*07/19/24 18:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
Benzenethiol	ND		9.7	9.6	ug/L		07/18/24 11:45	07/19/24 19:53	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 19:53	1
Benzyl alcohol	ND		9.7	7.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
Bis(2-chloroethoxy)methane	ND		9.7	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		07/18/24 11:45	07/19/24 19:53	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		07/18/24 11:45	07/19/24 19:53	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		07/18/24 11:45	07/19/24 19:53	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Chloroaniline	ND		9.7	4.5	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		07/18/24 11:45	07/19/24 19:53	1
2-Chlorophenol	ND		9.7	4.0	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		07/18/24 11:45	07/19/24 19:53	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		07/18/24 11:45	07/19/24 19:53	1
Dibenzofuran	ND		9.7	3.9	ug/L		07/18/24 11:45	07/19/24 19:53	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		07/18/24 11:45	07/19/24 19:53	1
Diethyl phthalate	ND		9.7	4.3	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4-Dimethylphenol	ND	UJ	9.7	5.0	ug/L		07/18/24 11:45	07/19/24 19:53	1
Dimethyl phthalate	ND		9.7	4.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
Di-n-butyl phthalate	ND		9.7	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		07/18/24 11:45	07/19/24 19:53	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		07/18/24 11:45	07/19/24 19:53	1
1,4-Dioxane	ND		9.7	4.2	ug/L		07/18/24 11:45	07/19/24 19:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		07/18/24 11:45	07/19/24 19:53	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
Hexachlorocyclopentadiene	ND	UJ	19	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
Hexachloroethane	ND		9.7	5.0	ug/L		07/18/24 11:45	07/19/24 19:53	1
Indene	ND		9.7	3.5	ug/L		07/18/24 11:45	07/19/24 19:53	1
Isophorone	ND		9.7	5.0	ug/L		07/18/24 11:45	07/19/24 19:53	1
2-Methylphenol	ND		9.7	3.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
3 & 4 Methylphenol	**19**		19	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
2-Nitroaniline	ND		9.7	4.8	ug/L		07/18/24 11:45	07/19/24 19:53	1
3-Nitroaniline	ND		9.7	4.5	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Nitroaniline	ND		9.7	4.0	ug/L		07/18/24 11:45	07/19/24 19:53	1
Nitrobenzene	ND		9.7	4.5	ug/L		07/18/24 11:45	07/19/24 19:53	1
2-Nitrophenol	ND		9.7	4.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
4-Nitrophenol	ND		9.7	3.2	ug/L		07/18/24 11:45	07/19/24 19:53	1

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

Job ID: 400-259188-1

Client Sample ID: P74-ROX-071224-DUP

Lab Sample ID: 400-259188-9

Date Collected: 07/12/24 11:30

Matrix: Water

Date Received: 07/13/24 07:54

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		07/18/24 11:45	07/19/24 19:53	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		07/18/24 11:45	07/19/24 19:53	1
Pentachlorophenol	ND		19	12	ug/L		07/18/24 11:45	07/19/24 19:53	1
Phenol	ND		9.7	4.1	ug/L		07/18/24 11:45	07/19/24 19:53	1
Pyridine	ND		9.7	9.7	ug/L		07/18/24 11:45	07/19/24 19:53	1
Quinoline	ND		9.7	2.3	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		07/18/24 11:45	07/19/24 19:53	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		07/18/24 11:45	07/19/24 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*07/18/24 11:45*	*07/19/24 19:53*	*1*
2-Fluorophenol	*41*		*10 - 105*	*07/18/24 11:45*	*07/19/24 19:53*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*07/18/24 11:45*	*07/19/24 19:53*	*1*
Phenol-d5	*32*		*10 - 129*	*07/18/24 11:45*	*07/19/24 19:53*	*1*
Terphenyl-d14	*81*		*13 - 150*	*07/18/24 11:45*	*07/19/24 19:53*	*1*
2,4,6-Tribromophenol	*63*		*10 - 150*	*07/18/24 11:45*	*07/19/24 19:53*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/16/24 08:21	07/16/24 17:34	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/16/24 08:21	07/16/24 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*135*		*51 - 149*	*07/16/24 08:21*	*07/16/24 17:34*	*1*

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

Job ID: 400-259188-1

Client Sample ID: P93D-ROX-071224
Date Collected: 07/12/24 12:45
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-10
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			07/18/24 17:07	1
Acrolein	ND		20	3.3	ug/L			07/18/24 17:07	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 17:07	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 17:07	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 17:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 17:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 17:07	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 17:07	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/18/24 17:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 17:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 17:07	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 17:07	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 17:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 17:07	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 17:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 17:07	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 17:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 17:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 17:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 17:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 17:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 17:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 17:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 17:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 17:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 17:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 17:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 17:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 17:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 17:07	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/18/24 17:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 17:07	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 17:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 17:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 17:07	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 17:07	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 17:07	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 17:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 17:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 17:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 17:07	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 17:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 17:07	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 17:07	1

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

Job ID: 400-259188-1

Client Sample ID: P93D-ROX-071224
Date Collected: 07/12/24 12:45
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-10
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			07/18/24 17:07	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 17:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 17:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 17:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 17:07	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 17:07	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 17:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 17:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 17:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 17:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 17:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 17:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 17:07	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 17:07	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 17:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 17:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 17:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 17:07	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 17:07	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			07/18/24 17:07	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 130*		*07/18/24 17:07*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/18/24 17:07*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*07/18/24 17:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		07/18/24 11:45	07/19/24 18:33	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/18/24 11:45	07/19/24 18:33	1
Anthracene	ND		0.19	0.045	ug/L		07/18/24 11:45	07/19/24 18:33	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:33	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		07/18/24 11:45	07/19/24 18:33	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/18/24 11:45	07/19/24 18:33	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/24 11:45	07/19/24 18:33	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		07/18/24 11:45	07/19/24 18:33	1
Chrysene	ND		0.19	0.032	ug/L		07/18/24 11:45	07/19/24 18:33	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/18/24 11:45	07/19/24 18:33	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:33	1
Fluorene	ND		0.19	0.085	ug/L		07/18/24 11:45	07/19/24 18:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:33	1
Phenanthrene	ND		0.19	0.086	ug/L		07/18/24 11:45	07/19/24 18:33	1
Pyrene	ND		0.19	0.037	ug/L		07/18/24 11:45	07/19/24 18:33	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		07/18/24 11:45	07/19/24 18:33	1
2-Methylnaphthalene	ND		0.19	0.063	ug/L		07/18/24 11:45	07/19/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*18 - 147*	*07/18/24 11:45*	*07/19/24 18:33*	*1*
2-Fluorobiphenyl	*64*		*15 - 128*	*07/18/24 11:45*	*07/19/24 18:33*	*1*

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

Job ID: 400-259188-1

Client Sample ID: P93D-ROX-071224
Date Collected: 07/12/24 12:45
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-10
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*	*07/18/24 11:45*	*07/19/24 18:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.3	ug/L		07/18/24 11:45	07/19/24 20:18	1
Benzenethiol	ND		9.6	9.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 20:18	1
Benzyl alcohol	ND		9.6	7.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 20:18	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		07/18/24 11:45	07/19/24 20:18	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		07/18/24 11:45	07/19/24 20:18	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Chloroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		07/18/24 11:45	07/19/24 20:18	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 20:18	1
2-Chlorophenol	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		07/18/24 11:45	07/19/24 20:18	1
Dibenzofuran	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 20:18	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 20:18	1
Diethyl phthalate	ND		9.6	4.2	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4-Dimethylphenol	ND	UJ	9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 20:18	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		07/18/24 11:45	07/19/24 20:18	1
1,4-Dioxane	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 20:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 20:18	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		07/18/24 11:45	07/19/24 20:18	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/18/24 11:45	07/19/24 20:18	1
Hexachloroethane	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
Indene	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
Isophorone	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
2-Methylphenol	ND		9.6	3.1	ug/L		07/18/24 11:45	07/19/24 20:18	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
2-Nitroaniline	ND		9.6	4.8	ug/L		07/18/24 11:45	07/19/24 20:18	1
3-Nitroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Nitroaniline	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 20:18	1
Nitrobenzene	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
2-Nitrophenol	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
4-Nitrophenol	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 20:18	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		07/18/24 11:45	07/19/24 20:18	1

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

Job ID: 400-259188-1

Client Sample ID: P93D-ROX-071224
Date Collected: 07/12/24 12:45
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-10
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		9.6	2.4	ug/L		07/18/24 11:45	07/19/24 20:18	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 20:18	1
Pentachlorophenol	ND		19	11	ug/L		07/18/24 11:45	07/19/24 20:18	1
Phenol	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 20:18	1
Pyridine	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 20:18	1
Quinoline	ND		9.6	2.3	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 20:18	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/18/24 11:45	07/19/24 20:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*07/18/24 11:45*	*07/19/24 20:18*	*1*
2-Fluorophenol	*44*		*10 - 105*	*07/18/24 11:45*	*07/19/24 20:18*	*1*
Nitrobenzene-d5	*60*		*16 - 127*	*07/18/24 11:45*	*07/19/24 20:18*	*1*
Phenol-d5	*32*		*10 - 129*	*07/18/24 11:45*	*07/19/24 20:18*	*1*
Terphenyl-d14	*83*		*13 - 150*	*07/18/24 11:45*	*07/19/24 20:18*	*1*
2,4,6-Tribromophenol	*61*		*10 - 150*	*07/18/24 11:45*	*07/19/24 20:18*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/16/24 08:21	07/16/24 17:55	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		07/16/24 08:21	07/16/24 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*07/16/24 08:21*	*07/16/24 17:55*	*1*

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

Job ID: 400-259188-1

Client Sample ID: P93A-ROX-071224

Date Collected: 07/12/24 13:25
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-11

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	5000	2000	ug/L			07/18/24 18:41	200
Acrolein	ND		4000	660	ug/L			07/18/24 18:41	200
Acrylonitrile	ND		2000	560	ug/L			07/18/24 18:41	200
Benzene	**29000**		200	48	ug/L			07/18/24 18:41	200
Bromobenzene	ND		200	110	ug/L			07/18/24 18:41	200
Bromochloromethane	ND		200	100	ug/L			07/18/24 18:41	200
Bromodichloromethane	ND		200	100	ug/L			07/18/24 18:41	200
Bromoform	ND		1000	50	ug/L			07/18/24 18:41	200
Bromomethane	ND		200	200	ug/L			07/18/24 18:41	200
2-Butanone (MEK)	ND	*+	5000	520	ug/L			07/18/24 18:41	200
Carbon disulfide	ND		200	100	ug/L			07/18/24 18:41	200
Carbon tetrachloride	ND		200	38	ug/L			07/18/24 18:41	200
Chlorobenzene	ND		200	84	ug/L			07/18/24 18:41	200
Chloroethane	ND		200	150	ug/L			07/18/24 18:41	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			07/18/24 18:41	200
Chloroform	ND		200	180	ug/L			07/18/24 18:41	200
1-Chlorohexane	ND		200	64	ug/L			07/18/24 18:41	200
Chloromethane	ND		200	80	ug/L			07/18/24 18:41	200
cis-1,2-Dichloroethene	ND		200	40	ug/L			07/18/24 18:41	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			07/18/24 18:41	200
Dibromochloromethane	ND		200	48	ug/L			07/18/24 18:41	200
1,2-Dichlorobenzene	ND		200	100	ug/L			07/18/24 18:41	200
1,3-Dichlorobenzene	ND		200	110	ug/L			07/18/24 18:41	200
1,4-Dichlorobenzene	ND		200	130	ug/L			07/18/24 18:41	200
Dichlorodifluoromethane	ND		200	170	ug/L			07/18/24 18:41	200
1,1-Dichloroethane	ND		200	100	ug/L			07/18/24 18:41	200
1,2-Dichloroethane	ND		200	110	ug/L			07/18/24 18:41	200
1,1-Dichloroethene	ND		200	100	ug/L			07/18/24 18:41	200
1,2-Dichloropropane	ND		200	100	ug/L			07/18/24 18:41	200
1,3-Dichloropropane	ND		200	100	ug/L			07/18/24 18:41	200
2,2-Dichloropropane	ND		200	100	ug/L			07/18/24 18:41	200
1,1-Dichloropropene	ND		200	18	ug/L			07/18/24 18:41	200
Ethylbenzene	ND		200	100	ug/L			07/18/24 18:41	200
Ethyl methacrylate	ND		200	120	ug/L			07/18/24 18:41	200
Hexachlorobutadiene	ND		1000	180	ug/L			07/18/24 18:41	200
2-Hexanone	ND	*+	5000	850	ug/L			07/18/24 18:41	200
Isopropylbenzene	ND		200	110	ug/L			07/18/24 18:41	200
Methylene bromide	ND		1000	44	ug/L			07/18/24 18:41	200
Methylene Chloride	ND		1000	600	ug/L			07/18/24 18:41	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			07/18/24 18:41	200
Methyl tert-butyl ether	ND		200	44	ug/L			07/18/24 18:41	200
m-Xylene & p-Xylene	ND		1000	130	ug/L			07/18/24 18:41	200
Naphthalene	ND		1000	600	ug/L			07/18/24 18:41	200
n-Butylbenzene	ND		200	150	ug/L			07/18/24 18:41	200
N-Propylbenzene	ND		200	140	ug/L			07/18/24 18:41	200
o-Chlorotoluene	ND		200	110	ug/L			07/18/24 18:41	200
o-Xylene	ND		1000	120	ug/L			07/18/24 18:41	200
p-Chlorotoluene	ND		200	110	ug/L			07/18/24 18:41	200
p-Isopropyltoluene	ND		200	140	ug/L			07/18/24 18:41	200

Client Sample ID: P93A-ROX-071224
Date Collected: 07/12/24 13:25
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-11
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		200	140	ug/L			07/18/24 18:41	200
Styrene	ND		200	200	ug/L			07/18/24 18:41	200
tert-Butylbenzene	ND		200	130	ug/L			07/18/24 18:41	200
1,1,1,2-Tetrachloroethane	ND		200	76	ug/L			07/18/24 18:41	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			07/18/24 18:41	200
Tetrachloroethene	ND		200	66	ug/L			07/18/24 18:41	200
Toluene	ND		200	180	ug/L			07/18/24 18:41	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			07/18/24 18:41	200
trans-1,3-Dichloropropene	ND		1000	40	ug/L			07/18/24 18:41	200
1,2,3-Trichlorobenzene	ND		200	180	ug/L			07/18/24 18:41	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			07/18/24 18:41	200
1,1,1-Trichloroethane	ND		200	36	ug/L			07/18/24 18:41	200
1,1,2-Trichloroethane	ND		1000	42	ug/L			07/18/24 18:41	200
Trichloroethene	ND		200	30	ug/L			07/18/24 18:41	200
Trichlorofluoromethane	ND		200	50	ug/L			07/18/24 18:41	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			07/18/24 18:41	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			07/18/24 18:41	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			07/18/24 18:41	200
Vinyl acetate	ND		5000	190	ug/L			07/18/24 18:41	200
Vinyl chloride	ND	UJ	200	100	ug/L			07/18/24 18:41	200
Xylenes, Total	ND		2000	320	ug/L			07/18/24 18:41	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*72 - 130*		*07/18/24 18:41*	*200*
Dibromofluoromethane	*103*		*75 - 126*		*07/18/24 18:41*	*200*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/18/24 18:41*	*200*

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		07/18/24 11:45	07/19/24 18:54	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/18/24 11:45	07/19/24 18:54	1
Anthracene	ND		0.19	0.045	ug/L		07/18/24 11:45	07/19/24 18:54	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:54	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		07/18/24 11:45	07/19/24 18:54	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/18/24 11:45	07/19/24 18:54	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/24 11:45	07/19/24 18:54	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		07/18/24 11:45	07/19/24 18:54	1
Chrysene	ND		0.19	0.032	ug/L		07/18/24 11:45	07/19/24 18:54	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/18/24 11:45	07/19/24 18:54	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:54	1
Fluorene	ND		0.19	0.085	ug/L		07/18/24 11:45	07/19/24 18:54	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 18:54	1
Phenanthrene	ND		0.19	0.086	ug/L		07/18/24 11:45	07/19/24 18:54	1
Pyrene	ND		0.19	0.037	ug/L		07/18/24 11:45	07/19/24 18:54	1
1-Methylnaphthalene	**1.1**		0.19	0.077	ug/L		07/18/24 11:45	07/19/24 18:54	1
2-Methylnaphthalene	**0.063**	**J**	0.19	0.063	ug/L		07/18/24 11:45	07/19/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*18 - 147*	*07/18/24 11:45*	*07/19/24 18:54*	*1*
2-Fluorobiphenyl	*42*		*15 - 128*	*07/18/24 11:45*	*07/19/24 18:54*	*1*

Client Sample ID: P93A-ROX-071224
Date Collected: 07/12/24 13:25
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-11
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*	*07/18/24 11:45*	*07/19/24 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.3	ug/L		07/18/24 11:45	07/19/24 20:43	1
Benzenethiol	ND		9.6	9.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 20:43	1
Benzyl alcohol	ND		9.6	7.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 20:43	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		07/18/24 11:45	07/19/24 20:43	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		07/18/24 11:45	07/19/24 20:43	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Chloroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		07/18/24 11:45	07/19/24 20:43	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 20:43	1
2-Chlorophenol	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		07/18/24 11:45	07/19/24 20:43	1
Dibenzofuran	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 20:43	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 20:43	1
Diethyl phthalate	ND		9.6	4.2	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4-Dimethylphenol	ND	UJ	9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 20:43	1
Di-n-octyl phthalate	ND		9.6	5.7	ug/L		07/18/24 11:45	07/19/24 20:43	1
1,4-Dioxane	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 20:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 20:43	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		07/18/24 11:45	07/19/24 20:43	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/18/24 11:45	07/19/24 20:43	1
Hexachloroethane	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
Indene	ND		9.6	3.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
Isophorone	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
2-Methylphenol	ND		9.6	3.1	ug/L		07/18/24 11:45	07/19/24 20:43	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
2-Nitroaniline	ND		9.6	4.8	ug/L		07/18/24 11:45	07/19/24 20:43	1
3-Nitroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Nitroaniline	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 20:43	1
Nitrobenzene	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
2-Nitrophenol	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
4-Nitrophenol	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 20:43	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		07/18/24 11:45	07/19/24 20:43	1

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

Job ID: 400-259188-1

Client Sample ID: P93A-ROX-071224
Date Collected: 07/12/24 13:25
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-11
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		9.6	2.4	ug/L		07/18/24 11:45	07/19/24 20:43	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 20:43	1
Pentachlorophenol	ND		19	11	ug/L		07/18/24 11:45	07/19/24 20:43	1
Phenol	**130**		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 20:43	1
Pyridine	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 20:43	1
Quinoline	ND		9.6	2.3	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 20:43	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		07/18/24 11:45	07/19/24 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*21 - 114*	*07/18/24 11:45*	*07/19/24 20:43*	*1*
2-Fluorophenol	*40*		*10 - 105*	*07/18/24 11:45*	*07/19/24 20:43*	*1*
Nitrobenzene-d5	*54*		*16 - 127*	*07/18/24 11:45*	*07/19/24 20:43*	*1*
Phenol-d5	*31*		*10 - 129*	*07/18/24 11:45*	*07/19/24 20:43*	*1*
Terphenyl-d14	*86*		*13 - 150*	*07/18/24 11:45*	*07/19/24 20:43*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 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-Dibromo-3-Chloropropane	ND		0.040	0.022	ug/L		07/16/24 08:21	07/16/24 18:17	1
1,2-Dibromoethane	ND		0.026	0.020	ug/L		07/16/24 08:21	07/16/24 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*	*p*	*51 - 149*	*07/16/24 08:21*	*07/16/24 18:17*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Job ID: 400-259188-1
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
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

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

Job ID: 400-259188-1

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)
400-259188-1	TB-ROX-071224-8260-A	82	111	89
400-259188-3	MW4-ROX-071224-EB	82	110	90
400-259188-4	MW4-ROX-071224	80	102	93
400-259188-5	MW22-ROX-071224	87	98	96
400-259188-5 - DL	MW22-ROX-071224	85	101	95
400-259188-6	TB-ROX-071224-8260-B	80	111	89
400-259188-8	P74-ROX-071224	85	98	94
400-259188-8	P74-ROX-071224	83	102	94
400-259188-9	P74-ROX-071224-DUP	85	101	92
400-259188-9	P74-ROX-071224-DUP	85	100	94
400-259188-10	P93D-ROX-071224	80	110	89
400-259188-11	P93A-ROX-071224	84	103	90
LCS 400-678204/1002	Lab Control Sample	88	104	93
LCS 400-678343/1002	Lab Control Sample	91	103	94
MB 400-678204/6	Method Blank	82	108	91
MB 400-678343/6	Method Blank	81	108	90

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-259188-3	MW4-ROX-071224-EB	70	49	65	36	87	57
400-259188-4	MW4-ROX-071224	67	42	61	29	88	62
400-259188-5	MW22-ROX-071224	68	29	62	30	91	67
400-259188-8	P74-ROX-071224	65	42	61	32	86	66
400-259188-9	P74-ROX-071224-DUP	61	41	58	32	81	63
400-259188-10	P93D-ROX-071224	63	44	60	32	83	61
400-259188-11	P93A-ROX-071224	57	40	54	31	86	57
LCS 400-678242/2-A	Lab Control Sample	68	51	65	45	92	62
LCS 400-678242/4-A	Lab Control Sample	66	46	63	35	88	58
LCSD 400-678242/3-A	Lab Control Sample Dup	72	52	66	47	97	66
LCSD 400-678242/5-A	Lab Control Sample Dup	66	48	65	36	90	56
MB 400-678242/1-A	Method Blank	67	46	66	33	88	57

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: 400-259188-1

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)
400-259188-3	MW4-ROX-071224-EB	126	67	69
400-259188-4	MW4-ROX-071224	96	65	68
400-259188-5	MW22-ROX-071224	95	46	58
400-259188-8	P74-ROX-071224	94	41	59
400-259188-9	P74-ROX-071224-DUP	85	40	57
400-259188-10	P93D-ROX-071224	91	64	65
400-259188-11	P93A-ROX-071224	91	42	62
LCS 400-678242/2-A	Lab Control Sample	100	66	58
LCSD 400-678242/3-A	Lab Control Sample Dup	100	70	60
MB 400-678242/1-A	Method Blank	148 S1+ *3	72	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-259188-2	TB-ROX-071224-8011-A	101
400-259188-3	MW4-ROX-071224-EB	74
400-259188-4	MW4-ROX-071224	90
400-259188-5	MW22-ROX-071224	69
400-259188-7	TB-ROX-071224-8011-B	133
400-259188-8	P74-ROX-071224	122
400-259188-9	P74-ROX-071224-DUP	135
400-259188-10	P93D-ROX-071224	86
400-259188-11	P93A-ROX-071224	76 p
LCS 400-677939/2-A	Lab Control Sample	128
LCSD 400-677939/3-A	Lab Control Sample Dup	146
MB 400-677939/1-A	Method Blank	135

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-259188-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-071224-8260-A

Lab Sample ID: 400-259188-1

Date Collected: 07/12/24 12:00

Matrix: Water

Date Received: 07/13/24 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	678204	07/18/24 15:51	LSS	EET PEN

Client Sample ID: TB-ROX-071224-8011-A

Lab Sample ID: 400-259188-2

Date Collected: 07/12/24 12:00

Matrix: Water

Date Received: 07/13/24 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			33.4 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 15:01	S1K	EET PEN

Client Sample ID: MW4-ROX-071224-EB

Lab Sample ID: 400-259188-3

Date Collected: 07/12/24 08:30

Matrix: Water

Date Received: 07/13/24 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	678204	07/18/24 16:10	LSS	EET PEN
Total/NA	Prep	3510C			254.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 18:13	KJA	EET PEN
Total/NA	Prep	3510C			254.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 16:48	JAW	EET PEN
Total/NA	Prep	8011			31.5 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 15:23	S1K	EET PEN

Client Sample ID: MW4-ROX-071224

Lab Sample ID: 400-259188-4

Date Collected: 07/12/24 10:10

Matrix: Water

Date Received: 07/13/24 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	678204	07/18/24 17:25	LSS	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 18:38	KJA	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 17:09	JAW	EET PEN
Total/NA	Prep	8011			32.4 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 16:07	S1K	EET PEN

Client Sample ID: MW22-ROX-071224

Lab Sample ID: 400-259188-5

Date Collected: 07/12/24 12:20

Matrix: Water

Date Received: 07/13/24 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		2	5 mL	5 mL	678204	07/18/24 17:44	LSS	EET PEN
Total/NA	Analysis	8260D	DL	10	5 mL	5 mL	678343	07/19/24 16:26	LSS	EET PEN
Total/NA	Prep	3510C			227.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 19:03	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-259188-1

Client Sample ID: MW22-ROX-071224
Date Collected: 07/12/24 12:20
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-5
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	3510C			227.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 17:30	JAW	EET PEN
Total/NA	Prep	8011			32.8 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 16:28	S1K	EET PEN

Client Sample ID: TB-ROX-071224-8260-B
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-6
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	678204	07/18/24 16:29	LSS	EET PEN

Client Sample ID: TB-ROX-071224-8011-B
Date Collected: 07/12/24 12:00
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			30.4 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 16:51	S1K	EET PEN

Client Sample ID: P74-ROX-071224
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-8
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		5	5 mL	5 mL	678204	07/18/24 18:03	LSS	EET PEN
Total/NA	Analysis	8260D		5	5 mL	5 mL	678343	07/19/24 15:48	LSS	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 19:28	KJA	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 17:51	JAW	EET PEN
Total/NA	Prep	8011			32.3 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 17:12	S1K	EET PEN

Client Sample ID: P74-ROX-071224-DUP
Date Collected: 07/12/24 11:30
Date Received: 07/13/24 07:54

Lab Sample ID: 400-259188-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		5	5 mL	5 mL	678204	07/18/24 18:22	LSS	EET PEN
Total/NA	Analysis	8260D		5	5 mL	5 mL	678343	07/19/24 16:07	LSS	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 19:53	KJA	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 18:12	JAW	EET PEN

Client Sample ID: P74-ROX-071224-DUP

Lab Sample ID: 400-259188-9

Date Collected: 07/12/24 11:30

Matrix: Water

Date Received: 07/13/24 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			32.7 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 17:34	S1K	EET PEN

Client Sample ID: P93D-ROX-071224

Lab Sample ID: 400-259188-10

Date Collected: 07/12/24 12:45

Matrix: Water

Date Received: 07/13/24 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	678204	07/18/24 17:07	LSS	EET PEN
Total/NA	Prep	3510C			260.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 20:18	KJA	EET PEN
Total/NA	Prep	3510C			260.8 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 18:33	JAW	EET PEN
Total/NA	Prep	8011			31.5 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 17:55	S1K	EET PEN

Client Sample ID: P93A-ROX-071224

Lab Sample ID: 400-259188-11

Date Collected: 07/12/24 13:25

Matrix: Water

Date Received: 07/13/24 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		200	5 mL	5 mL	678204	07/18/24 18:41	LSS	EET PEN
Total/NA	Prep	3510C			261.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 20:43	KJA	EET PEN
Total/NA	Prep	3510C			261.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 18:54	JAW	EET PEN
Total/NA	Prep	8011			26.5 mL	35 mL	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 18:17	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-677939/1-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 11:51	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678204/6

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	678204	07/18/24 10:49	LSS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678242/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:07	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 15:45	JAW	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678343/6

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	678343	07/19/24 08:55	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-677939/2-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 12:12	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678204/1002

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	678204	07/18/24 08:57	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:32	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:06	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/4-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:22	KJA	EET PEN

Lab Chronicle

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

Job ID: 400-259188-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678343/1002
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	678343	07/19/24 07:18	LSS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-677939/3-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	677939	07/16/24 08:21	KR	EET PEN
Total/NA	Analysis	8011		1			677968	07/16/24 12:33	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:57	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:27	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:47	KJA	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 678204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-1	TB-ROX-071224-8260-A	Total/NA	Water	8260D	
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	8260D	
400-259188-4	MW4-ROX-071224	Total/NA	Water	8260D	
400-259188-5	MW22-ROX-071224	Total/NA	Water	8260D	
400-259188-6	TB-ROX-071224-8260-B	Total/NA	Water	8260D	
400-259188-8	P74-ROX-071224	Total/NA	Water	8260D	
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8260D	
400-259188-10	P93D-ROX-071224	Total/NA	Water	8260D	
400-259188-11	P93A-ROX-071224	Total/NA	Water	8260D	
MB 400-678204/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678204/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-5 - DL	MW22-ROX-071224	Total/NA	Water	8260D	
400-259188-8	P74-ROX-071224	Total/NA	Water	8260D	
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8260D	
MB 400-678343/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678343/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 678242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	3510C	
400-259188-4	MW4-ROX-071224	Total/NA	Water	3510C	
400-259188-5	MW22-ROX-071224	Total/NA	Water	3510C	
400-259188-8	P74-ROX-071224	Total/NA	Water	3510C	
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	3510C	
400-259188-10	P93D-ROX-071224	Total/NA	Water	3510C	
400-259188-11	P93A-ROX-071224	Total/NA	Water	3510C	
MB 400-678242/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 678442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	8270E	678242
400-259188-4	MW4-ROX-071224	Total/NA	Water	8270E	678242
400-259188-5	MW22-ROX-071224	Total/NA	Water	8270E	678242
400-259188-8	P74-ROX-071224	Total/NA	Water	8270E	678242
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8270E	678242
400-259188-10	P93D-ROX-071224	Total/NA	Water	8270E	678242
400-259188-11	P93A-ROX-071224	Total/NA	Water	8270E	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E	678242
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242

QC Association Summary

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

Job ID: 400-259188-1

GC/MS Semi VOA

Analysis Batch: 678446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	8270E SIM	678242
400-259188-4	MW4-ROX-071224	Total/NA	Water	8270E SIM	678242
400-259188-5	MW22-ROX-071224	Total/NA	Water	8270E SIM	678242
400-259188-8	P74-ROX-071224	Total/NA	Water	8270E SIM	678242
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8270E SIM	678242
400-259188-10	P93D-ROX-071224	Total/NA	Water	8270E SIM	678242
400-259188-11	P93A-ROX-071224	Total/NA	Water	8270E SIM	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E SIM	678242
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	678242

GC Semi VOA

Prep Batch: 677939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-2	TB-ROX-071224-8011-A	Total/NA	Water	8011	
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	8011	
400-259188-4	MW4-ROX-071224	Total/NA	Water	8011	
400-259188-5	MW22-ROX-071224	Total/NA	Water	8011	
400-259188-7	TB-ROX-071224-8011-B	Total/NA	Water	8011	
400-259188-8	P74-ROX-071224	Total/NA	Water	8011	
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8011	
400-259188-10	P93D-ROX-071224	Total/NA	Water	8011	
400-259188-11	P93A-ROX-071224	Total/NA	Water	8011	
MB 400-677939/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-677939/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-677939/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 677968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259188-2	TB-ROX-071224-8011-A	Total/NA	Water	8011	677939
400-259188-3	MW4-ROX-071224-EB	Total/NA	Water	8011	677939
400-259188-4	MW4-ROX-071224	Total/NA	Water	8011	677939
400-259188-5	MW22-ROX-071224	Total/NA	Water	8011	677939
400-259188-7	TB-ROX-071224-8011-B	Total/NA	Water	8011	677939
400-259188-8	P74-ROX-071224	Total/NA	Water	8011	677939
400-259188-9	P74-ROX-071224-DUP	Total/NA	Water	8011	677939
400-259188-10	P93D-ROX-071224	Total/NA	Water	8011	677939
400-259188-11	P93A-ROX-071224	Total/NA	Water	8011	677939
MB 400-677939/1-A	Method Blank	Total/NA	Water	8011	677939
LCS 400-677939/2-A	Lab Control Sample	Total/NA	Water	8011	677939
LCSD 400-677939/3-A	Lab Control Sample Dup	Total/NA	Water	8011	677939

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

Lab Sample ID: MB 400-678204/6
Matrix: Water
Analysis Batch: 678204

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/18/24 10:49	1
Acrolein	ND		20	3.3	ug/L			07/18/24 10:49	1
Acrylonitrile	ND		10	2.8	ug/L			07/18/24 10:49	1
Benzene	ND		1.0	0.24	ug/L			07/18/24 10:49	1
Bromobenzene	ND		1.0	0.54	ug/L			07/18/24 10:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/18/24 10:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
Bromoform	ND		5.0	0.25	ug/L			07/18/24 10:49	1
Bromomethane	ND		1.0	0.98	ug/L			07/18/24 10:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/18/24 10:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/18/24 10:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/18/24 10:49	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/18/24 10:49	1
Chloroethane	ND		1.0	0.76	ug/L			07/18/24 10:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/18/24 10:49	1
Chloroform	ND		1.0	0.90	ug/L			07/18/24 10:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/18/24 10:49	1
Chloromethane	ND		1.0	0.40	ug/L			07/18/24 10:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/18/24 10:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/18/24 10:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/18/24 10:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/18/24 10:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/18/24 10:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/18/24 10:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/18/24 10:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/18/24 10:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 10:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/18/24 10:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/18/24 10:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/18/24 10:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/18/24 10:49	1
2-Hexanone	ND		25	4.3	ug/L			07/18/24 10:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/18/24 10:49	1
Methylene bromide	ND		5.0	0.22	ug/L			07/18/24 10:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/18/24 10:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/18/24 10:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/18/24 10:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/18/24 10:49	1
Naphthalene	ND		5.0	3.0	ug/L			07/18/24 10:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/18/24 10:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/18/24 10:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/18/24 10:49	1
o-Xylene	ND		5.0	0.60	ug/L			07/18/24 10:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/18/24 10:49	1

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

Lab Sample ID: MB 400-678204/6
Matrix: Water
Analysis Batch: 678204

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/18/24 10:49	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/18/24 10:49	1
Styrene	ND		1.0	1.0	ug/L			07/18/24 10:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/18/24 10:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/18/24 10:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/18/24 10:49	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/18/24 10:49	1
Toluene	ND		1.0	0.90	ug/L			07/18/24 10:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/18/24 10:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/18/24 10:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/18/24 10:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/18/24 10:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/18/24 10:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/18/24 10:49	1
Trichloroethene	ND		1.0	0.15	ug/L			07/18/24 10:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/18/24 10:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/18/24 10:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/18/24 10:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/18/24 10:49	1
Vinyl acetate	ND		25	0.93	ug/L			07/18/24 10:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/18/24 10:49	1
Xylenes, Total	ND		10	1.6	ug/L			07/18/24 10:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 130*		*07/18/24 10:49*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/18/24 10:49*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*07/18/24 10:49*	*1*

Lab Sample ID: LCS 400-678204/1002
Matrix: Water
Analysis Batch: 678204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	340	*+	ug/L		170	43 - 150
Acrolein	500	569		ug/L		114	38 - 150
Acrylonitrile	500	584		ug/L		117	64 - 142
Benzene	50.0	55.0		ug/L		110	70 - 130
Bromobenzene	50.0	56.0		ug/L		112	70 - 132
Bromochloromethane	50.0	61.9		ug/L		124	70 - 130
Bromodichloromethane	50.0	56.3		ug/L		113	67 - 133
Bromoform	50.0	54.6		ug/L		109	57 - 140
Bromomethane	50.0	41.3		ug/L		83	10 - 150
2-Butanone (MEK)	200	350	*+	ug/L		175	61 - 145
Carbon disulfide	50.0	44.7		ug/L		89	61 - 137
Carbon tetrachloride	50.0	53.8		ug/L		108	61 - 137
Chlorobenzene	50.0	56.8		ug/L		114	70 - 130
Chloroethane	50.0	45.0		ug/L		90	55 - 141
2-Chloroethyl vinyl ether	50.0	49.7		ug/L		99	10 - 150

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

Lab Sample ID: LCS 400-678204/1002
Matrix: Water
Analysis Batch: 678204

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	55.7		ug/L		111	69 - 130
1-Chlorohexane	50.0	46.7		ug/L		93	69 - 130
Chloromethane	50.0	44.6		ug/L		89	58 - 137
cis-1,2-Dichloroethene	50.0	52.9		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	55.7		ug/L		111	69 - 132
Dibromochloromethane	50.0	57.3		ug/L		115	67 - 135
1,2-Dichlorobenzene	50.0	56.6		ug/L		113	67 - 130
1,3-Dichlorobenzene	50.0	58.1		ug/L		116	70 - 130
1,4-Dichlorobenzene	50.0	55.0		ug/L		110	70 - 130
Dichlorodifluoromethane	50.0	42.5		ug/L		85	41 - 146
1,1-Dichloroethane	50.0	53.0		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	52.0		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	55.7		ug/L		111	63 - 134
1,2-Dichloropropane	50.0	58.9		ug/L		118	70 - 130
1,3-Dichloropropane	50.0	54.5		ug/L		109	70 - 130
2,2-Dichloropropane	50.0	46.7		ug/L		93	52 - 135
1,1-Dichloropropene	50.0	54.1		ug/L		108	70 - 130
Ethylbenzene	50.0	52.7		ug/L		105	70 - 130
Ethyl methacrylate	50.0	52.5		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	61.1		ug/L		122	53 - 140
2-Hexanone	200	299	*+	ug/L		149	65 - 137
Isopropylbenzene	50.0	50.3		ug/L		101	70 - 130
Methylene bromide	50.0	59.8		ug/L		120	70 - 130
Methylene Chloride	50.0	53.0		ug/L		106	66 - 135
4-Methyl-2-pentanone (MIBK)	200	231		ug/L		116	69 - 138
Methyl tert-butyl ether	50.0	52.2		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	51.0		ug/L		102	70 - 130
Naphthalene	50.0	52.0		ug/L		104	47 - 149
n-Butylbenzene	50.0	54.5		ug/L		109	67 - 130
N-Propylbenzene	50.0	52.5		ug/L		105	70 - 130
o-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
o-Xylene	50.0	50.5		ug/L		101	70 - 130
p-Chlorotoluene	50.0	51.5		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	55.5		ug/L		111	65 - 130
sec-Butylbenzene	50.0	53.9		ug/L		108	66 - 130
Styrene	50.0	54.7		ug/L		109	70 - 130
tert-Butylbenzene	50.0	50.0		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	58.2		ug/L		116	67 - 131
1,1,2,2-Tetrachloroethane	50.0	59.7		ug/L		119	70 - 131
Tetrachloroethene	50.0	48.5		ug/L		97	65 - 130
Toluene	50.0	50.4		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	57.5		ug/L		115	70 - 130
trans-1,3-Dichloropropene	50.0	49.8		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	56.5		ug/L		113	60 - 138
1,2,4-Trichlorobenzene	50.0	54.1		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	53.3		ug/L		107	68 - 130
1,1,2-Trichloroethane	50.0	56.4		ug/L		113	70 - 130
Trichloroethene	50.0	60.7		ug/L		121	70 - 130
Trichlorofluoromethane	50.0	48.3		ug/L		97	65 - 138

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

Lab Sample ID: LCS 400-678204/1002
Matrix: Water
Analysis Batch: 678204

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	54.2		ug/L		108	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	51.4		ug/L		103	69 - 130
Vinyl acetate	100	86.8		ug/L		87	26 - 150
Vinyl chloride	50.0	39.7		ug/L		79	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*88*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: MB 400-678343/6
Matrix: Water
Analysis Batch: 678343

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/24 08:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 08:55	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 08:55	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 130*		*07/19/24 08:55*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/19/24 08:55*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/19/24 08:55*	*1*

Lab Sample ID: LCS 400-678343/1002
Matrix: Water
Analysis Batch: 678343

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	300		ug/L		150	43 - 150
m-Xylene & p-Xylene	50.0	53.3		ug/L		107	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 16:07	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/19/24 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Phenol-d5	*33*		*10 - 129*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.0		ug/L		51	10 - 127
Benzoic acid	492	225		ug/L		46	19 - 126
Benzyl alcohol	120	77.9		ug/L		65	17 - 109
Bis(2-chloroethoxy)methane	120	74.9		ug/L		62	24 - 125
Bis(2-chloroethyl)ether	120	86.2		ug/L		72	10 - 121
bis (2-chloroisopropyl) ether	120	95.8		ug/L		80	14 - 123
Bis(2-ethylhexyl) phthalate	120	98.2		ug/L		82	16 - 150
4-Bromophenyl phenyl ether	120	89.6		ug/L		75	17 - 150
Butyl benzyl phthalate	120	102		ug/L		85	21 - 150
4-Chloroaniline	120	46.1		ug/L		38	10 - 124
4-Chloro-3-methylphenol	120	82.0		ug/L		68	37 - 131
2-Chloronaphthalene	120	79.1		ug/L		66	24 - 132
2-Chlorophenol	120	75.2		ug/L		63	27 - 124
4-Chlorophenyl phenyl ether	120	88.3		ug/L		74	27 - 147
Dibenz[a,h]acridine	120	115		ug/L		96	40 - 140
Dibenzofuran	120	84.2		ug/L		70	30 - 135
3,3'-Dichlorobenzidine	160	124		ug/L		78	10 - 150
2,4-Dichlorophenol	120	73.4		ug/L		61	33 - 132
Diethyl phthalate	120	92.0		ug/L		77	37 - 145
2,4-Dimethylphenol	120	80.0		ug/L		67	38 - 132
Dimethyl phthalate	120	85.0		ug/L		71	32 - 137
Di-n-butyl phthalate	120	97.2		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	200		ug/L		84	14 - 150
2,4-Dinitrophenol	240	228		ug/L		95	15 - 150
2,4-Dinitrotoluene	120	90.6		ug/L		75	35 - 136
2,6-Dinitrotoluene	120	86.3		ug/L		72	29 - 140
Di-n-octyl phthalate	120	94.5		ug/L		79	26 - 150
1,4-Dioxane	120	47.3		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	92.8		ug/L		77	23 - 138
Hexachlorobenzene	120	96.6		ug/L		81	10 - 150

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

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	76.3		ug/L		64	10 - 124
Hexachloroethane	120	67.0		ug/L		56	10 - 127
Indene	120	85.8		ug/L		71	18 - 150
Isophorone	120	78.0		ug/L		65	28 - 127
2-Methylphenol	120	79.6		ug/L		66	34 - 124
3 & 4 Methylphenol	120	76.4		ug/L		64	32 - 122
2-Nitroaniline	120	90.8		ug/L		76	24 - 139
3-Nitroaniline	120	86.5		ug/L		72	10 - 128
4-Nitroaniline	120	103		ug/L		86	28 - 118
Nitrobenzene	120	70.1		ug/L		58	29 - 120
2-Nitrophenol	120	69.1		ug/L		58	25 - 148
4-Nitrophenol	240	159		ug/L		66	12 - 129
N-Nitrosodimethylamine	120	65.8		ug/L		55	10 - 115
N-Nitrosodi-n-propylamine	120	84.2		ug/L		70	24 - 142
N-Nitrosodiphenylamine	119	87.2		ug/L		73	29 - 138
Pentachlorophenol	240	201		ug/L		84	19 - 150
Phenol	120	54.1		ug/L		45	11 - 95
Pyridine	240	75.3		ug/L		31	10 - 82
Quinoline	120	94.8		ug/L		79	10 - 141
2,4,5-Trichlorophenol	120	84.4		ug/L		70	30 - 144
2,4,6-Trichlorophenol	120	79.1		ug/L		66	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*51*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*62*		*10 - 150*

Lab Sample ID: LCS 400-678242/4-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	91.2		ug/L		76	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*58*		*10 - 150*

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8		ug/L		46	10 - 127	11	40
Benzoic acid			492	229		ug/L		46	19 - 126	2	40
Benzyl alcohol			120	78.8		ug/L		66	17 - 109	1	40
Bis(2-chloroethoxy)methane			120	76.0		ug/L		63	24 - 125	2	40
Bis(2-chloroethyl)ether			120	86.9		ug/L		72	10 - 121	1	40
bis (2-chloroisopropyl) ether			120	95.2		ug/L		79	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	16 - 150	3	40
4-Bromophenyl phenyl ether			120	93.5		ug/L		78	17 - 150	4	40
Butyl benzyl phthalate			120	106		ug/L		89	21 - 150	4	40
4-Chloroaniline			120	44.7		ug/L		37	10 - 124	3	40
4-Chloro-3-methylphenol			120	84.4		ug/L		70	37 - 131	3	40
2-Chloronaphthalene			120	82.0		ug/L		68	24 - 132	4	40
2-Chlorophenol			120	76.4		ug/L		64	27 - 124	2	40
4-Chlorophenyl phenyl ether			120	92.2		ug/L		77	27 - 147	4	40
Dibenz[a,h]acridine			120	118		ug/L		99	40 - 140	3	40
Dibenzofuran			120	88.6		ug/L		74	30 - 135	5	40
3,3'-Dichlorobenzidine			160	123		ug/L		77	10 - 150	1	40
2,4-Dichlorophenol			120	76.0		ug/L		63	33 - 132	3	40
Diethyl phthalate			120	96.9		ug/L		81	37 - 145	5	40
2,4-Dimethylphenol			120	82.7		ug/L		69	38 - 132	3	40
Dimethyl phthalate			120	88.8		ug/L		74	32 - 137	4	40
Di-n-butyl phthalate			120	101		ug/L		84	27 - 150	3	40
4,6-Dinitro-ortho-cresol			240	220		ug/L		92	14 - 150	9	40
2,4-Dinitrophenol			240	248		ug/L		103	15 - 150	8	40
2,4-Dinitrotoluene			120	96.5		ug/L		80	35 - 136	6	40
2,6-Dinitrotoluene			120	91.0		ug/L		76	29 - 140	5	40
Di-n-octyl phthalate			120	96.4		ug/L		80	26 - 150	2	40
1,4-Dioxane			120	46.1		ug/L		38	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	96.0		ug/L		80	23 - 138	3	40
Hexachlorobenzene			120	100		ug/L		84	10 - 150	4	40
Hexachlorocyclopentadiene			120	79.6		ug/L		66	10 - 124	4	40
Hexachloroethane			120	67.0		ug/L		56	10 - 127	0	40
Indene			120	85.9		ug/L		72	18 - 150	0	40
Isophorone			120	79.5		ug/L		66	28 - 127	2	40
2-Methylphenol			120	82.0		ug/L		68	34 - 124	3	40
3 & 4 Methylphenol			120	78.2		ug/L		65	32 - 122	2	40
2-Nitroaniline			120	95.1		ug/L		79	24 - 139	5	40
3-Nitroaniline			120	90.5		ug/L		75	10 - 128	5	40
4-Nitroaniline			120	127		ug/L		106	28 - 118	21	40
Nitrobenzene			120	70.7		ug/L		59	29 - 120	1	40
2-Nitrophenol			120	71.4		ug/L		60	25 - 148	3	40
4-Nitrophenol			240	167		ug/L		70	12 - 129	5	40
N-Nitrosodimethylamine			120	65.3		ug/L		54	10 - 115	1	40
N-Nitrosodi-n-propylamine			120	84.6		ug/L		71	24 - 142	1	40
N-Nitrosodiphenylamine			119	89.7		ug/L		75	29 - 138	3	40
Pentachlorophenol			240	213		ug/L		89	19 - 150	6	40
Phenol			120	56.4		ug/L		47	11 - 95	4	40
Pyridine			240	56.0		ug/L		23	10 - 82	29	40

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	95.7		ug/L		80	10 - 141	1	40
2,4,5-Trichlorophenol			120	89.2		ug/L		74	30 - 144	6	40
2,4,6-Trichlorophenol			120	83.4		ug/L		69	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*66*		*10 - 150*

Lab Sample ID: LCSD 400-678242/5-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	99.4		ug/L		83	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*48*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*90*		*13 - 150*
2,4,6-Tribromophenol	*56*		*10 - 150*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/24 11:45	07/19/24 15:45	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/24 11:45	07/19/24 15:45	1
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]anthracene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/18/24 11:45	07/19/24 15:45	1
Chrysene	ND	*3	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 15:45	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 15:45	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 15:45	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND	*3	0.20	0.039	ug/L		07/18/24 11:45	07/19/24 15:45	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/24 11:45	07/19/24 15:45	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*148*	*S1+ *3*	*18 - 147*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*07/18/24 11:45*	*07/19/24 15:45*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	83.2		ug/L		69	10 - 140
Acenaphthylene	120	84.2		ug/L		70	10 - 140
Anthracene	120	94.9		ug/L		79	19 - 140
Benzo[a]anthracene	120	91.5		ug/L		76	25 - 140
Benzo[a]pyrene	120	85.0		ug/L		71	24 - 140
Benzo[b]fluoranthene	120	95.4		ug/L		80	34 - 140
Benzo[g,h,i]perylene	120	75.4		ug/L		63	13 - 140
Benzo[k]fluoranthene	120	104		ug/L		87	21 - 140
Chrysene	120	107		ug/L		89	28 - 140
Dibenz(a,h)anthracene	120	65.7		ug/L		55	10 - 140
Fluoranthene	120	94.4		ug/L		79	18 - 140
Fluorene	120	84.5		ug/L		70	16 - 140
Indeno[1,2,3-cd]pyrene	120	60.5		ug/L		50	10 - 140
Phenanthrene	120	93.4		ug/L		78	22 - 140
Pyrene	120	134		ug/L		112	38 - 140
1-Methylnaphthalene	120	79.6		ug/L		66	10 - 140
2-Methylnaphthalene	120	75.9		ug/L		63	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*66*		*15 - 128*
Nitrobenzene-d5	*58*		*10 - 144*

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	88.5		ug/L		74	10 - 140	6	40
Acenaphthylene	120	87.8		ug/L		73	10 - 140	4	40
Anthracene	120	96.0		ug/L		80	19 - 140	1	40
Benzo[a]anthracene	120	91.3		ug/L		76	25 - 140	0	40
Benzo[a]pyrene	120	83.4		ug/L		70	24 - 140	2	40
Benzo[b]fluoranthene	120	98.5		ug/L		82	34 - 140	3	40

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			120	87.8		ug/L		73	13 - 140	15	40
Benzo[k]fluoranthene			120	102		ug/L		85	21 - 140	2	40
Chrysene			120	104		ug/L		87	28 - 140	3	40
Dibenz(a,h)anthracene			120	74.6		ug/L		62	10 - 140	13	40
Fluoranthene			120	96.8		ug/L		81	18 - 140	2	40
Fluorene			120	86.5		ug/L		72	16 - 140	2	40
Indeno[1,2,3-cd]pyrene			120	70.9		ug/L		59	10 - 140	16	40
Phenanthrene			120	96.0		ug/L		80	22 - 140	3	40
Pyrene			120	135		ug/L		113	38 - 140	1	40
1-Methylnaphthalene			120	81.8		ug/L		68	10 - 140	3	40
2-Methylnaphthalene			120	78.1		ug/L		65	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*60*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-677939/1-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 677939

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/16/24 08:21	07/16/24 11:51	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/16/24 08:21	07/16/24 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*135*		*51 - 149*	*07/16/24 08:21*	*07/16/24 11:51*	*1*

Lab Sample ID: LCS 400-677939/2-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 677939

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.114		ug/L		113	60 - 140		
1,2-Dibromoethane			0.100	0.100	p	ug/L		100	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*128*		*51 - 149*

Lab Sample ID: LCSD 400-677939/3-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677939

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.121		ug/L		120	60 - 140	6	30
1,2-Dibromoethane			0.100	0.0937	p	ug/L		93	60 - 140	7	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-677939/3-A
Matrix: Water
Analysis Batch: 677968

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 677939

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	146		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: 7/12/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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): C. McDavid, 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; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.3
JRS

Container PID Readings or Laboratory Notes:

400-259188 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-071224-8260-A	7/12/2024	0000	Water	2					2	X			
	TB-ROX-071224-8011-A	7/12/2024	0000	Water	2					2		X		
	MW4-ROX-071224-EB	7/12/2024	0830	Water	6			2		8	X	X	X	X
	MW4-ROX-071224	7/12/2024	1010	Water	6			2		8	X	X	X	X
	MW22-ROX-071224	7/12/2024	1220	Water	6			2		8	X	X	X	X

07-12-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0543 6377	7/12/2024	1600
		7.13.24	7:54

CUSTODY SEALS: 2355750, 2355751

0.4°C VLB

Version: 27Sept23

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7/22/2024

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/12/2024
PO #	**GSAP Project ID**	PAGE: __2__ of __2__
60721927 – 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 60721927 – 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

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; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-071224-8260-B	7/12/2024	0000	Water	2					2	X			
	TB-ROX-071224-8011-B	7/12/2024	0000	Water	2					2		X		
	P74-ROX-071224	7/12/2024	1130	Water	6			2		8	X	X	X	X
	P74-ROX-071224-DUP	7/12/2024	1130	Water	6			2		8	X	X	X	X
	P93D-ROX-071224	7/12/2024	1245	Water	6			2		8	X	X	X	X
	P93A-ROX-071224	7/12/2024	1325	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 7252 0540 4511	7/12/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7.13.24	Time: 7:54
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 2460010, 2460011

0.4°C IR8

7/22/2024



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TestAmerica

Part # 159469-434 MTW EXP 03/25

0.4 °C
1R8

ORIGIN ID:PNSA (304) 305-6614
MARY MASSA - ROMANA 2024
AECOM TECHNICAL SERVICES INC.
411 BROADWAY AVE
SOUTH ROMANA, IL 62007
UNITED STATES US

SHIP DATE: 06JUN24
ACTWGT: 10.00 LB MAN
CAD: 0823943/FE3808

TO SHIPPING MANAGER
TEST AMERICA PENSACOLA
3355 MCLEMORE
RETURNS
PENSACOLA FL 325
(850) 474-1001
REF: $400-131234

RMA: N [illegible]

FedEx Express

E

J241023112201ev

FedEx
TRK# 0221 7252 0543 6377

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO PNSA

32514
FL-US BFM

Part # 156297-435 BRDB EXP 05/25

#4199377 07/12 583J9/E0E4/9AE3

HEAVY HEAVY

57.65 lbs.

7/22/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-259188-1

Login Number: 259188
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.3°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: 400-259188-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-259266-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Delaine Austin

Date Reviewed: 8/22/2024

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

Sample Identification	Sample Identification
TB-ROX-071524-8260-B	TB-ROX-071524-8260-A
TB-ROX-071524-8011-B	TB-ROX-071524-8011-A
P59-ROX-071524	MW25-ROX-071524
T12-ROX-071524	MW25-ROX-071524-DUP
P93C-ROX-071524	MW7-ROX-071524

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 recovery for acetone was outside the evaluation criteria. VOCs in sample MW7-ROX-071524 were diluted to bring target analytes into the calibration range of the instrument. Several PAH and VOCs by 8011 surrogate recoveries were outside criteria in several investigative and quality control samples. The internal standard area recovery for perylene-d_{12} and chrysene-d_{12} were outside criteria in a PAH method blank. The continuing calibration verification (CCV) for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-678343/1002	VOCs	2-Butanone (MEK)	**150**	N/A	61-145
LCS 400-678687/1002	VOCs	Acetone	**164**	N/A	43-150
LCS 400-678687/1002	VOCs	2-Butanone (MEK)	**162**	N/A	61-145
LCS 400-678687/1002	VOCs	2-Hexanone	**153**	N/A	65-137

Analytical data that required qualification based on LCS 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. Associated trip blanks are quality control samples and do not require qualification. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW25-ROX-071524	VOCs	Acetone	**J**
MW25-ROX-071524-DUP	VOCs	Acetone	**J**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-678242/1-A	PAHs	Terphenyl-d14	**148**	18-147
P59-ROX-071524	VOCs by 8011	4-Bromofluorobenzene	**272**	51-149

Method blanks are quality control samples and do not require qualification. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did 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?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MB 400-678242/1-A	PAHs	Chrysene-d_{12}	**4182**	8919	4460 - 17838
MB 400-678242/1-A	PAHs	Perylene-d_{12}	**2188**	6967	3484 - 13934

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW25-ROX-071524	MW25-ROX-071524-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 with the exception of non-detect VOCs in sample MW7-ROX-071524 were diluted to bring target analytes into calibration range of the instrument. VOCs were non-detect at a dilution factor of 2500X, with raised reporting limits between 2500 and 63000 µg/L. Due to historical detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for 2,4-dimethylphenol, hexachlorocyclopentadiene, and dibenz(a,h)anthracene were outside evaluation criteria, biased low. Acetone in samples MW25-ROX-071524 and MW25-ROX-071524-DUP were previously qualified in Section 5.0 of this data review due to LCS outside criteria; no further qualification of acetone was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P59-ROX-071524	SVOCs	2,4-Dimethylphenol	**UJ**
T12-ROX-071524	SVOCs	2,4-Dimethylphenol	**UJ**
P93C-ROX-071524	SVOCs	2,4-Dimethylphenol	**UJ**
MW25-ROX-071524	SVOCs	2,4-Dimethylphenol	**UJ**
MW25-ROX-071524-DUP	SVOCs	2,4-Dimethylphenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-071524	SVOCs	2,4-Dimethylphenol	**UJ**
P59-ROX-071524	SVOCs	Hexachlorocyclopentadiene	**UJ**
T12-ROX-071524	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93C-ROX-071524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW25-ROX-071524	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW25-ROX-071524-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW7-ROX-071524	SVOCs	Hexachlorocyclopentadiene	**UJ**
P59-ROX-071524	PAHs	Dibenz(a,h)anthracene	**UJ**
T12-ROX-071524	PAHs	Dibenz(a,h)anthracene	**UJ**
P93C-ROX-071524	PAHs	Dibenz(a,h)anthracene	**UJ**
MW25-ROX-071524	PAHs	Dibenz(a,h)anthracene	**UJ**
MW25-ROX-071524-DUP	PAHs	Dibenz(a,h)anthracene	**UJ**
MW7-ROX-071524	PAHs	Dibenz(a,h)anthracene	**UJ**

Additionally, VOCs in sample MW7-ROX-071524 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-071524	VOCs	All non-detects	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 7/24/2024 12:19:57 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-259266-1

Reviewed 08/22/2024
AN

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

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Job Narrative
400-259266-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/16/2024 9:38 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 4.2°C.

GC/MS VOA
Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW7-ROX-071524 (400-259266-10). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-678343 recovered above the upper control limit for 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, Chlorobromomethane, Hexachlorobutadiene and Trichloroethene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The following sample was diluted due to the abundance of non-target analytes: P59-ROX-071524 (400-259266-3). Elevated reporting limits (RLs) are provided.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-678343 recovered outside control limits for the following analyte: 2-Butanone (MEK). This analyte was biased high in the LCS and was not detected in the associated samples; 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-071524-8260-B (400-259266-1), P59-ROX-071524 (400-259266-3), P93C-ROX-071524 (400-259266-5), TB-ROX-071524-8260-A (400-259266-6) and MW7-ROX-071524 (400-259266-10). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93C-ROX-071524 (400-259266-5) and MW7-ROX-071524 (400-259266-10). Elevated reporting limits (RLs) are provided.

Method 8260D: The following sample was diluted due to the abundance of non-target analytes: P59-ROX-071524 (400-259266-3). Elevated reporting limits (RLs) are provided.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: T12-ROX-071524 (400-259266-4). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-678687 recovered above the upper control limit for 1,1,2,2-Tetrachloroethane, 1,3-Dichlorobenzene, 2-Butanone (MEK), 2-Hexanone, Acetone, Acrolein and Hexachlorobutadiene. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: T12-ROX-071524 (400-259266-4), MW25-ROX-071524 (400-259266-8) and MW25-ROX-071524-DUP (400-259266-9). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compounds that degrades in an acidic medium.

Job ID: 400-259266-1 (Continued) Eurofins Pensacola

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-678687 recovered outside control limits for the following analytes: 2-Butanone (MEK), 2-Hexanone and Acetone. These analytes were biased high in the LCS and were below the reporting limit in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The continuing calibration verification (CCV) associated with batch 400-678442 recovered outside acceptance criteria, low biased, for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E_SIM: Internal standard responses were outside of acceptance limits for the method blank: (MB 400-678242/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the method blank are non-detect for the associated compounds a re-run is unnecessary.

Method 8270E_SIM: The surrogate recovery for the blank associated with preparation batch 400-678242 and analytical batch 400-678446 was outside the upper control limits.

Method 8270E_SIM: The continuing calibration verification (CCV) associated with batch 400-678446 recovered outside acceptance criteria, low biased, for Dibenz(a,h)anthracene. 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: Sample was not sent for re-extract for verification of detects as historical data confirms results. P59-ROX-071524 (400-259266-3), T12-ROX-071524 (400-259266-4), P93C-ROX-071524 (400-259266-5) and MW7-ROX-071524 (400-259266-10)

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 400-678196 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: Surrogate recovery for the following sample was outside control limits: P59-ROX-071524 (400-259266-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Sample Summary

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

Job ID: 400-259266-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-259266-1	TB-ROX-071524-8260-B	Water	07/15/24 00:00	07/16/24 09:38
400-259266-2	TB-ROX-071524-8011-B	Water	07/15/24 00:00	07/16/24 09:38
400-259266-3	P59-ROX-071524	Water	07/15/24 09:40	07/16/24 09:38
400-259266-4	T12-ROX-071524	Water	07/15/24 10:50	07/16/24 09:38
400-259266-5	P93C-ROX-071524	Water	07/15/24 12:25	07/16/24 09:38
400-259266-6	TB-ROX-071524-8260-A	Water	07/15/24 00:00	07/16/24 09:38
400-259266-7	TB-ROX-071524-8011-A	Water	07/15/24 00:00	07/16/24 09:38
400-259266-8	MW25-ROX-071524	Water	07/15/24 09:15	07/16/24 09:38
400-259266-9	MW25-ROX-071524-DUP	Water	07/15/24 09:15	07/16/24 09:38
400-259266-10	MW7-ROX-071524	Water	07/15/24 11:00	07/16/24 09:38

Detection Summary

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8260-B — Lab Sample ID: 400-259266-1

No Detections.

Client Sample ID: TB-ROX-071524-8011-B — Lab Sample ID: 400-259266-2

No Detections.

Client Sample ID: P59-ROX-071524 — Lab Sample ID: 400-259266-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	190		5.0	1.2	ug/L	5		8260D	Total/NA
Ethylbenzene	35		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	11		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	69		25	3.2	ug/L	5		8260D	Total/NA
N-Propylbenzene	13		5.0	3.5	ug/L	5		8260D	Total/NA
Toluene	15		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	8.0		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	6.9		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	69		50	8.0	ug/L	5		8260D	Total/NA
Acenaphthene	0.35		0.20	0.097	ug/L	1		8270E SIM	Total/NA
Anthracene	0.12	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.041	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Benzo[g,h,i]perylene	0.026	J	0.20	0.026	ug/L	1		8270E SIM	Total/NA
Chrysene	0.059	J	0.20	0.032	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.082	J	0.20	0.033	ug/L	1		8270E SIM	Total/NA
Fluorene	0.14	J	0.20	0.087	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.22		0.20	0.088	ug/L	1		8270E SIM	Total/NA
Pyrene	0.21		0.20	0.038	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	8.1		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	6.6		0.20	0.064	ug/L	1		8270E SIM	Total/NA
Phenol	4.1	J	9.8	4.1	ug/L	1		8270E	Total/NA

Client Sample ID: T12-ROX-071524 — Lab Sample ID: 400-259266-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1900		10	2.4	ug/L	10		8260D	Total/NA
Ethylbenzene	190		10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	13		10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	280		50	6.3	ug/L	10		8260D	Total/NA
N-Propylbenzene	22		10	6.9	ug/L	10		8260D	Total/NA
o-Xylene	16	J	50	6.0	ug/L	10		8260D	Total/NA
Toluene	220		10	9.0	ug/L	10		8260D	Total/NA
1,3,5-Trimethylbenzene	9.2	J	10	5.6	ug/L	10		8260D	Total/NA
Xylenes, Total	300		100	16	ug/L	10		8260D	Total/NA
Acenaphthene	0.25		0.20	0.097	ug/L	1		8270E SIM	Total/NA
Anthracene	0.10	J	0.20	0.046	ug/L	1		8270E SIM	Total/NA
Fluorene	0.20		0.20	0.087	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.44		0.20	0.088	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	12		0.20	0.078	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	18		0.20	0.065	ug/L	1		8270E SIM	Total/NA
Phenol	22		9.8	4.1	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: 400-259266-1

Client Sample ID: P93C-ROX-071524 — Lab Sample ID: 400-259266-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	0.68	J	1.0	0.50	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.2		1.0	0.22	ug/L	1		8260D	Total/NA
Toluene	1.3		1.0	0.90	ug/L	1		8260D	Total/NA
Benzene - DL	13000		100	24	ug/L	100		8260D	Total/NA
2-Methylnaphthalene	0.070	J	0.19	0.064	ug/L	1		8270E SIM	Total/NA
Phenol	24		9.6	4.0	ug/L	1		8270E	Total/NA

Client Sample ID: TB-ROX-071524-8260-A — Lab Sample ID: 400-259266-6

No Detections.

Client Sample ID: TB-ROX-071524-8011-A — Lab Sample ID: 400-259266-7

No Detections.

Client Sample ID: MW25-ROX-071524 — Lab Sample ID: 400-259266-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J *+ J	25	10	ug/L	1		8260D	Total/NA
Benzene	6.7		1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.38	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: MW25-ROX-071524-DUP — Lab Sample ID: 400-259266-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J *+ J	25	10	ug/L	1		8260D	Total/NA
Benzene	7.2		1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.41	J	1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.67	J	1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW7-ROX-071524 — Lab Sample ID: 400-259266-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	900000		5000	1200	ug/L	5000		8260D	Total/NA
Acenaphthene	0.19	J	0.22	0.11	ug/L	1		8270E SIM	Total/NA
Fluorene	0.16	J	0.22	0.099	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.31		0.22	0.10	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	1.4		0.22	0.089	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	1.4		0.22	0.073	ug/L	1		8270E SIM	Total/NA
Phenol	63		11	4.7	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8260-B
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-1
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			07/19/24 11:43	1
Acrolein	ND		20	3.3	ug/L			07/19/24 11:43	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/24 11:43	1
Benzene	ND		1.0	0.24	ug/L			07/19/24 11:43	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/24 11:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/24 11:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
Bromoform	ND		5.0	0.25	ug/L			07/19/24 11:43	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/24 11:43	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/19/24 11:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/24 11:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/19/24 11:43	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/19/24 11:43	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/24 11:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/24 11:43	1
Chloroform	ND		1.0	0.90	ug/L			07/19/24 11:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/19/24 11:43	1
Chloromethane	ND		1.0	0.40	ug/L			07/19/24 11:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/19/24 11:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/24 11:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/19/24 11:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/24 11:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/24 11:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/24 11:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/24 11:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/19/24 11:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 11:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/19/24 11:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/24 11:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/24 11:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/24 11:43	1
2-Hexanone	ND		25	4.3	ug/L			07/19/24 11:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/24 11:43	1
Methylene bromide	ND		5.0	0.22	ug/L			07/19/24 11:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/24 11:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/24 11:43	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/19/24 11:43	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 11:43	1
Naphthalene	ND		5.0	3.0	ug/L			07/19/24 11:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/24 11:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/24 11:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/24 11:43	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 11:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/24 11:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/24 11:43	1

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8260-B
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-1
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			07/19/24 11:43	1
Styrene	ND		1.0	1.0	ug/L			07/19/24 11:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/24 11:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/19/24 11:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/24 11:43	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/19/24 11:43	1
Toluene	ND		1.0	0.90	ug/L			07/19/24 11:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 11:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/19/24 11:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/19/24 11:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/24 11:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/19/24 11:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/19/24 11:43	1
Trichloroethene	ND		1.0	0.15	ug/L			07/19/24 11:43	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/19/24 11:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/24 11:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/24 11:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/24 11:43	1
Vinyl acetate	ND		25	0.93	ug/L			07/19/24 11:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/24 11:43	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*72 - 130*		*07/19/24 11:43*	*1*
Dibromofluoromethane	*111*		*75 - 126*		*07/19/24 11:43*	*1*
Toluene-d8 (Surr)	*89*		*64 - 132*		*07/19/24 11:43*	*1*

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8011-B
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.018	ug/L		07/17/24 09:34	07/18/24 11:40	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/17/24 09:34	07/18/24 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*132*		*51 - 149*	*07/17/24 09:34*	*07/18/24 11:40*	*1*

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

Job ID: 400-259266-1

Client Sample ID: P59-ROX-071524
Date Collected: 07/15/24 09:40
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			07/19/24 15:29	5
Acrolein	ND		100	17	ug/L			07/19/24 15:29	5
Acrylonitrile	ND		50	14	ug/L			07/19/24 15:29	5
Benzene	**190**		5.0	1.2	ug/L			07/19/24 15:29	5
Bromobenzene	ND		5.0	2.7	ug/L			07/19/24 15:29	5
Bromochloromethane	ND		5.0	2.6	ug/L			07/19/24 15:29	5
Bromodichloromethane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
Bromoform	ND		25	1.3	ug/L			07/19/24 15:29	5
Bromomethane	ND		5.0	4.9	ug/L			07/19/24 15:29	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			07/19/24 15:29	5
Carbon disulfide	ND		5.0	2.5	ug/L			07/19/24 15:29	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			07/19/24 15:29	5
Chlorobenzene	ND		5.0	2.1	ug/L			07/19/24 15:29	5
Chloroethane	ND		5.0	3.8	ug/L			07/19/24 15:29	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			07/19/24 15:29	5
Chloroform	ND		5.0	4.5	ug/L			07/19/24 15:29	5
1-Chlorohexane	ND		5.0	1.6	ug/L			07/19/24 15:29	5
Chloromethane	ND		5.0	2.0	ug/L			07/19/24 15:29	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			07/19/24 15:29	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			07/19/24 15:29	5
Dibromochloromethane	ND		5.0	1.2	ug/L			07/19/24 15:29	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			07/19/24 15:29	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			07/19/24 15:29	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			07/19/24 15:29	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			07/19/24 15:29	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
1,2-Dichloroethane	ND		5.0	2.8	ug/L			07/19/24 15:29	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			07/19/24 15:29	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			07/19/24 15:29	5
Ethylbenzene	**35**		5.0	2.5	ug/L			07/19/24 15:29	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			07/19/24 15:29	5
Hexachlorobutadiene	ND		25	4.5	ug/L			07/19/24 15:29	5
2-Hexanone	ND		130	21	ug/L			07/19/24 15:29	5
Isopropylbenzene	**11**		5.0	2.7	ug/L			07/19/24 15:29	5
Methylene bromide	ND		25	1.1	ug/L			07/19/24 15:29	5
Methylene Chloride	ND		25	15	ug/L			07/19/24 15:29	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			07/19/24 15:29	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			07/19/24 15:29	5
m-Xylene & p-Xylene	**69**		25	3.2	ug/L			07/19/24 15:29	5
Naphthalene	ND		25	15	ug/L			07/19/24 15:29	5
n-Butylbenzene	ND		5.0	3.8	ug/L			07/19/24 15:29	5
N-Propylbenzene	**13**		5.0	3.5	ug/L			07/19/24 15:29	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			07/19/24 15:29	5
o-Xylene	ND		25	3.0	ug/L			07/19/24 15:29	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			07/19/24 15:29	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			07/19/24 15:29	5

Client Sample ID: P59-ROX-071524
Date Collected: 07/15/24 09:40
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-3
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		5.0	3.5	ug/L			07/19/24 15:29	5
Styrene	ND		5.0	5.0	ug/L			07/19/24 15:29	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			07/19/24 15:29	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			07/19/24 15:29	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			07/19/24 15:29	5
Tetrachloroethene	ND		5.0	1.7	ug/L			07/19/24 15:29	5
Toluene	**15**		5.0	4.5	ug/L			07/19/24 15:29	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			07/19/24 15:29	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			07/19/24 15:29	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			07/19/24 15:29	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			07/19/24 15:29	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			07/19/24 15:29	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			07/19/24 15:29	5
Trichloroethene	ND		5.0	0.75	ug/L			07/19/24 15:29	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			07/19/24 15:29	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			07/19/24 15:29	5
1,2,4-Trimethylbenzene	**8.0**		5.0	4.1	ug/L			07/19/24 15:29	5
1,3,5-Trimethylbenzene	**6.9**		5.0	2.8	ug/L			07/19/24 15:29	5
Vinyl acetate	ND		130	4.7	ug/L			07/19/24 15:29	5
Vinyl chloride	ND		5.0	2.5	ug/L			07/19/24 15:29	5
Xylenes, Total	**69**		50	8.0	ug/L			07/19/24 15:29	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*72 - 130*		*07/19/24 15:29*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*07/19/24 15:29*	*5*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/19/24 15:29*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.35**		0.20	0.097	ug/L		07/18/24 11:45	07/19/24 20:39	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 20:39	1
Anthracene	**0.12**	**J**	0.20	0.046	ug/L		07/18/24 11:45	07/19/24 20:39	1
Benzo[a]anthracene	**0.041**	**J**	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:39	1
Benzo[a]pyrene	ND		0.20	0.062	ug/L		07/18/24 11:45	07/19/24 20:39	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/24 11:45	07/19/24 20:39	1
Benzo[g,h,i]perylene	**0.026**	**J**	0.20	0.026	ug/L		07/18/24 11:45	07/19/24 20:39	1
Benzo[k]fluoranthene	ND		0.20	0.060	ug/L		07/18/24 11:45	07/19/24 20:39	1
Chrysene	**0.059**	**J**	0.20	0.032	ug/L		07/18/24 11:45	07/19/24 20:39	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 20:39	1
Fluoranthene	**0.082**	**J**	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:39	1
Fluorene	**0.14**	**J**	0.20	0.087	ug/L		07/18/24 11:45	07/19/24 20:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 20:39	1
Phenanthrene	**0.22**		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 20:39	1
Pyrene	**0.21**		0.20	0.038	ug/L		07/18/24 11:45	07/19/24 20:39	1
1-Methylnaphthalene	**8.1**		0.20	0.078	ug/L		07/18/24 11:45	07/19/24 20:39	1
2-Methylnaphthalene	**6.6**		0.20	0.064	ug/L		07/18/24 11:45	07/19/24 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*72*		*18 - 147*	*07/18/24 11:45*	*07/19/24 20:39*	*1*
2-Fluorobiphenyl	*43*		*15 - 128*	*07/18/24 11:45*	*07/19/24 20:39*	*1*

Client Sample ID: P59-ROX-071524
Date Collected: 07/15/24 09:40
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-3
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*	*07/18/24 11:45*	*07/19/24 20:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
Benzenethiol	ND		9.8	9.7	ug/L		07/18/24 11:45	07/19/24 22:48	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 22:48	1
Benzyl alcohol	ND		9.8	7.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 22:48	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/18/24 11:45	07/19/24 22:48	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/18/24 11:45	07/19/24 22:48	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/18/24 11:45	07/19/24 22:48	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/18/24 11:45	07/19/24 22:48	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 22:48	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/18/24 11:45	07/19/24 22:48	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 22:48	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 22:48	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4-Dimethylphenol	ND	UJ	9.8	5.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 22:48	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/18/24 11:45	07/19/24 22:48	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 22:48	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 22:48	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/18/24 11:45	07/19/24 22:48	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
Indene	ND		9.8	3.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
Isophorone	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/18/24 11:45	07/19/24 22:48	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 22:48	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 22:48	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 22:48	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 22:48	1
N-Nitrosodimethylamine	ND		9.8	2.1	ug/L		07/18/24 11:45	07/19/24 22:48	1

Client Sample ID: P59-ROX-071524

Date Collected: 07/15/24 09:40
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 22:48	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 22:48	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 22:48	1
Phenol	**4.1**	**J**	9.8	4.1	ug/L		07/18/24 11:45	07/19/24 22:48	1
Pyridine	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 22:48	1
Quinoline	ND		9.8	2.3	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 22:48	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/24 11:45	07/19/24 22:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*07/18/24 11:45*	*07/19/24 22:48*	*1*
2-Fluorophenol	*40*		*10 - 105*	*07/18/24 11:45*	*07/19/24 22:48*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*07/18/24 11:45*	*07/19/24 22:48*	*1*
Phenol-d5	*31*		*10 - 129*	*07/18/24 11:45*	*07/19/24 22:48*	*1*
Terphenyl-d14	*86*		*13 - 150*	*07/18/24 11:45*	*07/19/24 22:48*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*07/18/24 11:45*	*07/19/24 22:48*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/17/24 09:34	07/18/24 12:01	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		07/17/24 09:34	07/18/24 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*272*	*S1+*	*51 - 149*	*07/17/24 09:34*	*07/18/24 12:01*	*1*

Client Sample ID: T12-ROX-071524
Date Collected: 07/15/24 10:50
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	250	100	ug/L			07/23/24 15:42	10
Acrolein	ND		200	33	ug/L			07/23/24 15:42	10
Acrylonitrile	ND		100	28	ug/L			07/23/24 15:42	10
Benzene	**1900**		10	2.4	ug/L			07/23/24 15:42	10
Bromobenzene	ND		10	5.4	ug/L			07/23/24 15:42	10
Bromochloromethane	ND		10	5.2	ug/L			07/23/24 15:42	10
Bromodichloromethane	ND		10	5.0	ug/L			07/23/24 15:42	10
Bromoform	ND		50	2.5	ug/L			07/23/24 15:42	10
Bromomethane	ND		10	9.8	ug/L			07/23/24 15:42	10
2-Butanone (MEK)	ND	*+	250	26	ug/L			07/23/24 15:42	10
Carbon disulfide	ND		10	5.0	ug/L			07/23/24 15:42	10
Carbon tetrachloride	ND		10	1.9	ug/L			07/23/24 15:42	10
Chlorobenzene	ND		10	4.2	ug/L			07/23/24 15:42	10
Chloroethane	ND		10	7.6	ug/L			07/23/24 15:42	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			07/23/24 15:42	10
Chloroform	ND		10	9.0	ug/L			07/23/24 15:42	10
1-Chlorohexane	ND		10	3.2	ug/L			07/23/24 15:42	10
Chloromethane	ND		10	4.0	ug/L			07/23/24 15:42	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			07/23/24 15:42	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			07/23/24 15:42	10
Dibromochloromethane	ND		10	2.4	ug/L			07/23/24 15:42	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			07/23/24 15:42	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			07/23/24 15:42	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			07/23/24 15:42	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			07/23/24 15:42	10
1,1-Dichloroethane	ND		10	5.0	ug/L			07/23/24 15:42	10
1,2-Dichloroethane	ND		10	5.5	ug/L			07/23/24 15:42	10
1,1-Dichloroethene	ND		10	5.0	ug/L			07/23/24 15:42	10
1,2-Dichloropropane	ND		10	5.0	ug/L			07/23/24 15:42	10
1,3-Dichloropropane	ND		10	5.0	ug/L			07/23/24 15:42	10
2,2-Dichloropropane	ND		10	5.0	ug/L			07/23/24 15:42	10
1,1-Dichloropropene	ND		10	0.90	ug/L			07/23/24 15:42	10
Ethylbenzene	**190**		10	5.0	ug/L			07/23/24 15:42	10
Ethyl methacrylate	ND		10	6.0	ug/L			07/23/24 15:42	10
Hexachlorobutadiene	ND		50	9.0	ug/L			07/23/24 15:42	10
2-Hexanone	ND	*+	250	43	ug/L			07/23/24 15:42	10
Isopropylbenzene	**13**		10	5.3	ug/L			07/23/24 15:42	10
Methylene bromide	ND		50	2.2	ug/L			07/23/24 15:42	10
Methylene Chloride	ND		50	30	ug/L			07/23/24 15:42	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			07/23/24 15:42	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			07/23/24 15:42	10
m-Xylene & p-Xylene	**280**		50	6.3	ug/L			07/23/24 15:42	10
Naphthalene	ND		50	30	ug/L			07/23/24 15:42	10
n-Butylbenzene	ND		10	7.6	ug/L			07/23/24 15:42	10
N-Propylbenzene	**22**		10	6.9	ug/L			07/23/24 15:42	10
o-Chlorotoluene	ND		10	5.7	ug/L			07/23/24 15:42	10
o-Xylene	**16**	**J**	50	6.0	ug/L			07/23/24 15:42	10
p-Chlorotoluene	ND		10	5.6	ug/L			07/23/24 15:42	10
p-Isopropyltoluene	ND		10	7.1	ug/L			07/23/24 15:42	10

Client Sample ID: T12-ROX-071524
Date Collected: 07/15/24 10:50
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-4
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		10	7.0	ug/L			07/23/24 15:42	10
Styrene	ND		10	10	ug/L			07/23/24 15:42	10
tert-Butylbenzene	ND		10	6.3	ug/L			07/23/24 15:42	10
1,1,1,2-Tetrachloroethane	ND		10	3.8	ug/L			07/23/24 15:42	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			07/23/24 15:42	10
Tetrachloroethene	ND		10	3.3	ug/L			07/23/24 15:42	10
Toluene	**220**		10	9.0	ug/L			07/23/24 15:42	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			07/23/24 15:42	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			07/23/24 15:42	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			07/23/24 15:42	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			07/23/24 15:42	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			07/23/24 15:42	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			07/23/24 15:42	10
Trichloroethene	ND		10	1.5	ug/L			07/23/24 15:42	10
Trichlorofluoromethane	ND		10	2.5	ug/L			07/23/24 15:42	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			07/23/24 15:42	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			07/23/24 15:42	10
1,3,5-Trimethylbenzene	**9.2**	**J**	10	5.6	ug/L			07/23/24 15:42	10
Vinyl acetate	ND		250	9.3	ug/L			07/23/24 15:42	10
Vinyl chloride	ND		10	5.0	ug/L			07/23/24 15:42	10
Xylenes, Total	**300**		100	16	ug/L			07/23/24 15:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*72 - 130*		*07/23/24 15:42*	*10*
Dibromofluoromethane	*95*		*75 - 126*		*07/23/24 15:42*	*10*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/23/24 15:42*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.25**		0.20	0.097	ug/L		07/18/24 11:45	07/19/24 21:00	1
Acenaphthylene	ND		0.20	0.043	ug/L		07/18/24 11:45	07/19/24 21:00	1
Anthracene	**0.10**	**J**	0.20	0.046	ug/L		07/18/24 11:45	07/19/24 21:00	1
Benzo[a]anthracene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 21:00	1
Benzo[a]pyrene	ND		0.20	0.063	ug/L		07/18/24 11:45	07/19/24 21:00	1
Benzo[b]fluoranthene	ND		0.20	0.036	ug/L		07/18/24 11:45	07/19/24 21:00	1
Benzo[g,h,i]perylene	ND		0.20	0.026	ug/L		07/18/24 11:45	07/19/24 21:00	1
Benzo[k]fluoranthene	ND		0.20	0.061	ug/L		07/18/24 11:45	07/19/24 21:00	1
Chrysene	ND		0.20	0.032	ug/L		07/18/24 11:45	07/19/24 21:00	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.047	ug/L		07/18/24 11:45	07/19/24 21:00	1
Fluoranthene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 21:00	1
Fluorene	**0.20**		0.20	0.087	ug/L		07/18/24 11:45	07/19/24 21:00	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 21:00	1
Phenanthrene	**0.44**		0.20	0.088	ug/L		07/18/24 11:45	07/19/24 21:00	1
Pyrene	ND		0.20	0.038	ug/L		07/18/24 11:45	07/19/24 21:00	1
1-Methylnaphthalene	**12**		0.20	0.078	ug/L		07/18/24 11:45	07/19/24 21:00	1
2-Methylnaphthalene	**18**		0.20	0.065	ug/L		07/18/24 11:45	07/19/24 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*18 - 147*	*07/18/24 11:45*	*07/19/24 21:00*	*1*
2-Fluorobiphenyl	*54*		*15 - 128*	*07/18/24 11:45*	*07/19/24 21:00*	*1*

Client Sample ID: T12-ROX-071524
Date Collected: 07/15/24 10:50
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*62*		*10 - 144*	*07/18/24 11:45*	*07/19/24 21:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
Benzenethiol	ND		9.8	9.7	ug/L		07/18/24 11:45	07/19/24 23:13	1
Benzoic acid	ND		29	24	ug/L		07/18/24 11:45	07/19/24 23:13	1
Benzyl alcohol	ND		9.8	7.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 23:13	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		07/18/24 11:45	07/19/24 23:13	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		07/18/24 11:45	07/19/24 23:13	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Chloroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		07/18/24 11:45	07/19/24 23:13	1
2-Chlorophenol	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 23:13	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		07/18/24 11:45	07/19/24 23:13	1
Dibenzofuran	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 23:13	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
Diethyl phthalate	ND		9.8	4.3	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4-Dimethylphenol	ND	UJ	9.8	5.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
Dimethyl phthalate	ND		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		07/18/24 11:45	07/19/24 23:13	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		07/18/24 11:45	07/19/24 23:13	1
1,4-Dioxane	ND		9.8	4.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
Hexachlorocyclopentadiene	ND	UJ	20	4.4	ug/L		07/18/24 11:45	07/19/24 23:13	1
Hexachloroethane	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
Indene	ND		9.8	3.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
Isophorone	ND		9.8	5.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
2-Methylphenol	ND		9.8	3.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
2-Nitroaniline	ND		9.8	4.9	ug/L		07/18/24 11:45	07/19/24 23:13	1
3-Nitroaniline	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Nitroaniline	ND		9.8	4.0	ug/L		07/18/24 11:45	07/19/24 23:13	1
Nitrobenzene	ND		9.8	4.6	ug/L		07/18/24 11:45	07/19/24 23:13	1
2-Nitrophenol	ND		9.8	4.5	ug/L		07/18/24 11:45	07/19/24 23:13	1
4-Nitrophenol	ND		9.8	3.2	ug/L		07/18/24 11:45	07/19/24 23:13	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		07/18/24 11:45	07/19/24 23:13	1

Client Sample ID: T12-ROX-071524

Date Collected: 07/15/24 10:50
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 23:13	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		07/18/24 11:45	07/19/24 23:13	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 23:13	1
Phenol	**22**		9.8	4.1	ug/L		07/18/24 11:45	07/19/24 23:13	1
Pyridine	ND		9.8	9.8	ug/L		07/18/24 11:45	07/19/24 23:13	1
Quinoline	ND		9.8	2.4	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		07/18/24 11:45	07/19/24 23:13	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		07/18/24 11:45	07/19/24 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*07/18/24 11:45*	*07/19/24 23:13*	*1*
2-Fluorophenol	*38*		*10 - 105*	*07/18/24 11:45*	*07/19/24 23:13*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*07/18/24 11:45*	*07/19/24 23:13*	*1*
Phenol-d5	*31*		*10 - 129*	*07/18/24 11:45*	*07/19/24 23:13*	*1*
Terphenyl-d14	*84*		*13 - 150*	*07/18/24 11:45*	*07/19/24 23:13*	*1*
2,4,6-Tribromophenol	*59*		*10 - 150*	*07/18/24 11:45*	*07/19/24 23:13*	*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		0.032	0.018	ug/L		07/17/24 09:34	07/18/24 12:23	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		07/17/24 09:34	07/18/24 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/17/24 09:34*	*07/18/24 12:23*	*1*

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

Job ID: 400-259266-1

Client Sample ID: P93C-ROX-071524
Date Collected: 07/15/24 12:25
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-5
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			07/19/24 12:20	1
Acrolein	ND		20	3.3	ug/L			07/19/24 12:20	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/24 12:20	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/24 12:20	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/24 12:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
Bromoform	ND		5.0	0.25	ug/L			07/19/24 12:20	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/24 12:20	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/19/24 12:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/24 12:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/19/24 12:20	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/19/24 12:20	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/24 12:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/24 12:20	1
Chloroform	ND		1.0	0.90	ug/L			07/19/24 12:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/19/24 12:20	1
Chloromethane	ND		1.0	0.40	ug/L			07/19/24 12:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/19/24 12:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/24 12:20	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/19/24 12:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/24 12:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/24 12:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/24 12:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/24 12:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/19/24 12:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 12:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/19/24 12:20	1
Ethylbenzene	**0.68**	**J**	1.0	0.50	ug/L			07/19/24 12:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/24 12:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/24 12:20	1
2-Hexanone	ND		25	4.3	ug/L			07/19/24 12:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/24 12:20	1
Methylene bromide	ND		5.0	0.22	ug/L			07/19/24 12:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/24 12:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/24 12:20	1
Methyl tert-butyl ether	**1.2**		1.0	0.22	ug/L			07/19/24 12:20	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 12:20	1
Naphthalene	ND		5.0	3.0	ug/L			07/19/24 12:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/24 12:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/24 12:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/24 12:20	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 12:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/24 12:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/24 12:20	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/24 12:20	1

Client Sample ID: P93C-ROX-071524

Date Collected: 07/15/24 12:25
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-5

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			07/19/24 12:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/24 12:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/19/24 12:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/24 12:20	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/19/24 12:20	1
Toluene	**1.3**		1.0	0.90	ug/L			07/19/24 12:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 12:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/19/24 12:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/19/24 12:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/24 12:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/19/24 12:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/19/24 12:20	1
Trichloroethene	ND		1.0	0.15	ug/L			07/19/24 12:20	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/19/24 12:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/24 12:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/24 12:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/24 12:20	1
Vinyl acetate	ND		25	0.93	ug/L			07/19/24 12:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/24 12:20	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*72 - 130*		*07/19/24 12:20*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/19/24 12:20*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/19/24 12:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**13000**		100	24	ug/L			07/20/24 17:23	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*72 - 130*		*07/20/24 17:23*	*100*
Dibromofluoromethane	*103*		*75 - 126*		*07/20/24 17:23*	*100*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/20/24 17:23*	*100*

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		07/18/24 11:45	07/19/24 21:21	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/18/24 11:45	07/19/24 21:21	1
Anthracene	ND		0.19	0.045	ug/L		07/18/24 11:45	07/19/24 21:21	1
Benzo[a]anthracene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 21:21	1
Benzo[a]pyrene	ND		0.19	0.062	ug/L		07/18/24 11:45	07/19/24 21:21	1
Benzo[b]fluoranthene	ND		0.19	0.036	ug/L		07/18/24 11:45	07/19/24 21:21	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/18/24 11:45	07/19/24 21:21	1
Benzo[k]fluoranthene	ND		0.19	0.060	ug/L		07/18/24 11:45	07/19/24 21:21	1
Chrysene	ND		0.19	0.032	ug/L		07/18/24 11:45	07/19/24 21:21	1
Dibenz(a,h)anthracene	ND	UJ	0.19	0.046	ug/L		07/18/24 11:45	07/19/24 21:21	1
Fluoranthene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 21:21	1
Fluorene	ND		0.19	0.086	ug/L		07/18/24 11:45	07/19/24 21:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.033	ug/L		07/18/24 11:45	07/19/24 21:21	1

Client Sample ID: P93C-ROX-071524
Date Collected: 07/15/24 12:25
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-5
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	0.087	ug/L		07/18/24 11:45	07/19/24 21:21	1
Pyrene	ND		0.19	0.038	ug/L		07/18/24 11:45	07/19/24 21:21	1
1-Methylnaphthalene	ND		0.19	0.077	ug/L		07/18/24 11:45	07/19/24 21:21	1
2-Methylnaphthalene	**0.070**	**J**	0.19	0.064	ug/L		07/18/24 11:45	07/19/24 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*18 - 147*	*07/18/24 11:45*	*07/19/24 21:21*	*1*
2-Fluorobiphenyl	*55*		*15 - 128*	*07/18/24 11:45*	*07/19/24 21:21*	*1*
Nitrobenzene-d5	*68*		*10 - 144*	*07/18/24 11:45*	*07/19/24 21:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
Benzenethiol	ND		9.6	9.5	ug/L		07/18/24 11:45	07/19/24 23:38	1
Benzoic acid	ND		29	23	ug/L		07/18/24 11:45	07/19/24 23:38	1
Benzyl alcohol	ND		9.6	7.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
Bis(2-chloroethyl)ether	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 23:38	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		07/18/24 11:45	07/19/24 23:38	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Bromophenyl phenyl ether	ND		9.6	8.3	ug/L		07/18/24 11:45	07/19/24 23:38	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Chloroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		07/18/24 11:45	07/19/24 23:38	1
2-Chloronaphthalene	ND		9.6	3.7	ug/L		07/18/24 11:45	07/19/24 23:38	1
2-Chlorophenol	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Chlorophenyl phenyl ether	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		07/18/24 11:45	07/19/24 23:38	1
Dibenzofuran	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 23:38	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 23:38	1
Diethyl phthalate	ND		9.6	4.2	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4-Dimethylphenol	ND	UJ	9.6	5.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,6-Dinitrotoluene	ND		9.6	3.8	ug/L		07/18/24 11:45	07/19/24 23:38	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		07/18/24 11:45	07/19/24 23:38	1
1,4-Dioxane	ND		9.6	4.1	ug/L		07/18/24 11:45	07/19/24 23:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 23:38	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		07/18/24 11:45	07/19/24 23:38	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/18/24 11:45	07/19/24 23:38	1
Hexachloroethane	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Indene	ND		9.6	3.5	ug/L		07/18/24 11:45	07/19/24 23:38	1
Isophorone	ND		9.6	5.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
2-Methylphenol	ND		9.6	3.1	ug/L		07/18/24 11:45	07/19/24 23:38	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/18/24 11:45	07/19/24 23:38	1

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

Job ID: 400-259266-1

Client Sample ID: P93C-ROX-071524
Date Collected: 07/15/24 12:25
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-5
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	4.8	ug/L		07/18/24 11:45	07/19/24 23:38	1
3-Nitroaniline	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Nitroaniline	ND		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Nitrobenzene	ND		9.6	4.5	ug/L		07/18/24 11:45	07/19/24 23:38	1
2-Nitrophenol	ND		9.6	4.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
4-Nitrophenol	ND		9.6	3.2	ug/L		07/18/24 11:45	07/19/24 23:38	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		07/18/24 11:45	07/19/24 23:38	1
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		07/18/24 11:45	07/19/24 23:38	1
N-Nitrosodiphenylamine	ND		9.6	3.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
Pentachlorophenol	ND		19	11	ug/L		07/18/24 11:45	07/19/24 23:38	1
Phenol	**24**		9.6	4.0	ug/L		07/18/24 11:45	07/19/24 23:38	1
Pyridine	ND		9.6	9.6	ug/L		07/18/24 11:45	07/19/24 23:38	1
Quinoline	ND		9.6	2.3	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4,5-Trichlorophenol	ND		9.6	3.9	ug/L		07/18/24 11:45	07/19/24 23:38	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		07/18/24 11:45	07/19/24 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*07/18/24 11:45*	*07/19/24 23:38*	*1*
2-Fluorophenol	*44*		*10 - 105*	*07/18/24 11:45*	*07/19/24 23:38*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/18/24 11:45*	*07/19/24 23:38*	*1*
Phenol-d5	*33*		*10 - 129*	*07/18/24 11:45*	*07/19/24 23:38*	*1*
Terphenyl-d14	*89*		*13 - 150*	*07/18/24 11:45*	*07/19/24 23:38*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*07/18/24 11:45*	*07/19/24 23:38*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/17/24 09:34	07/18/24 12:44	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/17/24 09:34	07/18/24 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*07/17/24 09:34*	*07/18/24 12:44*	*1*

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8260-A
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-6
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			07/19/24 12:01	1
Acrolein	ND		20	3.3	ug/L			07/19/24 12:01	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/24 12:01	1
Benzene	ND		1.0	0.24	ug/L			07/19/24 12:01	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/24 12:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/24 12:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
Bromoform	ND		5.0	0.25	ug/L			07/19/24 12:01	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/24 12:01	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/19/24 12:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/24 12:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/19/24 12:01	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/19/24 12:01	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/24 12:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/24 12:01	1
Chloroform	ND		1.0	0.90	ug/L			07/19/24 12:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/19/24 12:01	1
Chloromethane	ND		1.0	0.40	ug/L			07/19/24 12:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/19/24 12:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/24 12:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/19/24 12:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/24 12:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/24 12:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/24 12:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/24 12:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/19/24 12:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 12:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/19/24 12:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/24 12:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/24 12:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/24 12:01	1
2-Hexanone	ND		25	4.3	ug/L			07/19/24 12:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/24 12:01	1
Methylene bromide	ND		5.0	0.22	ug/L			07/19/24 12:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/24 12:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/24 12:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/19/24 12:01	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 12:01	1
Naphthalene	ND		5.0	3.0	ug/L			07/19/24 12:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/24 12:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/24 12:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/24 12:01	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 12:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/24 12:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/24 12:01	1

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8260-A
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-6
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			07/19/24 12:01	1
Styrene	ND		1.0	1.0	ug/L			07/19/24 12:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/24 12:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/19/24 12:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/24 12:01	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/19/24 12:01	1
Toluene	ND		1.0	0.90	ug/L			07/19/24 12:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 12:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/19/24 12:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/19/24 12:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/24 12:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/19/24 12:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/19/24 12:01	1
Trichloroethene	ND		1.0	0.15	ug/L			07/19/24 12:01	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/19/24 12:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/24 12:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/24 12:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/24 12:01	1
Vinyl acetate	ND		25	0.93	ug/L			07/19/24 12:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/24 12:01	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 12:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 130*		*07/19/24 12:01*	*1*
Dibromofluoromethane	*114*		*75 - 126*		*07/19/24 12:01*	*1*
Toluene-d8 (Surr)	*88*		*64 - 132*		*07/19/24 12:01*	*1*

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

Job ID: 400-259266-1

Client Sample ID: TB-ROX-071524-8011-A
Date Collected: 07/15/24 00:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-7
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/17/24 09:34	07/18/24 13:05	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/17/24 09:34	07/18/24 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*139*		*51 - 149*	*07/17/24 09:34*	*07/18/24 13:05*	*1*

Client Sample ID: MW25-ROX-071524
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-8
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 *+ J	25	10	ug/L			07/23/24 14:46	1
Acrolein	ND		20	3.3	ug/L			07/23/24 14:46	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/24 14:46	1
Benzene	**6.7**		1.0	0.24	ug/L			07/23/24 14:46	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/24 14:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/24 14:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
Bromoform	ND		5.0	0.25	ug/L			07/23/24 14:46	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/24 14:46	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/23/24 14:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/24 14:46	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/23/24 14:46	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/23/24 14:46	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/24 14:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/24 14:46	1
Chloroform	ND		1.0	0.90	ug/L			07/23/24 14:46	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/23/24 14:46	1
Chloromethane	ND		1.0	0.40	ug/L			07/23/24 14:46	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/23/24 14:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/24 14:46	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/23/24 14:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/24 14:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/24 14:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/24 14:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/24 14:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/23/24 14:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 14:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/23/24 14:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/24 14:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/24 14:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/24 14:46	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/23/24 14:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/24 14:46	1
Methylene bromide	ND		5.0	0.22	ug/L			07/23/24 14:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/24 14:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/24 14:46	1
Methyl tert-butyl ether	**0.38**	J	1.0	0.22	ug/L			07/23/24 14:46	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/23/24 14:46	1
Naphthalene	ND		5.0	3.0	ug/L			07/23/24 14:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/24 14:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/24 14:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/24 14:46	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/24 14:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/24 14:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/24 14:46	1

Client Sample ID: MW25-ROX-071524
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-8
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			07/23/24 14:46	1
Styrene	ND		1.0	1.0	ug/L			07/23/24 14:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/24 14:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/23/24 14:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/24 14:46	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/23/24 14:46	1
Toluene	ND		1.0	0.90	ug/L			07/23/24 14:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 14:46	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/23/24 14:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/23/24 14:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/24 14:46	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/23/24 14:46	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/23/24 14:46	1
Trichloroethene	ND		1.0	0.15	ug/L			07/23/24 14:46	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/23/24 14:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/24 14:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/24 14:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/24 14:46	1
Vinyl acetate	ND		25	0.93	ug/L			07/23/24 14:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/24 14:46	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/24 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*72 - 130*		*07/23/24 14:46*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*07/23/24 14:46*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/23/24 14:46*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/24 11:45	07/19/24 21:42	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/24 11:45	07/19/24 21:42	1
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 21:42	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 21:42	1
Benzo[a]pyrene	ND		0.20	0.064	ug/L		07/18/24 11:45	07/19/24 21:42	1
Benzo[b]fluoranthene	ND		0.20	0.037	ug/L		07/18/24 11:45	07/19/24 21:42	1
Benzo[g,h,i]perylene	ND		0.20	0.027	ug/L		07/18/24 11:45	07/19/24 21:42	1
Benzo[k]fluoranthene	ND		0.20	0.062	ug/L		07/18/24 11:45	07/19/24 21:42	1
Chrysene	ND		0.20	0.033	ug/L		07/18/24 11:45	07/19/24 21:42	1
Dibenz(a,h)anthracene	ND	UJ	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 21:42	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 21:42	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 21:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 21:42	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 21:42	1
Pyrene	ND		0.20	0.039	ug/L		07/18/24 11:45	07/19/24 21:42	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/24 11:45	07/19/24 21:42	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*95*		*18 - 147*	*07/18/24 11:45*	*07/19/24 21:42*	*1*
2-Fluorobiphenyl	*63*		*15 - 128*	*07/18/24 11:45*	*07/19/24 21:42*	*1*

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

Job ID: 400-259266-1

Client Sample ID: MW25-ROX-071524
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*69*		*10 - 144*	*07/18/24 11:45*	*07/19/24 21:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/20/24 00:03	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/20/24 00:03	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/20/24 00:03	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/20/24 00:03	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/20/24 00:03	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/20/24 00:03	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/20/24 00:03	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4-Dimethylphenol	ND	UJ	10	5.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/20/24 00:03	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/20/24 00:03	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
Hexachlorocyclopentadiene	ND	UJ	20	4.5	ug/L		07/18/24 11:45	07/20/24 00:03	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/20/24 00:03	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/20/24 00:03	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/20/24 00:03	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/20/24 00:03	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/20/24 00:03	1

Client Sample ID: MW25-ROX-071524
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-8
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	2.5	ug/L		07/18/24 11:45	07/20/24 00:03	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/20/24 00:03	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/20/24 00:03	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/20/24 00:03	1
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/20/24 00:03	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/20/24 00:03	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/20/24 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*07/18/24 11:45*	*07/20/24 00:03*	*1*
2-Fluorophenol	*42*		*10 - 105*	*07/18/24 11:45*	*07/20/24 00:03*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*07/18/24 11:45*	*07/20/24 00:03*	*1*
Phenol-d5	*31*		*10 - 129*	*07/18/24 11:45*	*07/20/24 00:03*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/18/24 11:45*	*07/20/24 00:03*	*1*
2,4,6-Tribromophenol	*64*		*10 - 150*	*07/18/24 11:45*	*07/20/24 00:03*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		07/17/24 09:34	07/18/24 13:27	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/17/24 09:34	07/18/24 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*07/17/24 09:34*	*07/18/24 13:27*	*1*

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

Job ID: 400-259266-1

Client Sample ID: MW25-ROX-071524-DUP
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-9
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 *+ J	25	10	ug/L			07/23/24 15:04	1
Acrolein	ND		20	3.3	ug/L			07/23/24 15:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/24 15:04	1
Benzene	**7.2**		1.0	0.24	ug/L			07/23/24 15:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/24 15:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/24 15:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
Bromoform	ND		5.0	0.25	ug/L			07/23/24 15:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/24 15:04	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			07/23/24 15:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/24 15:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/23/24 15:04	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/23/24 15:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/24 15:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/24 15:04	1
Chloroform	ND		1.0	0.90	ug/L			07/23/24 15:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/23/24 15:04	1
Chloromethane	ND		1.0	0.40	ug/L			07/23/24 15:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/23/24 15:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/24 15:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/23/24 15:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/24 15:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/24 15:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/24 15:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/24 15:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/23/24 15:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 15:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/23/24 15:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/24 15:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/24 15:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/24 15:04	1
2-Hexanone	ND	*+	25	4.3	ug/L			07/23/24 15:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/24 15:04	1
Methylene bromide	ND		5.0	0.22	ug/L			07/23/24 15:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/24 15:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/24 15:04	1
Methyl tert-butyl ether	**0.41**	J	1.0	0.22	ug/L			07/23/24 15:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/23/24 15:04	1
Naphthalene	ND		5.0	3.0	ug/L			07/23/24 15:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/24 15:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/24 15:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/24 15:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/24 15:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/24 15:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/24 15:04	1

Client Sample ID: MW25-ROX-071524-DUP

Lab Sample ID: 400-259266-9

Date Collected: 07/15/24 09:15

Matrix: Water

Date Received: 07/16/24 09:38

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			07/23/24 15:04	1
Styrene	ND		1.0	1.0	ug/L			07/23/24 15:04	1
tert-Butylbenzene	**0.67**	**J**	1.0	0.63	ug/L			07/23/24 15:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/23/24 15:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/24 15:04	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/23/24 15:04	1
Toluene	ND		1.0	0.90	ug/L			07/23/24 15:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 15:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/23/24 15:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/23/24 15:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/24 15:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/23/24 15:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/23/24 15:04	1
Trichloroethene	ND		1.0	0.15	ug/L			07/23/24 15:04	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/23/24 15:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/24 15:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/24 15:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/24 15:04	1
Vinyl acetate	ND		25	0.93	ug/L			07/23/24 15:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/24 15:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/24 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*72 - 130*		*07/23/24 15:04*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*07/23/24 15:04*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/23/24 15:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.22	0.11	ug/L		07/18/24 11:45	07/19/24 22:03	1
Acenaphthylene	ND		0.22	0.049	ug/L		07/18/24 11:45	07/19/24 22:03	1
Anthracene	ND		0.22	0.053	ug/L		07/18/24 11:45	07/19/24 22:03	1
Benzo[a]anthracene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:03	1
Benzo[a]pyrene	ND		0.22	0.072	ug/L		07/18/24 11:45	07/19/24 22:03	1
Benzo[b]fluoranthene	ND		0.22	0.041	ug/L		07/18/24 11:45	07/19/24 22:03	1
Benzo[g,h,i]perylene	ND		0.22	0.030	ug/L		07/18/24 11:45	07/19/24 22:03	1
Benzo[k]fluoranthene	ND		0.22	0.069	ug/L		07/18/24 11:45	07/19/24 22:03	1
Chrysene	ND		0.22	0.037	ug/L		07/18/24 11:45	07/19/24 22:03	1
Dibenz(a,h)anthracene	ND	UJ	0.22	0.054	ug/L		07/18/24 11:45	07/19/24 22:03	1
Fluoranthene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:03	1
Fluorene	ND		0.22	0.10	ug/L		07/18/24 11:45	07/19/24 22:03	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:03	1
Phenanthrene	ND		0.22	0.10	ug/L		07/18/24 11:45	07/19/24 22:03	1
Pyrene	ND		0.22	0.044	ug/L		07/18/24 11:45	07/19/24 22:03	1
1-Methylnaphthalene	ND		0.22	0.089	ug/L		07/18/24 11:45	07/19/24 22:03	1
2-Methylnaphthalene	ND		0.22	0.074	ug/L		07/18/24 11:45	07/19/24 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*99*		*18 - 147*	*07/18/24 11:45*	*07/19/24 22:03*	*1*
2-Fluorobiphenyl	*67*		*15 - 128*	*07/18/24 11:45*	*07/19/24 22:03*	*1*

Client Sample ID: MW25-ROX-071524-DUP
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-9
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*72*		*10 - 144*	*07/18/24 11:45*	*07/19/24 22:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
Benzenethiol	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:27	1
Benzoic acid	ND		34	27	ug/L		07/18/24 11:45	07/20/24 00:27	1
Benzyl alcohol	ND		11	8.2	ug/L		07/18/24 11:45	07/20/24 00:27	1
Bis(2-chloroethoxy)methane	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
Bis(2-chloroethyl)ether	ND		11	4.4	ug/L		07/18/24 11:45	07/20/24 00:27	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		07/18/24 11:45	07/20/24 00:27	1
Bis(2-ethylhexyl) phthalate	ND		11	10	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Bromophenyl phenyl ether	ND		11	9.6	ug/L		07/18/24 11:45	07/20/24 00:27	1
Butyl benzyl phthalate	ND		11	6.5	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Chloroaniline	ND		11	5.3	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Chloro-3-methylphenol	ND		11	5.9	ug/L		07/18/24 11:45	07/20/24 00:27	1
2-Chloronaphthalene	ND		11	4.2	ug/L		07/18/24 11:45	07/20/24 00:27	1
2-Chlorophenol	ND		11	4.6	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Chlorophenyl phenyl ether	ND		11	4.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
Dibenz[a,h]acridine	ND		11	3.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
Dibenzofuran	ND		11	4.5	ug/L		07/18/24 11:45	07/20/24 00:27	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4-Dichlorophenol	ND		11	4.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
Diethyl phthalate	ND		11	4.9	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4-Dimethylphenol	ND	UJ	11	5.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
Dimethyl phthalate	ND		11	4.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
Di-n-butyl phthalate	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4-Dinitrophenol	ND		34	5.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4-Dinitrotoluene	ND		11	5.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,6-Dinitrotoluene	ND		11	4.4	ug/L		07/18/24 11:45	07/20/24 00:27	1
Di-n-octyl phthalate	ND		11	6.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
1,4-Dioxane	ND		11	4.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
Hexachlorobenzene	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:27	1
Hexachlorocyclopentadiene	ND	UJ	22	5.0	ug/L		07/18/24 11:45	07/20/24 00:27	1
Hexachloroethane	ND		11	5.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
Indene	ND		11	4.0	ug/L		07/18/24 11:45	07/20/24 00:27	1
Isophorone	ND		11	5.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
2-Methylphenol	ND		11	3.6	ug/L		07/18/24 11:45	07/20/24 00:27	1
3 & 4 Methylphenol	ND		22	5.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
2-Nitroaniline	ND		11	5.6	ug/L		07/18/24 11:45	07/20/24 00:27	1
3-Nitroaniline	ND		11	5.3	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Nitroaniline	ND		11	4.6	ug/L		07/18/24 11:45	07/20/24 00:27	1
Nitrobenzene	ND		11	5.3	ug/L		07/18/24 11:45	07/20/24 00:27	1
2-Nitrophenol	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
4-Nitrophenol	ND		11	3.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
N-Nitrosodimethylamine	ND		11	2.5	ug/L		07/18/24 11:45	07/20/24 00:27	1

Client Sample ID: MW25-ROX-071524-DUP
Date Collected: 07/15/24 09:15
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-9
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		11	2.8	ug/L		07/18/24 11:45	07/20/24 00:27	1
N-Nitrosodiphenylamine	ND		11	4.1	ug/L		07/18/24 11:45	07/20/24 00:27	1
Pentachlorophenol	ND		22	13	ug/L		07/18/24 11:45	07/20/24 00:27	1
Phenol	ND		11	4.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
Pyridine	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:27	1
Quinoline	ND		11	2.7	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4,5-Trichlorophenol	ND		11	4.5	ug/L		07/18/24 11:45	07/20/24 00:27	1
2,4,6-Trichlorophenol	ND		11	3.9	ug/L		07/18/24 11:45	07/20/24 00:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*07/18/24 11:45*	*07/20/24 00:27*	*1*
2-Fluorophenol	*41*		*10 - 105*	*07/18/24 11:45*	*07/20/24 00:27*	*1*
Nitrobenzene-d5	*59*		*16 - 127*	*07/18/24 11:45*	*07/20/24 00:27*	*1*
Phenol-d5	*29*		*10 - 129*	*07/18/24 11:45*	*07/20/24 00:27*	*1*
Terphenyl-d14	*87*		*13 - 150*	*07/18/24 11:45*	*07/20/24 00:27*	*1*
2,4,6-Tribromophenol	*63*		*10 - 150*	*07/18/24 11:45*	*07/20/24 00:27*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		07/17/24 09:34	07/18/24 13:48	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		07/17/24 09:34	07/18/24 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*07/17/24 09:34*	*07/18/24 13:48*	*1*

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

Job ID: 400-259266-1

Client Sample ID: MW7-ROX-071524
Date Collected: 07/15/24 11:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	63000	25000	ug/L			07/19/24 17:41	2500
Acrolein	ND	UJ	50000	8300	ug/L			07/19/24 17:41	2500
Acrylonitrile	ND	UJ	25000	7000	ug/L			07/19/24 17:41	2500
Bromobenzene	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
Bromochloromethane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Bromodichloromethane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Bromoform	ND	UJ	13000	630	ug/L			07/19/24 17:41	2500
Bromomethane	ND	UJ	2500	2500	ug/L			07/19/24 17:41	2500
2-Butanone (MEK)	ND	*+ UJ	63000	6500	ug/L			07/19/24 17:41	2500
Carbon disulfide	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Carbon tetrachloride	ND	UJ	2500	480	ug/L			07/19/24 17:41	2500
Chlorobenzene	ND	UJ	2500	1100	ug/L			07/19/24 17:41	2500
Chloroethane	ND	UJ	2500	1900	ug/L			07/19/24 17:41	2500
2-Chloroethyl vinyl ether	ND	UJ	13000	5000	ug/L			07/19/24 17:41	2500
Chloroform	ND	UJ	2500	2300	ug/L			07/19/24 17:41	2500
1-Chlorohexane	ND	UJ	2500	800	ug/L			07/19/24 17:41	2500
Chloromethane	ND	UJ	2500	1000	ug/L			07/19/24 17:41	2500
cis-1,2-Dichloroethene	ND	UJ	2500	500	ug/L			07/19/24 17:41	2500
cis-1,3-Dichloropropene	ND	UJ	13000	1300	ug/L			07/19/24 17:41	2500
Dibromochloromethane	ND	UJ	2500	600	ug/L			07/19/24 17:41	2500
1,2-Dichlorobenzene	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
1,3-Dichlorobenzene	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
1,4-Dichlorobenzene	ND	UJ	2500	1600	ug/L			07/19/24 17:41	2500
Dichlorodifluoromethane	ND	UJ	2500	2100	ug/L			07/19/24 17:41	2500
1,1-Dichloroethane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
1,2-Dichloroethane	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
1,1-Dichloroethene	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
1,2-Dichloropropane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
1,3-Dichloropropane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
2,2-Dichloropropane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
1,1-Dichloropropene	ND	UJ	2500	230	ug/L			07/19/24 17:41	2500
Ethylbenzene	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Ethyl methacrylate	ND	UJ	2500	1500	ug/L			07/19/24 17:41	2500
Hexachlorobutadiene	ND	UJ	13000	2300	ug/L			07/19/24 17:41	2500
2-Hexanone	ND	UJ	63000	11000	ug/L			07/19/24 17:41	2500
Isopropylbenzene	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Methylene bromide	ND	UJ	13000	550	ug/L			07/19/24 17:41	2500
Methylene Chloride	ND	UJ	13000	7500	ug/L			07/19/24 17:41	2500
4-Methyl-2-pentanone (MIBK)	ND	UJ	63000	4500	ug/L			07/19/24 17:41	2500
Methyl tert-butyl ether	ND	UJ	2500	550	ug/L			07/19/24 17:41	2500
m-Xylene & p-Xylene	ND	UJ	13000	1600	ug/L			07/19/24 17:41	2500
Naphthalene	ND	UJ	13000	7500	ug/L			07/19/24 17:41	2500
n-Butylbenzene	ND	UJ	2500	1900	ug/L			07/19/24 17:41	2500
N-Propylbenzene	ND	UJ	2500	1700	ug/L			07/19/24 17:41	2500
o-Chlorotoluene	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
o-Xylene	ND	UJ	13000	1500	ug/L			07/19/24 17:41	2500
p-Chlorotoluene	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
p-Isopropyltoluene	ND	UJ	2500	1800	ug/L			07/19/24 17:41	2500
sec-Butylbenzene	ND	UJ	2500	1800	ug/L			07/19/24 17:41	2500

Client Sample ID: MW7-ROX-071524
Date Collected: 07/15/24 11:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-10
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	UJ	2500	2500	ug/L			07/19/24 17:41	2500
tert-Butylbenzene	ND	UJ	2500	1600	ug/L			07/19/24 17:41	2500
1,1,1,2-Tetrachloroethane	ND	UJ	2500	950	ug/L			07/19/24 17:41	2500
1,1,2,2-Tetrachloroethane	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Tetrachloroethene	ND	UJ	2500	830	ug/L			07/19/24 17:41	2500
Toluene	ND	UJ	2500	2300	ug/L			07/19/24 17:41	2500
trans-1,2-Dichloroethene	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
trans-1,3-Dichloropropene	ND	UJ	13000	500	ug/L			07/19/24 17:41	2500
1,2,3-Trichlorobenzene	ND	UJ	2500	2300	ug/L			07/19/24 17:41	2500
1,2,4-Trichlorobenzene	ND	UJ	2500	2100	ug/L			07/19/24 17:41	2500
1,1,1-Trichloroethane	ND	UJ	2500	450	ug/L			07/19/24 17:41	2500
1,1,2-Trichloroethane	ND	UJ	13000	530	ug/L			07/19/24 17:41	2500
Trichloroethene	ND	UJ	2500	380	ug/L			07/19/24 17:41	2500
Trichlorofluoromethane	ND	UJ	2500	630	ug/L			07/19/24 17:41	2500
1,2,3-Trichloropropane	ND	UJ	13000	2100	ug/L			07/19/24 17:41	2500
1,2,4-Trimethylbenzene	ND	UJ	2500	2100	ug/L			07/19/24 17:41	2500
1,3,5-Trimethylbenzene	ND	UJ	2500	1400	ug/L			07/19/24 17:41	2500
Vinyl acetate	ND	UJ	63000	2300	ug/L			07/19/24 17:41	2500
Vinyl chloride	ND	UJ	2500	1300	ug/L			07/19/24 17:41	2500
Xylenes, Total	ND	UJ	25000	4000	ug/L			07/19/24 17:41	2500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 130*		*07/19/24 17:41*	*2500*
Dibromofluoromethane	*102*		*75 - 126*		*07/19/24 17:41*	*2500*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/19/24 17:41*	*2500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**900000**		5000	1200	ug/L			07/20/24 18:00	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*72 - 130*		*07/20/24 18:00*	*5000*
Dibromofluoromethane	*102*		*75 - 126*		*07/20/24 18:00*	*5000*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/20/24 18:00*	*5000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.19**	**J**	0.22	0.11	ug/L		07/18/24 11:45	07/19/24 22:24	1
Acenaphthylene	ND		0.22	0.049	ug/L		07/18/24 11:45	07/19/24 22:24	1
Anthracene	ND		0.22	0.052	ug/L		07/18/24 11:45	07/19/24 22:24	1
Benzo[a]anthracene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:24	1
Benzo[a]pyrene	ND		0.22	0.071	ug/L		07/18/24 11:45	07/19/24 22:24	1
Benzo[b]fluoranthene	ND		0.22	0.041	ug/L		07/18/24 11:45	07/19/24 22:24	1
Benzo[g,h,i]perylene	ND		0.22	0.030	ug/L		07/18/24 11:45	07/19/24 22:24	1
Benzo[k]fluoranthene	ND		0.22	0.069	ug/L		07/18/24 11:45	07/19/24 22:24	1
Chrysene	ND		0.22	0.037	ug/L		07/18/24 11:45	07/19/24 22:24	1
Dibenz(a,h)anthracene	ND	UJ	0.22	0.053	ug/L		07/18/24 11:45	07/19/24 22:24	1
Fluoranthene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:24	1
Fluorene	**0.16**	**J**	0.22	0.099	ug/L		07/18/24 11:45	07/19/24 22:24	1
Indeno[1,2,3-cd]pyrene	ND		0.22	0.038	ug/L		07/18/24 11:45	07/19/24 22:24	1

Client Sample ID: MW7-ROX-071524
Date Collected: 07/15/24 11:00
Date Received: 07/16/24 09:38

Lab Sample ID: 400-259266-10
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	**0.31**		0.22	0.10	ug/L		07/18/24 11:45	07/19/24 22:24	1
Pyrene	ND		0.22	0.043	ug/L		07/18/24 11:45	07/19/24 22:24	1
1-Methylnaphthalene	**1.4**		0.22	0.089	ug/L		07/18/24 11:45	07/19/24 22:24	1
2-Methylnaphthalene	**1.4**		0.22	0.073	ug/L		07/18/24 11:45	07/19/24 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*18 - 147*	*07/18/24 11:45*	*07/19/24 22:24*	*1*
2-Fluorobiphenyl	*71*		*15 - 128*	*07/18/24 11:45*	*07/19/24 22:24*	*1*
Nitrobenzene-d5	*49*		*10 - 144*	*07/18/24 11:45*	*07/19/24 22:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		11	9.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
Benzenethiol	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:52	1
Benzoic acid	ND		33	27	ug/L		07/18/24 11:45	07/20/24 00:52	1
Benzyl alcohol	ND		11	8.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
Bis(2-chloroethoxy)methane	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
Bis(2-chloroethyl)ether	ND		11	4.3	ug/L		07/18/24 11:45	07/20/24 00:52	1
bis (2-chloroisopropyl) ether	ND		11	2.0	ug/L		07/18/24 11:45	07/20/24 00:52	1
Bis(2-ethylhexyl) phthalate	ND		11	9.9	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Bromophenyl phenyl ether	ND		11	9.6	ug/L		07/18/24 11:45	07/20/24 00:52	1
Butyl benzyl phthalate	ND		11	6.5	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Chloroaniline	ND		11	5.2	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Chloro-3-methylphenol	ND		11	5.9	ug/L		07/18/24 11:45	07/20/24 00:52	1
2-Chloronaphthalene	ND		11	4.2	ug/L		07/18/24 11:45	07/20/24 00:52	1
2-Chlorophenol	ND		11	4.6	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Chlorophenyl phenyl ether	ND		11	4.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
Dibenz[a,h]acridine	ND		11	3.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
Dibenzofuran	ND		11	4.5	ug/L		07/18/24 11:45	07/20/24 00:52	1
3,3'-Dichlorobenzidine	ND		12	12	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4-Dichlorophenol	ND		11	4.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
Diethyl phthalate	ND		11	4.9	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4-Dimethylphenol	ND	UJ	11	5.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
Dimethyl phthalate	ND		11	4.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
Di-n-butyl phthalate	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
4,6-Dinitro-ortho-cresol	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4-Dinitrophenol	ND		33	5.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4-Dinitrotoluene	ND		11	5.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,6-Dinitrotoluene	ND		11	4.3	ug/L		07/18/24 11:45	07/20/24 00:52	1
Di-n-octyl phthalate	ND		11	6.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
1,4-Dioxane	ND		11	4.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		11	3.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
Hexachlorobenzene	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:52	1
Hexachlorocyclopentadiene	ND	UJ	22	5.0	ug/L		07/18/24 11:45	07/20/24 00:52	1
Hexachloroethane	ND		11	5.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
Indene	ND		11	4.0	ug/L		07/18/24 11:45	07/20/24 00:52	1
Isophorone	ND		11	5.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
2-Methylphenol	ND		11	3.6	ug/L		07/18/24 11:45	07/20/24 00:52	1
3 & 4 Methylphenol	ND		22	5.1	ug/L		07/18/24 11:45	07/20/24 00:52	1

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

Job ID: 400-259266-1

Client Sample ID: MW7-ROX-071524

Lab Sample ID: 400-259266-10

Date Collected: 07/15/24 11:00

Matrix: Water

Date Received: 07/16/24 09:38

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		11	5.6	ug/L		07/18/24 11:45	07/20/24 00:52	1
3-Nitroaniline	ND		11	5.2	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Nitroaniline	ND		11	4.6	ug/L		07/18/24 11:45	07/20/24 00:52	1
Nitrobenzene	ND		11	5.2	ug/L		07/18/24 11:45	07/20/24 00:52	1
2-Nitrophenol	ND		11	5.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
4-Nitrophenol	ND		11	3.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
N-Nitrosodimethylamine	ND		11	2.4	ug/L		07/18/24 11:45	07/20/24 00:52	1
N-Nitrosodi-n-propylamine	ND		11	2.8	ug/L		07/18/24 11:45	07/20/24 00:52	1
N-Nitrosodiphenylamine	ND		11	4.1	ug/L		07/18/24 11:45	07/20/24 00:52	1
Pentachlorophenol	ND		22	13	ug/L		07/18/24 11:45	07/20/24 00:52	1
Phenol	**63**		11	4.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
Pyridine	ND		11	11	ug/L		07/18/24 11:45	07/20/24 00:52	1
Quinoline	ND		11	2.7	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4,5-Trichlorophenol	ND		11	4.5	ug/L		07/18/24 11:45	07/20/24 00:52	1
2,4,6-Trichlorophenol	ND		11	3.9	ug/L		07/18/24 11:45	07/20/24 00:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*21 - 114*	*07/18/24 11:45*	*07/20/24 00:52*	*1*
2-Fluorophenol	*41*		*10 - 105*	*07/18/24 11:45*	*07/20/24 00:52*	*1*
Nitrobenzene-d5	*60*		*16 - 127*	*07/18/24 11:45*	*07/20/24 00:52*	*1*
Phenol-d5	*31*		*10 - 129*	*07/18/24 11:45*	*07/20/24 00:52*	*1*
Terphenyl-d14	*93*		*13 - 150*	*07/18/24 11:45*	*07/20/24 00:52*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*07/18/24 11:45*	*07/20/24 00:52*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		07/17/24 09:34	07/18/24 14:31	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/17/24 09:34	07/18/24 14:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*07/17/24 09:34*	*07/18/24 14:31*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.
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: 400-259266-1

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)
400-259266-1	TB-ROX-071524-8260-B	80	111	89
400-259266-3	P59-ROX-071524	86	101	95
400-259266-4	T12-ROX-071524	87	95	98
400-259266-5	P93C-ROX-071524	86	103	92
400-259266-5 - DL	P93C-ROX-071524	83	103	92
400-259266-6	TB-ROX-071524-8260-A	82	114	88
400-259266-8	MW25-ROX-071524	84	98	99
400-259266-9	MW25-ROX-071524-DUP	84	98	97
400-259266-10	MW7-ROX-071524	81	102	90
400-259266-10 - DL	MW7-ROX-071524	83	102	90
LCS 400-678343/1002	Lab Control Sample	91	103	94
LCS 400-678496/1002	Lab Control Sample	90	106	93
LCS 400-678687/1002	Lab Control Sample	87	99	99
MB 400-678343/6	Method Blank	81	108	90
MB 400-678496/6	Method Blank	84	110	90
MB 400-678687/6	Method Blank	82	109	95

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-259266-3	P59-ROX-071524	63	40	62	31	86	66
400-259266-4	T12-ROX-071524	58	38	53	31	84	59
400-259266-5	P93C-ROX-071524	65	44	61	33	89	66
400-259266-8	MW25-ROX-071524	61	42	57	31	88	64
400-259266-9	MW25-ROX-071524-DUP	63	41	59	29	87	63
400-259266-10	MW7-ROX-071524	64	41	60	31	93	67
LCS 400-678242/2-A	Lab Control Sample	68	51	65	45	92	62
LCS 400-678242/4-A	Lab Control Sample	66	46	63	35	88	58
LCSD 400-678242/3-A	Lab Control Sample Dup	72	52	66	47	97	66
LCSD 400-678242/5-A	Lab Control Sample Dup	66	48	65	36	90	56
MB 400-678242/1-A	Method Blank	67	46	66	33	88	57

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: 400-259266-1

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)
400-259266-3	P59-ROX-071524	72	43	66
400-259266-4	T12-ROX-071524	79	54	62
400-259266-5	P93C-ROX-071524	89	55	68
400-259266-8	MW25-ROX-071524	95	63	69
400-259266-9	MW25-ROX-071524-DUP	99	67	72
400-259266-10	MW7-ROX-071524	92	71	49
LCS 400-678242/2-A	Lab Control Sample	100	66	58
LCSD 400-678242/3-A	Lab Control Sample Dup	100	70	60
MB 400-678242/1-A	Method Blank	148 S1+ *3	72	73

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-259266-2	TB-ROX-071524-8011-B	132
400-259266-3	P59-ROX-071524	272 S1+
400-259266-4	T12-ROX-071524	101
400-259266-5	P93C-ROX-071524	99
400-259266-7	TB-ROX-071524-8011-A	139
400-259266-8	MW25-ROX-071524	82
400-259266-9	MW25-ROX-071524-DUP	81
400-259266-10	MW7-ROX-071524	125
LCS 400-678082/2-A	Lab Control Sample	143
LCSD 400-678082/3-A	Lab Control Sample Dup	135
MB 400-678082/1-A	Method Blank	136

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-259266-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-071524-8260-B

Lab Sample ID: 400-259266-1

Date Collected: 07/15/24 00:00

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678343	07/19/24 11:43	LSS	EET PEN

Client Sample ID: TB-ROX-071524-8011-B

Lab Sample ID: 400-259266-2

Date Collected: 07/15/24 00:00

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.3 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 11:40	S1K	EET PEN

Client Sample ID: P59-ROX-071524

Lab Sample ID: 400-259266-3

Date Collected: 07/15/24 09:40

Matrix: Water

Date Received: 07/16/24 09:38

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	678343	07/19/24 15:29	LSS	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 22:48	KJA	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 20:39	JAW	EET PEN
Total/NA	Prep	8011			31.7 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 12:01	S1K	EET PEN

Client Sample ID: T12-ROX-071524

Lab Sample ID: 400-259266-4

Date Collected: 07/15/24 10:50

Matrix: Water

Date Received: 07/16/24 09:38

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	678687	07/23/24 15:42	LSS	EET PEN
Total/NA	Prep	3510C			255.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 23:13	KJA	EET PEN
Total/NA	Prep	3510C			255.2 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 21:00	JAW	EET PEN
Total/NA	Prep	8011			33.2 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 12:23	S1K	EET PEN

Client Sample ID: P93C-ROX-071524

Lab Sample ID: 400-259266-5

Date Collected: 07/15/24 12:25

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678343	07/19/24 12:20	LSS	EET PEN
Total/NA	Analysis	8260D	DL	100	5 mL	5 mL	678496	07/20/24 17:23	LSS	EET PEN
Total/NA	Prep	3510C			259.4 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 23:38	KJA	EET PEN

Client Sample ID: P93C-ROX-071524

Lab Sample ID: 400-259266-5

Date Collected: 07/15/24 12:25

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			259.4 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 21:21	JAW	EET PEN
Total/NA	Prep	8011			32.4 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 12:44	S1K	EET PEN

Client Sample ID: TB-ROX-071524-8260-A

Lab Sample ID: 400-259266-6

Date Collected: 07/15/24 00:00

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678343	07/19/24 12:01	LSS	EET PEN

Client Sample ID: TB-ROX-071524-8011-A

Lab Sample ID: 400-259266-7

Date Collected: 07/15/24 00:00

Matrix: Water

Date Received: 07/16/24 09:38

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 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 13:05	S1K	EET PEN

Client Sample ID: MW25-ROX-071524

Lab Sample ID: 400-259266-8

Date Collected: 07/15/24 09:15

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678687	07/23/24 14:46	LSS	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/20/24 00:03	KJA	EET PEN
Total/NA	Prep	3510C			249.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 21:42	JAW	EET PEN
Total/NA	Prep	8011			30.8 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 13:27	S1K	EET PEN

Client Sample ID: MW25-ROX-071524-DUP

Lab Sample ID: 400-259266-9

Date Collected: 07/15/24 09:15

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	678687	07/23/24 15:04	LSS	EET PEN
Total/NA	Prep	3510C			223.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/20/24 00:27	KJA	EET PEN
Total/NA	Prep	3510C			223.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 22:03	JAW	EET PEN
Total/NA	Prep	8011			30.6 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 13:48	S1K	EET PEN

Client Sample ID: MW7-ROX-071524

Lab Sample ID: 400-259266-10

Date Collected: 07/15/24 11:00

Matrix: Water

Date Received: 07/16/24 09:38

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2500	5 mL	5 mL	678343	07/19/24 17:41	LSS	EET PEN
Total/NA	Analysis	8260D	DL	5000	5 mL	5 mL	678496	07/20/24 18:00	LSS	EET PEN
Total/NA	Prep	3510C			224.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/20/24 00:52	KJA	EET PEN
Total/NA	Prep	3510C			224.6 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 22:24	JAW	EET PEN
Total/NA	Prep	8011			34.2 mL	35 mL	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 14:31	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678082/1-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	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 10:37	S1K	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678242/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:07	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	678446	07/19/24 15:45	JAW	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678343/6

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	678343	07/19/24 08:55	LSS	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678496/6

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	678496	07/20/24 10:46	LSS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678687/6

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	678687	07/23/24 09:42	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678082/2-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	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 10:58	S1K	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:32	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:06	JAW	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678242/4-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:22	KJA	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678343/1002

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	678343	07/19/24 07:18	LSS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678496/1002

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	678496	07/20/24 09:12	LSS	EET PEN

Lab Chronicle

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

Job ID: 400-259266-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678687/1002
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	678687	07/23/24 08:05	LSS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678082/3-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	678082	07/17/24 09:34	KR	EET PEN
Total/NA	Analysis	8011		1			678196	07/18/24 11:19	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 16:57	KJA	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	678446	07/19/24 16:27	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678242/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678242	07/18/24 11:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	678442	07/19/24 17:47	KJA	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 678343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-1	TB-ROX-071524-8260-B	Total/NA	Water	8260D	
400-259266-3	P59-ROX-071524	Total/NA	Water	8260D	
400-259266-5	P93C-ROX-071524	Total/NA	Water	8260D	
400-259266-6	TB-ROX-071524-8260-A	Total/NA	Water	8260D	
400-259266-10	MW7-ROX-071524	Total/NA	Water	8260D	
MB 400-678343/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678343/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-5 - DL	P93C-ROX-071524	Total/NA	Water	8260D	
400-259266-10 - DL	MW7-ROX-071524	Total/NA	Water	8260D	
MB 400-678496/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678496/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-4	T12-ROX-071524	Total/NA	Water	8260D	
400-259266-8	MW25-ROX-071524	Total/NA	Water	8260D	
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	8260D	
MB 400-678687/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678687/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 678242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-3	P59-ROX-071524	Total/NA	Water	3510C	
400-259266-4	T12-ROX-071524	Total/NA	Water	3510C	
400-259266-5	P93C-ROX-071524	Total/NA	Water	3510C	
400-259266-8	MW25-ROX-071524	Total/NA	Water	3510C	
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	3510C	
400-259266-10	MW7-ROX-071524	Total/NA	Water	3510C	
MB 400-678242/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 678442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-3	P59-ROX-071524	Total/NA	Water	8270E	678242
400-259266-4	T12-ROX-071524	Total/NA	Water	8270E	678242
400-259266-5	P93C-ROX-071524	Total/NA	Water	8270E	678242
400-259266-8	MW25-ROX-071524	Total/NA	Water	8270E	678242
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	8270E	678242
400-259266-10	MW7-ROX-071524	Total/NA	Water	8270E	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E	678242
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCS 400-678242/4-A	Lab Control Sample	Total/NA	Water	8270E	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242

GC/MS Semi VOA (Continued)

Analysis Batch: 678442 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-678242/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	678242

Analysis Batch: 678446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-3	P59-ROX-071524	Total/NA	Water	8270E SIM	678242
400-259266-4	T12-ROX-071524	Total/NA	Water	8270E SIM	678242
400-259266-5	P93C-ROX-071524	Total/NA	Water	8270E SIM	678242
400-259266-8	MW25-ROX-071524	Total/NA	Water	8270E SIM	678242
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	8270E SIM	678242
400-259266-10	MW7-ROX-071524	Total/NA	Water	8270E SIM	678242
MB 400-678242/1-A	Method Blank	Total/NA	Water	8270E SIM	678242
LCS 400-678242/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	678242
LCSD 400-678242/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	678242

GC Semi VOA

Prep Batch: 678082

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-2	TB-ROX-071524-8011-B	Total/NA	Water	8011	
400-259266-3	P59-ROX-071524	Total/NA	Water	8011	
400-259266-4	T12-ROX-071524	Total/NA	Water	8011	
400-259266-5	P93C-ROX-071524	Total/NA	Water	8011	
400-259266-7	TB-ROX-071524-8011-A	Total/NA	Water	8011	
400-259266-8	MW25-ROX-071524	Total/NA	Water	8011	
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	8011	
400-259266-10	MW7-ROX-071524	Total/NA	Water	8011	
MB 400-678082/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-678082/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-678082/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 678196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259266-2	TB-ROX-071524-8011-B	Total/NA	Water	8011	678082
400-259266-3	P59-ROX-071524	Total/NA	Water	8011	678082
400-259266-4	T12-ROX-071524	Total/NA	Water	8011	678082
400-259266-5	P93C-ROX-071524	Total/NA	Water	8011	678082
400-259266-7	TB-ROX-071524-8011-A	Total/NA	Water	8011	678082
400-259266-8	MW25-ROX-071524	Total/NA	Water	8011	678082
400-259266-9	MW25-ROX-071524-DUP	Total/NA	Water	8011	678082
400-259266-10	MW7-ROX-071524	Total/NA	Water	8011	678082
MB 400-678082/1-A	Method Blank	Total/NA	Water	8011	678082
LCS 400-678082/2-A	Lab Control Sample	Total/NA	Water	8011	678082
LCSD 400-678082/3-A	Lab Control Sample Dup	Total/NA	Water	8011	678082

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

Lab Sample ID: MB 400-678343/6
Matrix: Water
Analysis Batch: 678343

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/19/24 08:55	1
Acrolein	ND		20	3.3	ug/L			07/19/24 08:55	1
Acrylonitrile	ND		10	2.8	ug/L			07/19/24 08:55	1
Benzene	ND		1.0	0.24	ug/L			07/19/24 08:55	1
Bromobenzene	ND		1.0	0.54	ug/L			07/19/24 08:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/19/24 08:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
Bromoform	ND		5.0	0.25	ug/L			07/19/24 08:55	1
Bromomethane	ND		1.0	0.98	ug/L			07/19/24 08:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/19/24 08:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/19/24 08:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/19/24 08:55	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/19/24 08:55	1
Chloroethane	ND		1.0	0.76	ug/L			07/19/24 08:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/19/24 08:55	1
Chloroform	ND		1.0	0.90	ug/L			07/19/24 08:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/19/24 08:55	1
Chloromethane	ND		1.0	0.40	ug/L			07/19/24 08:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/19/24 08:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/19/24 08:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/19/24 08:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/24 08:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/24 08:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/19/24 08:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/19/24 08:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/19/24 08:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 08:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/19/24 08:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/19/24 08:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/19/24 08:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/19/24 08:55	1
2-Hexanone	ND		25	4.3	ug/L			07/19/24 08:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/19/24 08:55	1
Methylene bromide	ND		5.0	0.22	ug/L			07/19/24 08:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/19/24 08:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/19/24 08:55	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/19/24 08:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/19/24 08:55	1
Naphthalene	ND		5.0	3.0	ug/L			07/19/24 08:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/19/24 08:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/19/24 08:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/19/24 08:55	1
o-Xylene	ND		5.0	0.60	ug/L			07/19/24 08:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/19/24 08:55	1

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

Lab Sample ID: MB 400-678343/6
Matrix: Water
Analysis Batch: 678343

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/19/24 08:55	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/19/24 08:55	1
Styrene	ND		1.0	1.0	ug/L			07/19/24 08:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/19/24 08:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/19/24 08:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/19/24 08:55	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/19/24 08:55	1
Toluene	ND		1.0	0.90	ug/L			07/19/24 08:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/19/24 08:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/19/24 08:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/19/24 08:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/19/24 08:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/19/24 08:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/19/24 08:55	1
Trichloroethene	ND		1.0	0.15	ug/L			07/19/24 08:55	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/19/24 08:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/19/24 08:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/19/24 08:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/19/24 08:55	1
Vinyl acetate	ND		25	0.93	ug/L			07/19/24 08:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/19/24 08:55	1
Xylenes, Total	ND		10	1.6	ug/L			07/19/24 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*72 - 130*		*07/19/24 08:55*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*07/19/24 08:55*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/19/24 08:55*	*1*

Lab Sample ID: LCS 400-678343/1002
Matrix: Water
Analysis Batch: 678343

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	300		ug/L		150	43 - 150
Acrolein	500	539		ug/L		108	38 - 150
Acrylonitrile	500	550		ug/L		110	64 - 142
Benzene	50.0	56.7		ug/L		113	70 - 130
Bromobenzene	50.0	59.4		ug/L		119	70 - 132
Bromochloromethane	50.0	62.6		ug/L		125	70 - 130
Bromodichloromethane	50.0	58.6		ug/L		117	67 - 133
Bromoform	50.0	56.1		ug/L		112	57 - 140
Bromomethane	50.0	42.5		ug/L		85	10 - 150
2-Butanone (MEK)	200	300	*+	ug/L		150	61 - 145
Carbon disulfide	50.0	46.3		ug/L		93	61 - 137
Carbon tetrachloride	50.0	56.0		ug/L		112	61 - 137
Chlorobenzene	50.0	58.3		ug/L		117	70 - 130
Chloroethane	50.0	47.4		ug/L		95	55 - 141
2-Chloroethyl vinyl ether	50.0	48.5		ug/L		97	10 - 150

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

Lab Sample ID: LCS 400-678343/1002
Matrix: Water
Analysis Batch: 678343

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	57.4		ug/L		115	69 - 130
1-Chlorohexane	50.0	48.5		ug/L		97	69 - 130
Chloromethane	50.0	46.5		ug/L		93	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	55.6		ug/L		111	69 - 132
Dibromochloromethane	50.0	59.6		ug/L		119	67 - 135
1,2-Dichlorobenzene	50.0	59.4		ug/L		119	67 - 130
1,3-Dichlorobenzene	50.0	61.8		ug/L		124	70 - 130
1,4-Dichlorobenzene	50.0	58.2		ug/L		116	70 - 130
Dichlorodifluoromethane	50.0	43.5		ug/L		87	41 - 146
1,1-Dichloroethane	50.0	54.2		ug/L		108	70 - 130
1,2-Dichloroethane	50.0	51.7		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	56.7		ug/L		113	63 - 134
1,2-Dichloropropane	50.0	59.4		ug/L		119	70 - 130
1,3-Dichloropropane	50.0	55.2		ug/L		110	70 - 130
2,2-Dichloropropane	50.0	47.1		ug/L		94	52 - 135
1,1-Dichloropropene	50.0	55.4		ug/L		111	70 - 130
Ethylbenzene	50.0	54.5		ug/L		109	70 - 130
Ethyl methacrylate	50.0	49.7		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	63.3		ug/L		127	53 - 140
2-Hexanone	200	262		ug/L		131	65 - 137
Isopropylbenzene	50.0	51.6		ug/L		103	70 - 130
Methylene bromide	50.0	59.7		ug/L		119	70 - 130
Methylene Chloride	50.0	56.1		ug/L		112	66 - 135
4-Methyl-2-pentanone (MIBK)	200	203		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	49.8		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	53.3		ug/L		107	70 - 130
Naphthalene	50.0	48.3		ug/L		97	47 - 149
n-Butylbenzene	50.0	57.9		ug/L		116	67 - 130
N-Propylbenzene	50.0	55.3		ug/L		111	70 - 130
o-Chlorotoluene	50.0	55.3		ug/L		111	70 - 130
o-Xylene	50.0	52.0		ug/L		104	70 - 130
p-Chlorotoluene	50.0	55.3		ug/L		111	70 - 130
p-Isopropyltoluene	50.0	59.0		ug/L		118	65 - 130
sec-Butylbenzene	50.0	57.9		ug/L		116	66 - 130
Styrene	50.0	56.4		ug/L		113	70 - 130
tert-Butylbenzene	50.0	53.6		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	60.5		ug/L		121	67 - 131
1,1,2,2-Tetrachloroethane	50.0	60.5		ug/L		121	70 - 131
Tetrachloroethene	50.0	46.8		ug/L		94	65 - 130
Toluene	50.0	52.6		ug/L		105	70 - 130
trans-1,2-Dichloroethene	50.0	58.6		ug/L		117	70 - 130
trans-1,3-Dichloropropene	50.0	50.1		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	57.3		ug/L		115	60 - 138
1,2,4-Trichlorobenzene	50.0	54.8		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	54.8		ug/L		110	68 - 130
1,1,2-Trichloroethane	50.0	57.0		ug/L		114	70 - 130
Trichloroethene	50.0	60.5		ug/L		121	70 - 130
Trichlorofluoromethane	50.0	50.3		ug/L		101	65 - 138

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

Lab Sample ID: LCS 400-678343/1002
Matrix: Water
Analysis Batch: 678343

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	53.0		ug/L		106	70 - 130
1,2,4-Trimethylbenzene	50.0	55.8		ug/L		112	70 - 130
1,3,5-Trimethylbenzene	50.0	55.5		ug/L		111	69 - 130
Vinyl acetate	100	85.5		ug/L		86	26 - 150
Vinyl chloride	50.0	41.3		ug/L		83	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

Lab Sample ID: MB 400-678496/6
Matrix: Water
Analysis Batch: 678496

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	0.24	ug/L			07/20/24 10:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*72 - 130*		*07/20/24 10:46*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*07/20/24 10:46*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/20/24 10:46*	*1*

Lab Sample ID: LCS 400-678496/1002
Matrix: Water
Analysis Batch: 678496

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	58.0		ug/L		116	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: MB 400-678687/6
Matrix: Water
Analysis Batch: 678687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/23/24 09:42	1
Acrolein	ND		20	3.3	ug/L			07/23/24 09:42	1
Acrylonitrile	ND		10	2.8	ug/L			07/23/24 09:42	1
Benzene	ND		1.0	0.24	ug/L			07/23/24 09:42	1
Bromobenzene	ND		1.0	0.54	ug/L			07/23/24 09:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/23/24 09:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/23/24 09:42	1

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

Lab Sample ID: MB 400-678687/6
Matrix: Water
Analysis Batch: 678687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.0	0.25	ug/L			07/23/24 09:42	1
Bromomethane	ND		1.0	0.98	ug/L			07/23/24 09:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/23/24 09:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/23/24 09:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/23/24 09:42	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/23/24 09:42	1
Chloroethane	ND		1.0	0.76	ug/L			07/23/24 09:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/23/24 09:42	1
Chloroform	ND		1.0	0.90	ug/L			07/23/24 09:42	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/23/24 09:42	1
Chloromethane	ND		1.0	0.40	ug/L			07/23/24 09:42	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/23/24 09:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/23/24 09:42	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/23/24 09:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/23/24 09:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/23/24 09:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/23/24 09:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/23/24 09:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/23/24 09:42	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/23/24 09:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 09:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 09:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 09:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/23/24 09:42	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/23/24 09:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/23/24 09:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/23/24 09:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/23/24 09:42	1
2-Hexanone	ND		25	4.3	ug/L			07/23/24 09:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/23/24 09:42	1
Methylene bromide	ND		5.0	0.22	ug/L			07/23/24 09:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/23/24 09:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/23/24 09:42	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/23/24 09:42	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/23/24 09:42	1
Naphthalene	ND		5.0	3.0	ug/L			07/23/24 09:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/23/24 09:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/23/24 09:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/23/24 09:42	1
o-Xylene	ND		5.0	0.60	ug/L			07/23/24 09:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/23/24 09:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/23/24 09:42	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/23/24 09:42	1
Styrene	ND		1.0	1.0	ug/L			07/23/24 09:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/23/24 09:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/23/24 09:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/23/24 09:42	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/23/24 09:42	1
Toluene	ND		1.0	0.90	ug/L			07/23/24 09:42	1

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

Lab Sample ID: MB 400-678687/6
Matrix: Water
Analysis Batch: 678687

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/23/24 09:42	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/23/24 09:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/23/24 09:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/23/24 09:42	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/23/24 09:42	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/23/24 09:42	1
Trichloroethene	ND		1.0	0.15	ug/L			07/23/24 09:42	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/23/24 09:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/23/24 09:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/23/24 09:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/23/24 09:42	1
Vinyl acetate	ND		25	0.93	ug/L			07/23/24 09:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/23/24 09:42	1
Xylenes, Total	ND		10	1.6	ug/L			07/23/24 09:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*72 - 130*		*07/23/24 09:42*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*07/23/24 09:42*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*07/23/24 09:42*	*1*

Lab Sample ID: LCS 400-678687/1002
Matrix: Water
Analysis Batch: 678687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	329	*+	ug/L		164	43 - 150
Acrolein	500	631		ug/L		126	38 - 150
Acrylonitrile	500	578		ug/L		116	64 - 142
Benzene	50.0	50.3		ug/L		101	70 - 130
Bromobenzene	50.0	57.0		ug/L		114	70 - 132
Bromochloromethane	50.0	56.9		ug/L		114	70 - 130
Bromodichloromethane	50.0	51.7		ug/L		103	67 - 133
Bromoform	50.0	57.2		ug/L		114	57 - 140
Bromomethane	50.0	45.9		ug/L		92	10 - 150
2-Butanone (MEK)	200	323	*+	ug/L		162	61 - 145
Carbon disulfide	50.0	37.7		ug/L		75	61 - 137
Carbon tetrachloride	50.0	49.5		ug/L		99	61 - 137
Chlorobenzene	50.0	57.4		ug/L		115	70 - 130
Chloroethane	50.0	50.2		ug/L		100	55 - 141
2-Chloroethyl vinyl ether	50.0	51.0		ug/L		102	10 - 150
Chloroform	50.0	51.9		ug/L		104	69 - 130
1-Chlorohexane	50.0	48.3		ug/L		97	69 - 130
Chloromethane	50.0	56.6		ug/L		113	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	49.2		ug/L		98	69 - 132
Dibromochloromethane	50.0	58.8		ug/L		118	67 - 135
1,2-Dichlorobenzene	50.0	58.7		ug/L		117	67 - 130
1,3-Dichlorobenzene	50.0	60.8		ug/L		122	70 - 130

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

Lab Sample ID: LCS 400-678687/1002
Matrix: Water
Analysis Batch: 678687

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	50.0	56.9		ug/L		114	70 - 130
Dichlorodifluoromethane	50.0	59.8		ug/L		120	41 - 146
1,1-Dichloroethane	50.0	49.7		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	47.5		ug/L		95	69 - 130
1,1-Dichloroethene	50.0	50.3		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	54.2		ug/L		108	70 - 130
1,3-Dichloropropane	50.0	55.7		ug/L		111	70 - 130
2,2-Dichloropropane	50.0	40.5		ug/L		81	52 - 135
1,1-Dichloropropene	50.0	48.4		ug/L		97	70 - 130
Ethylbenzene	50.0	53.2		ug/L		106	70 - 130
Ethyl methacrylate	50.0	51.9		ug/L		104	68 - 130
Hexachlorobutadiene	50.0	62.1		ug/L		124	53 - 140
2-Hexanone	200	306	*+	ug/L		153	65 - 137
Isopropylbenzene	50.0	49.5		ug/L		99	70 - 130
Methylene bromide	50.0	55.6		ug/L		111	70 - 130
Methylene Chloride	50.0	51.0		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	219		ug/L		109	69 - 138
Methyl tert-butyl ether	50.0	45.3		ug/L		91	66 - 130
m-Xylene & p-Xylene	50.0	51.5		ug/L		103	70 - 130
Naphthalene	50.0	52.1		ug/L		104	47 - 149
n-Butylbenzene	50.0	59.5		ug/L		119	67 - 130
N-Propylbenzene	50.0	53.8		ug/L		108	70 - 130
o-Chlorotoluene	50.0	55.6		ug/L		111	70 - 130
o-Xylene	50.0	50.1		ug/L		100	70 - 130
p-Chlorotoluene	50.0	53.8		ug/L		108	70 - 130
p-Isopropyltoluene	50.0	57.3		ug/L		115	65 - 130
sec-Butylbenzene	50.0	56.0		ug/L		112	66 - 130
Styrene	50.0	54.7		ug/L		109	70 - 130
tert-Butylbenzene	50.0	52.3		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	59.0		ug/L		118	67 - 131
1,1,2,2-Tetrachloroethane	50.0	65.6		ug/L		131	70 - 131
Tetrachloroethene	50.0	47.2		ug/L		94	65 - 130
Toluene	50.0	50.9		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	50.8		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	49.0		ug/L		98	63 - 130
1,2,3-Trichlorobenzene	50.0	56.4		ug/L		113	60 - 138
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	48.3		ug/L		97	68 - 130
1,1,2-Trichloroethane	50.0	58.4		ug/L		117	70 - 130
Trichloroethene	50.0	53.5		ug/L		107	70 - 130
Trichlorofluoromethane	50.0	54.8		ug/L		110	65 - 138
1,2,3-Trichloropropane	50.0	59.5		ug/L		119	70 - 130
1,2,4-Trimethylbenzene	50.0	54.9		ug/L		110	70 - 130
1,3,5-Trimethylbenzene	50.0	53.8		ug/L		108	69 - 130
Vinyl acetate	100	90.6		ug/L		91	26 - 150
Vinyl chloride	50.0	46.4		ug/L		93	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

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

Lab Sample ID: LCS 400-678687/1002
Matrix: Water
Analysis Batch: 678687

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	*87*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzenethiol	ND		10	9.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzoic acid	ND		30	24	ug/L		07/18/24 11:45	07/19/24 16:07	1
Benzyl alcohol	ND		10	7.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Chlorophenol	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dibenzofuran	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Diethyl phthalate	ND		10	4.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/18/24 11:45	07/19/24 16:07	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,4-Dioxane	ND		10	4.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
Hexachloroethane	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Indene	ND		10	3.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
Isophorone	ND		10	5.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Methylphenol	ND		10	3.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	5.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
3-Nitroaniline	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitroaniline	ND		10	4.1	ug/L		07/18/24 11:45	07/19/24 16:07	1
Nitrobenzene	ND		10	4.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
2-Nitrophenol	ND		10	4.6	ug/L		07/18/24 11:45	07/19/24 16:07	1
4-Nitrophenol	ND		10	3.3	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/18/24 11:45	07/19/24 16:07	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/18/24 11:45	07/19/24 16:07	1
Pentachlorophenol	ND		20	12	ug/L		07/18/24 11:45	07/19/24 16:07	1
Phenol	ND		10	4.2	ug/L		07/18/24 11:45	07/19/24 16:07	1
Pyridine	ND		10	10	ug/L		07/18/24 11:45	07/19/24 16:07	1
Quinoline	ND		10	2.4	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/18/24 11:45	07/19/24 16:07	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/18/24 11:45	07/19/24 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2-Fluorophenol	*46*		*10 - 105*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Phenol-d5	*33*		*10 - 129*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*
2,4,6-Tribromophenol	*57*		*10 - 150*	*07/18/24 11:45*	*07/19/24 16:07*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	61.0		ug/L		51	10 - 127
Benzoic acid	492	225		ug/L		46	19 - 126
Benzyl alcohol	120	77.9		ug/L		65	17 - 109
Bis(2-chloroethoxy)methane	120	74.9		ug/L		62	24 - 125
Bis(2-chloroethyl)ether	120	86.2		ug/L		72	10 - 121
bis (2-chloroisopropyl) ether	120	95.8		ug/L		80	14 - 123
Bis(2-ethylhexyl) phthalate	120	98.2		ug/L		82	16 - 150
4-Bromophenyl phenyl ether	120	89.6		ug/L		75	17 - 150
Butyl benzyl phthalate	120	102		ug/L		85	21 - 150
4-Chloroaniline	120	46.1		ug/L		38	10 - 124
4-Chloro-3-methylphenol	120	82.0		ug/L		68	37 - 131
2-Chloronaphthalene	120	79.1		ug/L		66	24 - 132
2-Chlorophenol	120	75.2		ug/L		63	27 - 124
4-Chlorophenyl phenyl ether	120	88.3		ug/L		74	27 - 147
Dibenz[a,h]acridine	120	115		ug/L		96	40 - 140
Dibenzofuran	120	84.2		ug/L		70	30 - 135
3,3'-Dichlorobenzidine	160	124		ug/L		78	10 - 150
2,4-Dichlorophenol	120	73.4		ug/L		61	33 - 132
Diethyl phthalate	120	92.0		ug/L		77	37 - 145

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

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dimethylphenol	120	80.0		ug/L		67	38 - 132
Dimethyl phthalate	120	85.0		ug/L		71	32 - 137
Di-n-butyl phthalate	120	97.2		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	200		ug/L		84	14 - 150
2,4-Dinitrophenol	240	228		ug/L		95	15 - 150
2,4-Dinitrotoluene	120	90.6		ug/L		75	35 - 136
2,6-Dinitrotoluene	120	86.3		ug/L		72	29 - 140
Di-n-octyl phthalate	120	94.5		ug/L		79	26 - 150
1,4-Dioxane	120	47.3		ug/L		39	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	92.8		ug/L		77	23 - 138
Hexachlorobenzene	120	96.6		ug/L		81	10 - 150
Hexachlorocyclopentadiene	120	76.3		ug/L		64	10 - 124
Hexachloroethane	120	67.0		ug/L		56	10 - 127
Indene	120	85.8		ug/L		71	18 - 150
Isophorone	120	78.0		ug/L		65	28 - 127
2-Methylphenol	120	79.6		ug/L		66	34 - 124
3 & 4 Methylphenol	120	76.4		ug/L		64	32 - 122
2-Nitroaniline	120	90.8		ug/L		76	24 - 139
3-Nitroaniline	120	86.5		ug/L		72	10 - 128
4-Nitroaniline	120	103		ug/L		86	28 - 118
Nitrobenzene	120	70.1		ug/L		58	29 - 120
2-Nitrophenol	120	69.1		ug/L		58	25 - 148
4-Nitrophenol	240	159		ug/L		66	12 - 129
N-Nitrosodimethylamine	120	65.8		ug/L		55	10 - 115
N-Nitrosodi-n-propylamine	120	84.2		ug/L		70	24 - 142
N-Nitrosodiphenylamine	119	87.2		ug/L		73	29 - 138
Pentachlorophenol	240	201		ug/L		84	19 - 150
Phenol	120	54.1		ug/L		45	11 - 95
Pyridine	240	75.3		ug/L		31	10 - 82
Quinoline	120	94.8		ug/L		79	10 - 141
2,4,5-Trichlorophenol	120	84.4		ug/L		70	30 - 144
2,4,6-Trichlorophenol	120	79.1		ug/L		66	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*51*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*62*		*10 - 150*

Lab Sample ID: LCS 400-678242/4-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	91.2		ug/L		76	10 - 140

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

Lab Sample ID: LCS 400-678242/4-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*58*		*10 - 150*

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	54.8		ug/L		46	10 - 127	11	40
Benzoic acid			492	229		ug/L		46	19 - 126	2	40
Benzyl alcohol			120	78.8		ug/L		66	17 - 109	1	40
Bis(2-chloroethoxy)methane			120	76.0		ug/L		63	24 - 125	2	40
Bis(2-chloroethyl)ether			120	86.9		ug/L		72	10 - 121	1	40
bis (2-chloroisopropyl) ether			120	95.2		ug/L		79	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	101		ug/L		84	16 - 150	3	40
4-Bromophenyl phenyl ether			120	93.5		ug/L		78	17 - 150	4	40
Butyl benzyl phthalate			120	106		ug/L		89	21 - 150	4	40
4-Chloroaniline			120	44.7		ug/L		37	10 - 124	3	40
4-Chloro-3-methylphenol			120	84.4		ug/L		70	37 - 131	3	40
2-Chloronaphthalene			120	82.0		ug/L		68	24 - 132	4	40
2-Chlorophenol			120	76.4		ug/L		64	27 - 124	2	40
4-Chlorophenyl phenyl ether			120	92.2		ug/L		77	27 - 147	4	40
Dibenz[a,h]acridine			120	118		ug/L		99	40 - 140	3	40
Dibenzofuran			120	88.6		ug/L		74	30 - 135	5	40
3,3'-Dichlorobenzidine			160	123		ug/L		77	10 - 150	1	40
2,4-Dichlorophenol			120	76.0		ug/L		63	33 - 132	3	40
Diethyl phthalate			120	96.9		ug/L		81	37 - 145	5	40
2,4-Dimethylphenol			120	82.7		ug/L		69	38 - 132	3	40
Dimethyl phthalate			120	88.8		ug/L		74	32 - 137	4	40
Di-n-butyl phthalate			120	101		ug/L		84	27 - 150	3	40
4,6-Dinitro-ortho-cresol			240	220		ug/L		92	14 - 150	9	40
2,4-Dinitrophenol			240	248		ug/L		103	15 - 150	8	40
2,4-Dinitrotoluene			120	96.5		ug/L		80	35 - 136	6	40
2,6-Dinitrotoluene			120	91.0		ug/L		76	29 - 140	5	40
Di-n-octyl phthalate			120	96.4		ug/L		80	26 - 150	2	40
1,4-Dioxane			120	46.1		ug/L		38	10 - 87	2	40
1,2-Diphenylhydrazine (as Azobenzene)			120	96.0		ug/L		80	23 - 138	3	40
Hexachlorobenzene			120	100		ug/L		84	10 - 150	4	40
Hexachlorocyclopentadiene			120	79.6		ug/L		66	10 - 124	4	40
Hexachloroethane			120	67.0		ug/L		56	10 - 127	0	40
Indene			120	85.9		ug/L		72	18 - 150	0	40
Isophorone			120	79.5		ug/L		66	28 - 127	2	40
2-Methylphenol			120	82.0		ug/L		68	34 - 124	3	40
3 & 4 Methylphenol			120	78.2		ug/L		65	32 - 122	2	40

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Nitroaniline			120	95.1		ug/L		79	24 - 139	5	40
3-Nitroaniline			120	90.5		ug/L		75	10 - 128	5	40
4-Nitroaniline			120	127		ug/L		106	28 - 118	21	40
Nitrobenzene			120	70.7		ug/L		59	29 - 120	1	40
2-Nitrophenol			120	71.4		ug/L		60	25 - 148	3	40
4-Nitrophenol			240	167		ug/L		70	12 - 129	5	40
N-Nitrosodimethylamine			120	65.3		ug/L		54	10 - 115	1	40
N-Nitrosodi-n-propylamine			120	84.6		ug/L		71	24 - 142	1	40
N-Nitrosodiphenylamine			119	89.7		ug/L		75	29 - 138	3	40
Pentachlorophenol			240	213		ug/L		89	19 - 150	6	40
Phenol			120	56.4		ug/L		47	11 - 95	4	40
Pyridine			240	56.0		ug/L		23	10 - 82	29	40
Quinoline			120	95.7		ug/L		80	10 - 141	1	40
2,4,5-Trichlorophenol			120	89.2		ug/L		74	30 - 144	6	40
2,4,6-Trichlorophenol			120	83.4		ug/L		69	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*66*		*10 - 150*

Lab Sample ID: LCSD 400-678242/5-A
Matrix: Water
Analysis Batch: 678442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	99.4		ug/L		83	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*48*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*90*		*13 - 150*
2,4,6-Tribromophenol	*56*		*10 - 150*

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/18/24 11:45	07/19/24 15:45	1
Acenaphthylene	ND		0.20	0.044	ug/L		07/18/24 11:45	07/19/24 15:45	1

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

Lab Sample ID: MB 400-678242/1-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.047	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]anthracene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/18/24 11:45	07/19/24 15:45	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/18/24 11:45	07/19/24 15:45	1
Chrysene	ND	*3	0.20	0.033	ug/L		07/18/24 11:45	07/19/24 15:45	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluoranthene	ND		0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Fluorene	ND		0.20	0.089	ug/L		07/18/24 11:45	07/19/24 15:45	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/18/24 11:45	07/19/24 15:45	1
Phenanthrene	ND		0.20	0.090	ug/L		07/18/24 11:45	07/19/24 15:45	1
Pyrene	ND	*3	0.20	0.039	ug/L		07/18/24 11:45	07/19/24 15:45	1
1-Methylnaphthalene	ND		0.20	0.080	ug/L		07/18/24 11:45	07/19/24 15:45	1
2-Methylnaphthalene	ND		0.20	0.066	ug/L		07/18/24 11:45	07/19/24 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*148*	*S1+ *3*	*18 - 147*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
2-Fluorobiphenyl	*72*		*15 - 128*	*07/18/24 11:45*	*07/19/24 15:45*	*1*
Nitrobenzene-d5	*73*		*10 - 144*	*07/18/24 11:45*	*07/19/24 15:45*	*1*

Lab Sample ID: LCS 400-678242/2-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	83.2		ug/L		69	10 - 140
Acenaphthylene	120	84.2		ug/L		70	10 - 140
Anthracene	120	94.9		ug/L		79	19 - 140
Benzo[a]anthracene	120	91.5		ug/L		76	25 - 140
Benzo[a]pyrene	120	85.0		ug/L		71	24 - 140
Benzo[b]fluoranthene	120	95.4		ug/L		80	34 - 140
Benzo[g,h,i]perylene	120	75.4		ug/L		63	13 - 140
Benzo[k]fluoranthene	120	104		ug/L		87	21 - 140
Chrysene	120	107		ug/L		89	28 - 140
Dibenz(a,h)anthracene	120	65.7		ug/L		55	10 - 140
Fluoranthene	120	94.4		ug/L		79	18 - 140
Fluorene	120	84.5		ug/L		70	16 - 140
Indeno[1,2,3-cd]pyrene	120	60.5		ug/L		50	10 - 140
Phenanthrene	120	93.4		ug/L		78	22 - 140
Pyrene	120	134		ug/L		112	38 - 140
1-Methylnaphthalene	120	79.6		ug/L		66	10 - 140
2-Methylnaphthalene	120	75.9		ug/L		63	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*66*		*15 - 128*
Nitrobenzene-d5	*58*		*10 - 144*

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

Lab Sample ID: LCSD 400-678242/3-A
Matrix: Water
Analysis Batch: 678446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			120	88.5		ug/L		74	10 - 140	6	40
Acenaphthylene			120	87.8		ug/L		73	10 - 140	4	40
Anthracene			120	96.0		ug/L		80	19 - 140	1	40
Benzo[a]anthracene			120	91.3		ug/L		76	25 - 140	0	40
Benzo[a]pyrene			120	83.4		ug/L		70	24 - 140	2	40
Benzo[b]fluoranthene			120	98.5		ug/L		82	34 - 140	3	40
Benzo[g,h,i]perylene			120	87.8		ug/L		73	13 - 140	15	40
Benzo[k]fluoranthene			120	102		ug/L		85	21 - 140	2	40
Chrysene			120	104		ug/L		87	28 - 140	3	40
Dibenz(a,h)anthracene			120	74.6		ug/L		62	10 - 140	13	40
Fluoranthene			120	96.8		ug/L		81	18 - 140	2	40
Fluorene			120	86.5		ug/L		72	16 - 140	2	40
Indeno[1,2,3-cd]pyrene			120	70.9		ug/L		59	10 - 140	16	40
Phenanthrene			120	96.0		ug/L		80	22 - 140	3	40
Pyrene			120	135		ug/L		113	38 - 140	1	40
1-Methylnaphthalene			120	81.8		ug/L		68	10 - 140	3	40
2-Methylnaphthalene			120	78.1		ug/L		65	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*100*		*18 - 147*
2-Fluorobiphenyl	*70*		*15 - 128*
Nitrobenzene-d5	*60*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-678082/1-A
Matrix: Water
Analysis Batch: 678196

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678082

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		07/17/24 09:34	07/18/24 10:37	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/17/24 09:34	07/18/24 10:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*136*		*51 - 149*	*07/17/24 09:34*	*07/18/24 10:37*	*1*

Lab Sample ID: LCS 400-678082/2-A
Matrix: Water
Analysis Batch: 678196

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678082

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.119		ug/L		119	60 - 140		
1,2-Dibromoethane			0.100	0.0966		ug/L		96	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*143*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-678082/3-A
Matrix: Water
Analysis Batch: 678196

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678082

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.110		ug/L		109	60 - 140	8	30
1,2-Dibromoethane			0.100	0.0845	p	ug/L		84	60 - 140	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*135*		*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: 7/15/2024
PO #	**GSAP Project ID**	PAGE: 1 of 2
60721927 – 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 60721927 – 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):	PHONE NO.:	E-MAIL:	AECOM Other ID:
Melissa Remiger - please see special instructions	314-802-1207	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; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

400-259266 COC

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-071524-8260-B	7/15/2024	0000	Water	2					2	X			
	TB-ROX-071524-8011-B	7/15/2024	0000	Water	2					2		X		
	P59-ROX-072524	7/15/2024	0940	Water	6			2		8	X	X	X	X
	T12-ROX-071524	7/15/2024	1050	Water	6			2		8	X	X	X	X
	P93C-ROX-071524	7/15/2024	1225	Water	6			2		8	X	X	X	X

19 – 24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
JOE MAYER	FEDEX: 7252 0543 6300	7/15/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		7-16-24	938
Relinquished by: (Signature)	Received by: (Signature) 4.2°C/IR8	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: 1952112, 1952113

7/24/2024

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 7/15/2024
PO #	**GSAP Project ID**	PAGE: 2 of 2
60721927 – 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 60721927 – 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): C. McDavid, 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; Vlad.Virjan@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

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-071524-8260-A	7/15/2024	0000	Water	2					2	X			
	TB-ROX-071524-8011-A	7/15/2024	0000	Water	2					2		X		
	MW25-ROX-071524	7/15/2024	0915	Water	6			2		8	X	X	X	X
	MW25-ROX-071524-DUP	7/15/2024	0915	Water	6			2		8	X	X	X	X
	MW7-ROX-071524	7/15/2024	1100	Water	6			2		8	X	X	X	X

07-15-24

Relinquished by: (Signature) COURTNEY MCDAVID	Received by: (Signature) FEDEX: See page 1	Date: 7/15/2024	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 7-16-24	Time: 938
Relinquished by: (Signature)	Received by: (Signature) 4.2°C IR8	Date:	Time:

Version: 27Sept23

CUSTODY SEALS: See page 1

7/24/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-259266-1

Login Number: 259266
List Number: 1
Creator: Pardonner, Brett

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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: 400-259266-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Roxana Groundwater Quarterly – 3rd Quarter 2024 Data Review

Laboratory SDG: 400-259480-1

Data Reviewer: Andrei Niculau

Peer Reviewer: Delaine Austin

Date Reviewed: 8/23/2024

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

Sample Identification	Sample Identification
TB-ROX-071724-8260-A	P58-ROX-071724
TB-ROX-071724-8011-A	P58-ROX-071724-DUP
TB-ROX-071724-8260-B	P93B-ROX-071724
TB-ROX-071724-8011-B	--

1.0 Data Package Completeness

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

No, the laboratory case narrative indicated that the samples TB-ROX-071724-8260-B and TB-ROX-071724-8011-B were each received with 2 VOA vials instead of 8 as listd on the Chain-of-Custody (COC). Analysis was performed using the available vials; 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 methylene chloride was detected in trip blank TB 400-259480-3 and several PAHs were detected in a method blank. Several SVOC surrogate recoveries were outside criteria in quality control samples. The internal standard area recovery for naphthalene-d_8, perylene-d_{12}, and/or chrysene-d_{12} were outside criteria in several PAH investigative and quality control samples. PAHs in sample P93B-ROX-071724 were diluted due to the nature of the sample matrix. The continuing calibration verification (CCV) for several analytes were outside were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

Three of 70 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
TB-ROX-071724-8260-B	VOCs	Methylene Chloride	3.5 µg/L
MB 400-678921/1-A	PAHs	Acenaphthylene	0.0660 µg/L
MB 400-678921/1-A	PAHs	Anthracene	0.0822 µg/L
MB 400-678921/1-A	PAHs	Fluorene	0.103 µg/L
MB 400-678921/1-A	PAHs	1-Methylnaphthalene	0.136 µg/L
MB 400-678921/1-A	PAHs	2-Methylnaphthalene	0.189 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
P58-ROX-071724	PAHs	Anthracene	0.27 µg/L	U
P58-ROX-071724-DUP	PAHs	Anthracene	-	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 400-678572/1002	VOCs	Acetone	**242**	N/A	43-150
LCS 400-678572/1002	VOCs	Acrolein	**151**	N/A	38-150

Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-678921/4-A	SVOCs	2-Fluorobiphenyl	**0.8**	21-114
LCS 400-678921/4-A	SVOCs	2-Fluorophenol	**0**	10-105
LCS 400-678921/4-A	SVOCs	Nitrobenzene-d5	**0**	16-127
LCS 400-678921/4-A	SVOCs	Phenol-d5	**0**	10-129
LCS 400-678921/4-A	SVOCs	Terphenyl-d14	**0**	13-150
LCS 400-678921/4-A	SVOCs	2,4,6-Tribromophenol	**0**	10-150

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?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
P93B-ROX-071724	PAHs	Naphthalene-d_8	**50716**	22026	11013 - 44052
LCSD 400-678921/3-A	PAHs	Perylene-d_{12}	**4210**	8900	4450 - 17800
MB 400-678921/1-A	PAHs	Perylene-d_{12}	**3550**	8900	4450 - 17800
P93B-ROX-071724 DL	PAHs	Perylene-d_{12}	**3655**	8900	4450 - 17800
P93B-ROX-071724 DL	PAHs	Chrysene-d_{12}	**4319**	9948	4974- 19896

Analytical data that were reported as non-detect and associated with internal standard recoveries above evaluation criteria, did not require qualification. Method blanks and laboratory control samples/duplicates are quality control samples and do not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P58-ROX-071724	P58-ROX-071724-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 with the exception of non-detect PAHs in sample P93B-ROX-071724 which were diluted due to the nature of the sample matrix. PAHs were non-detect at a dilution factor of 5X, with raised reporting limits of 0.95 µg/L. Due to historical detections, please see section 12.0 of the data

review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification (CCV) for aniline, 2,4-dimethylphenol and hexachlorocyclopentadiene were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P58-ROX-071724	SVOCs	Aniline	**UJ**
P58-ROX-071724-DUP	SVOCs	Aniline	**UJ**
P93B-ROX-071724	SVOCs	Aniline	**UJ**
P58-ROX-071724	SVOCs	2,4-Dimethylphenol	**UJ**
P58-ROX-071724-DUP	SVOCs	2,4-Dimethylphenol	**UJ**
P93B-ROX-071724	SVOCs	2,4-Dimethylphenol	**UJ**
P58-ROX-071724	SVOCs	Hexachlorocyclopentadiene	**UJ**
P58-ROX-071724-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93B-ROX-071724	SVOCs	Hexachlorocyclopentadiene	**UJ**

Additionally, VOCs in sample P93B-ROX-071724 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-071724 - DL	PAHs	1-Methylnaphthalene	**UJ**
P93B-ROX-071724 - DL	PAHs	2-Methylnaphthalene	**UJ**

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102
Generated 8/2/2024 7:20:00 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-259480-1

Reviewed 08/23/2024
AN

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

myEOL

Job Notes

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

Authorization



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Job Narrative
400-259480-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/19/2024 10:08 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C.

Receipt Exceptions
Sample 3 and 4 are listed to have 8 total containers recieved but we only recieved 2 voas for each sample. samples appear to be missing.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-678536 recovered above the upper control limit for Chloromethane and Vinyl chloride. 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 400-678572 recovered outside control limits for the following analytes: Acetone and Acrolein. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-678572 recovered above the upper control limit for Acetone, Acrolein, Chloromethane and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P58-ROX-071724 (400-259480-5) and P58-ROX-071724-DUP (400-259480-6). Elevated reporting limits (RLs) are provided.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071724 (400-259480-7). Elevated reporting limits (RLs) are provided.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-071724 (400-259480-7). Elevated reporting limits (RLs) are provided.

Method 8260D: The initial calibration verification (ICV) analyzed in batch 400-675148 was outside method criteria for the following analyte(s): 2-Chloroethyl vinyl ether. 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: P58-ROX-071724-DUP (400-259480-6). 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-071724-8260-A (400-259480-1), TB-ROX-071724-8260-B (400-259480-3), P58-ROX-071724 (400-259480-5) and P58-ROX-071724-DUP (400-259480-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile an acid-labile compounds that degrades in an acidic medium.

Method 8260D: Sample TB-ROX-071724-8260-B (400-259480-3) contains Methylene Chloride between the method detection limit and the reporting limit. 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: The continuing calibration verification (CCV) associated with batch 400-679032 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene, Aniline and 2,4-Dimethylphenol. 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 compounds were inadvertently omitted during the extraction process for the following sample: (LCS 400-678921/4-A). The laboratory control spike duplicate (LCSD) is within acceptance limits ; therefore, the data have been reported and qualified.

Method 8270E: The following samples were diluted to bring the concentration of target analytes within the calibration range: P58-ROX-071724 (400-259480-5) and P58-ROX-071724-DUP (400-259480-6). Elevated reporting limits (RLs) are provided.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-673785 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 following sample was diluted due to the nature of the sample matrix: P93B-ROX-071724 (400-259480-7). Elevated reporting limits (RLs) are provided.

Method 8270E_SIM: Internal standard responses recovered low by 3% which would indicate a biased high result for the associated spiked compounds. This deviation would not make significant changes to the target analyte recovery, therefore the data has been reported. (LCSD 400-678921/3-A)

Method 8270E_SIM: Internal standard responses were outside of acceptance limits for the following sample: (MB 400-678921/1-A). The ISTD fails low which would indicate a biased high result for the associated compounds. Since the sample(s) are non-detect for the associated compounds a re-run is unnecessary. (MB 400-678921/1-A)

Method 8270E_SIM: The method blank for preparation batch 400-678921 and analytical batch 400-679045 contained Anthracene, 1-Methylnaphthalene, 2-Methylnaphthalene, Acenaphthylene and Fluorene 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.

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 400-678864 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 400-679450 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.

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: 400-259480-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-259480-1	TB-ROX-071724-8260-A	Water	07/17/24 00:00	07/19/24 10:08
400-259480-2	TB-ROX-071724-8011-A	Water	07/17/24 00:00	07/19/24 10:08
400-259480-3	TB-ROX-071724-8260-B	Water	07/17/24 00:00	07/19/24 10:08
400-259480-4	TB-ROX-071724-8011-B	Water	07/17/24 00:00	07/19/24 10:08
400-259480-5	P58-ROX-071724	Water	07/17/24 08:40	07/19/24 10:08
400-259480-6	P58-ROX-071724-DUP	Water	07/17/24 08:40	07/19/24 10:08
400-259480-7	P93B-ROX-071724	Water	07/17/24 09:10	07/19/24 10:08

Detection Summary

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8260-A — Lab Sample ID: 400-259480-1

No Detections.

Client Sample ID: TB-ROX-071724-8011-A — Lab Sample ID: 400-259480-2

No Detections.

Client Sample ID: TB-ROX-071724-8260-B — Lab Sample ID: 400-259480-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.5	J	5.0	3.0	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-071724-8011-B — Lab Sample ID: 400-259480-4

No Detections.

Client Sample ID: P58-ROX-071724 — Lab Sample ID: 400-259480-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	340000		2000	480	ug/L	2000		8260D	Total/NA
Acenaphthene	0.60		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.27	B U	0.21	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.086	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Benzo[b]fluoranthene	0.038	J	0.21	0.038	ug/L	1		8270E SIM	Total/NA
Chrysene	0.12	J	0.21	0.034	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.081	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.63	B	0.21	0.091	ug/L	1		8270E SIM	Total/NA
Phenanthrene	1.2		0.21	0.093	ug/L	1		8270E SIM	Total/NA
Pyrene	0.27		0.21	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	39	B	0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	15	B	0.21	0.068	ug/L	1		8270E SIM	Total/NA
Phenol - DL	480		51	22	ug/L	5		8270E	Total/NA

Client Sample ID: P58-ROX-071724-DUP — Lab Sample ID: 400-259480-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	300000		2000	480	ug/L	2000		8260D	Total/NA
Acenaphthene	0.59		0.21	0.10	ug/L	1		8270E SIM	Total/NA
Anthracene	0.21	B U	0.21	0.048	ug/L	1		8270E SIM	Total/NA
Benzo[a]anthracene	0.059	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Chrysene	0.083	J	0.21	0.034	ug/L	1		8270E SIM	Total/NA
Fluoranthene	0.056	J	0.21	0.035	ug/L	1		8270E SIM	Total/NA
Fluorene	0.65	B	0.21	0.091	ug/L	1		8270E SIM	Total/NA
Phenanthrene	0.96		0.21	0.092	ug/L	1		8270E SIM	Total/NA
Pyrene	0.16	J	0.21	0.040	ug/L	1		8270E SIM	Total/NA
1-Methylnaphthalene	38	B	0.21	0.082	ug/L	1		8270E SIM	Total/NA
2-Methylnaphthalene	15	B	0.21	0.068	ug/L	1		8270E SIM	Total/NA
Phenol - DL	430		51	22	ug/L	5		8270E	Total/NA

Client Sample ID: P93B-ROX-071724 — Lab Sample ID: 400-259480-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m-Xylene & p-Xylene	850	J	5000	630	ug/L	1000		8260D	Total/NA
Benzene - DL	990000		10000	2400	ug/L	10000		8260D	Total/NA
Phenol	150		9.5	4.0	ug/L	1		8270E	Total/NA
1,2-Dibromo-3-Chloropropane	0.057		0.033	0.019	ug/L	1		8011	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8260-A
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-1
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			07/22/24 16:21	1
Acrolein	ND	*+	20	3.3	ug/L			07/22/24 16:21	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/24 16:21	1
Benzene	ND		1.0	0.24	ug/L			07/22/24 16:21	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/24 16:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/24 16:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
Bromoform	ND		5.0	0.25	ug/L			07/22/24 16:21	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/24 16:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/22/24 16:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/24 16:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/22/24 16:21	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/22/24 16:21	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/24 16:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/24 16:21	1
Chloroform	ND		1.0	0.90	ug/L			07/22/24 16:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/22/24 16:21	1
Chloromethane	ND		1.0	0.40	ug/L			07/22/24 16:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/22/24 16:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/24 16:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/22/24 16:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/24 16:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/24 16:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/24 16:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/24 16:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/22/24 16:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 16:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/22/24 16:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/24 16:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/24 16:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/24 16:21	1
2-Hexanone	ND		25	4.3	ug/L			07/22/24 16:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/24 16:21	1
Methylene bromide	ND		5.0	0.22	ug/L			07/22/24 16:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/24 15:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/24 16:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/22/24 16:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/22/24 16:21	1
Naphthalene	ND		5.0	3.0	ug/L			07/22/24 16:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/24 16:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/24 16:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/24 16:21	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/24 16:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/24 16:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/24 16:21	1

Client Sample ID: TB-ROX-071724-8260-A
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-1
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			07/22/24 16:21	1
Styrene	ND		1.0	1.0	ug/L			07/22/24 16:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/24 16:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/22/24 16:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/24 16:21	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/22/24 16:21	1
Toluene	ND		1.0	0.90	ug/L			07/22/24 16:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 16:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/22/24 16:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/22/24 16:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/24 16:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/22/24 16:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/22/24 16:21	1
Trichloroethene	ND		1.0	0.15	ug/L			07/22/24 16:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/22/24 16:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/24 16:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/24 16:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/24 16:21	1
Vinyl acetate	ND		25	0.93	ug/L			07/22/24 16:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/24 16:21	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/24 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 130*		*07/22/24 16:21*	*1*
4-Bromofluorobenzene	*101*		*72 - 130*		*07/31/24 15:51*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*07/22/24 16:21*	*1*
Dibromofluoromethane	*113*		*75 - 126*		*07/31/24 15:51*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/24 16:21*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*07/31/24 15:51*	*1*

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8011-A
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-2
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.037	0.021	ug/L		07/24/24 07:59	07/24/24 16:53	1
1,2-Dibromoethane	ND		0.024	0.018	ug/L		07/24/24 07:59	07/24/24 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*115*		*51 - 149*	*07/24/24 07:59*	*07/24/24 16:53*	*1*

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8260-B
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-3
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			07/22/24 16:45	1
Acrolein	ND	*+	20	3.3	ug/L			07/22/24 16:45	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/24 16:45	1
Benzene	ND		1.0	0.24	ug/L			07/22/24 16:45	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/24 16:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/24 16:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
Bromoform	ND		5.0	0.25	ug/L			07/22/24 16:45	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/24 16:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/22/24 16:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/24 16:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/22/24 16:45	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/22/24 16:45	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/24 16:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/24 16:45	1
Chloroform	ND		1.0	0.90	ug/L			07/22/24 16:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/22/24 16:45	1
Chloromethane	ND		1.0	0.40	ug/L			07/22/24 16:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/22/24 16:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/24 16:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/22/24 16:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/24 16:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/24 16:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/24 16:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/24 16:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/22/24 16:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 16:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/22/24 16:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/24 16:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/24 16:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/24 16:45	1
2-Hexanone	ND		25	4.3	ug/L			07/22/24 16:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/24 16:45	1
Methylene bromide	ND		5.0	0.22	ug/L			07/22/24 16:45	1
Methylene Chloride	**3.5**	**J**	5.0	3.0	ug/L			07/22/24 16:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/24 16:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/22/24 16:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/22/24 16:45	1
Naphthalene	ND		5.0	3.0	ug/L			07/22/24 16:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/24 16:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/24 16:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/24 16:45	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/24 16:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/24 16:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/24 16:45	1

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8260-B
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-3
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			07/22/24 16:45	1
Styrene	ND		1.0	1.0	ug/L			07/22/24 16:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/24 16:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/22/24 16:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/24 16:45	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/22/24 16:45	1
Toluene	ND		1.0	0.90	ug/L			07/22/24 16:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 16:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/22/24 16:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/22/24 16:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/24 16:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/22/24 16:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/22/24 16:45	1
Trichloroethene	ND		1.0	0.15	ug/L			07/22/24 16:45	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/22/24 16:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/24 16:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/24 16:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/24 16:45	1
Vinyl acetate	ND		25	0.93	ug/L			07/22/24 16:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/24 16:45	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/24 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/22/24 16:45*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*07/22/24 16:45*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/22/24 16:45*	*1*

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8011-B
Date Collected: 07/17/24 00:00
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-4
Matrix: Water

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		07/24/24 07:59	07/24/24 17:15	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/24/24 07:59	07/24/24 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*51 - 149*	*07/24/24 07:59*	*07/24/24 17:15*	*1*

Client Sample ID: P58-ROX-071724
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	50000	20000	ug/L			07/22/24 20:24	2000
Acrolein	ND	*+	40000	6600	ug/L			07/22/24 20:24	2000
Acrylonitrile	ND		20000	5600	ug/L			07/22/24 20:24	2000
Benzene	**340000**		2000	480	ug/L			07/22/24 20:24	2000
Bromobenzene	ND		2000	1100	ug/L			07/22/24 20:24	2000
Bromochloromethane	ND		2000	1000	ug/L			07/22/24 20:24	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/22/24 20:24	2000
Bromoform	ND		10000	500	ug/L			07/22/24 20:24	2000
Bromomethane	ND		2000	2000	ug/L			07/22/24 20:24	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			07/22/24 20:24	2000
Carbon disulfide	ND		2000	1000	ug/L			07/22/24 20:24	2000
Carbon tetrachloride	ND		2000	380	ug/L			07/22/24 20:24	2000
Chlorobenzene	ND		2000	840	ug/L			07/22/24 20:24	2000
Chloroethane	ND		2000	1500	ug/L			07/22/24 20:24	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/22/24 20:24	2000
Chloroform	ND		2000	1800	ug/L			07/22/24 20:24	2000
1-Chlorohexane	ND		2000	640	ug/L			07/22/24 20:24	2000
Chloromethane	ND		2000	800	ug/L			07/22/24 20:24	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			07/22/24 20:24	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/22/24 20:24	2000
Dibromochloromethane	ND		2000	480	ug/L			07/22/24 20:24	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/22/24 20:24	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/22/24 20:24	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/22/24 20:24	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/22/24 20:24	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/22/24 20:24	2000
1,2-Dichloroethane	ND		2000	1100	ug/L			07/22/24 20:24	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/22/24 20:24	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:24	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:24	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:24	2000
1,1-Dichloropropene	ND		2000	180	ug/L			07/22/24 20:24	2000
Ethylbenzene	ND		2000	1000	ug/L			07/22/24 20:24	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/22/24 20:24	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			07/22/24 20:24	2000
2-Hexanone	ND		50000	8500	ug/L			07/22/24 20:24	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/22/24 20:24	2000
Methylene bromide	ND		10000	440	ug/L			07/22/24 20:24	2000
Methylene Chloride	ND		10000	6000	ug/L			07/22/24 20:24	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/22/24 20:24	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			07/22/24 20:24	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			07/22/24 20:24	2000
Naphthalene	ND		10000	6000	ug/L			07/22/24 20:24	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/22/24 20:24	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/22/24 20:24	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/22/24 20:24	2000
o-Xylene	ND		10000	1200	ug/L			07/22/24 20:24	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/22/24 20:24	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/22/24 20:24	2000

Client Sample ID: P58-ROX-071724
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-5
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		2000	1400	ug/L			07/22/24 20:24	2000
Styrene	ND		2000	2000	ug/L			07/22/24 20:24	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/22/24 20:24	2000
1,1,1,2-Tetrachloroethane	ND		2000	760	ug/L			07/22/24 20:24	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/22/24 20:24	2000
Tetrachloroethene	ND		2000	660	ug/L			07/22/24 20:24	2000
Toluene	ND		2000	1800	ug/L			07/22/24 20:24	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/22/24 20:24	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			07/22/24 20:24	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			07/22/24 20:24	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/22/24 20:24	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			07/22/24 20:24	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			07/22/24 20:24	2000
Trichloroethene	ND		2000	300	ug/L			07/22/24 20:24	2000
Trichlorofluoromethane	ND		2000	500	ug/L			07/22/24 20:24	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/22/24 20:24	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/22/24 20:24	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/22/24 20:24	2000
Vinyl acetate	ND		50000	1900	ug/L			07/22/24 20:24	2000
Vinyl chloride	ND		2000	1000	ug/L			07/22/24 20:24	2000
Xylenes, Total	ND		20000	3200	ug/L			07/22/24 20:24	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*72 - 130*		*07/22/24 20:24*	*2000*
Dibromofluoromethane	*107*		*75 - 126*		*07/22/24 20:24*	*2000*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/24 20:24*	*2000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.60**		0.21	0.10	ug/L		07/24/24 14:30	07/25/24 14:16	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/24/24 14:30	07/25/24 14:16	1
Anthracene	**0.27**	**B U**	0.21	0.048	ug/L		07/24/24 14:30	07/25/24 14:16	1
Benzo[a]anthracene	**0.086**	**J**	0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:16	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/24/24 14:30	07/25/24 14:16	1
Benzo[b]fluoranthene	**0.038**	**J**	0.21	0.038	ug/L		07/24/24 14:30	07/25/24 14:16	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/24/24 14:30	07/25/24 14:16	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/24/24 14:30	07/25/24 14:16	1
Chrysene	**0.12**	**J**	0.21	0.034	ug/L		07/24/24 14:30	07/25/24 14:16	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		07/24/24 14:30	07/25/24 14:16	1
Fluoranthene	**0.081**	**J**	0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:16	1
Fluorene	**0.63**	**B**	0.21	0.091	ug/L		07/24/24 14:30	07/25/24 14:16	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:16	1
Phenanthrene	**1.2**		0.21	0.093	ug/L		07/24/24 14:30	07/25/24 14:16	1
Pyrene	**0.27**		0.21	0.040	ug/L		07/24/24 14:30	07/25/24 14:16	1
1-Methylnaphthalene	**39**	**B**	0.21	0.082	ug/L		07/24/24 14:30	07/25/24 14:16	1
2-Methylnaphthalene	**15**	**B**	0.21	0.068	ug/L		07/24/24 14:30	07/25/24 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*75*		*18 - 147*	*07/24/24 14:30*	*07/25/24 14:16*	*1*
2-Fluorobiphenyl	*28*		*15 - 128*	*07/24/24 14:30*	*07/25/24 14:16*	*1*

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

Job ID: 400-259480-1

Client Sample ID: P58-ROX-071724
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-5
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*	*07/24/24 14:30*	*07/25/24 14:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	8.9	ug/L		07/24/24 14:30	07/25/24 16:09	1
Benzenethiol	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:09	1
Benzoic acid	ND		31	25	ug/L		07/24/24 14:30	07/25/24 16:09	1
Benzyl alcohol	ND		10	7.5	ug/L		07/24/24 14:30	07/25/24 16:09	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		07/24/24 14:30	07/25/24 16:09	1
bis (2-chloroisopropyl) ether	ND		10	1.9	ug/L		07/24/24 14:30	07/25/24 16:09	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
Butyl benzyl phthalate	ND		10	6.0	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Chloroaniline	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		07/24/24 14:30	07/25/24 16:09	1
2-Chloronaphthalene	ND		10	3.9	ug/L		07/24/24 14:30	07/25/24 16:09	1
2-Chlorophenol	ND		10	4.2	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/24/24 14:30	07/25/24 16:09	1
Dibenzofuran	ND		10	4.1	ug/L		07/24/24 14:30	07/25/24 16:09	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		07/24/24 14:30	07/25/24 16:09	1
Diethyl phthalate	ND		10	4.5	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4-Dimethylphenol	ND	UJ	10	5.3	ug/L		07/24/24 14:30	07/25/24 16:09	1
Dimethyl phthalate	ND		10	4.3	ug/L		07/24/24 14:30	07/25/24 16:09	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		07/24/24 14:30	07/25/24 16:09	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		07/24/24 14:30	07/25/24 16:09	1
1,4-Dioxane	ND		10	4.4	ug/L		07/24/24 14:30	07/25/24 16:09	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/24/24 14:30	07/25/24 16:09	1
Hexachlorobenzene	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:09	1
Hexachlorocyclopentadiene	ND	UJ	21	4.6	ug/L		07/24/24 14:30	07/25/24 16:09	1
Hexachloroethane	ND		10	5.3	ug/L		07/24/24 14:30	07/25/24 16:09	1
Indene	ND		10	3.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
Isophorone	ND		10	5.3	ug/L		07/24/24 14:30	07/25/24 16:09	1
2-Methylphenol	ND		10	3.3	ug/L		07/24/24 14:30	07/25/24 16:09	1
3 & 4 Methylphenol	ND		21	4.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
2-Nitroaniline	ND		10	5.1	ug/L		07/24/24 14:30	07/25/24 16:09	1
3-Nitroaniline	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Nitroaniline	ND		10	4.2	ug/L		07/24/24 14:30	07/25/24 16:09	1
Nitrobenzene	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
2-Nitrophenol	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:09	1
4-Nitrophenol	ND		10	3.4	ug/L		07/24/24 14:30	07/25/24 16:09	1
N-Nitrosodimethylamine	ND		10	2.3	ug/L		07/24/24 14:30	07/25/24 16:09	1

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

Job ID: 400-259480-1

Client Sample ID: P58-ROX-071724
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		07/24/24 14:30	07/25/24 16:09	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/24/24 14:30	07/25/24 16:09	1
Pentachlorophenol	ND		21	12	ug/L		07/24/24 14:30	07/25/24 16:09	1
Pyridine	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:09	1
Quinoline	ND		10	2.5	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		07/24/24 14:30	07/25/24 16:09	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/24/24 14:30	07/25/24 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*07/24/24 14:30*	*07/25/24 16:09*	*1*
2-Fluorophenol	*43*		*10 - 105*	*07/24/24 14:30*	*07/25/24 16:09*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*07/24/24 14:30*	*07/25/24 16:09*	*1*
Phenol-d5	*36*		*10 - 129*	*07/24/24 14:30*	*07/25/24 16:09*	*1*
Terphenyl-d14	*89*		*13 - 150*	*07/24/24 14:30*	*07/25/24 16:09*	*1*
2,4,6-Tribromophenol	*70*		*10 - 150*	*07/24/24 14:30*	*07/25/24 16:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**480**		51	22	ug/L		07/24/24 14:30	07/26/24 15:33	5

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.018	ug/L		07/30/24 08:45	07/30/24 12:20	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/30/24 08:45	07/30/24 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*07/30/24 08:45*	*07/30/24 12:20*	*1*

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

Job ID: 400-259480-1

Client Sample ID: P58-ROX-071724-DUP
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-6
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			07/22/24 20:49	2000
Acrolein	ND	*+	40000	6600	ug/L			07/22/24 20:49	2000
Acrylonitrile	ND		20000	5600	ug/L			07/22/24 20:49	2000
Benzene	**300000**		2000	480	ug/L			07/22/24 20:49	2000
Bromobenzene	ND		2000	1100	ug/L			07/22/24 20:49	2000
Bromochloromethane	ND		2000	1000	ug/L			07/22/24 20:49	2000
Bromodichloromethane	ND		2000	1000	ug/L			07/22/24 20:49	2000
Bromoform	ND		10000	500	ug/L			07/22/24 20:49	2000
Bromomethane	ND		2000	2000	ug/L			07/22/24 20:49	2000
2-Butanone (MEK)	ND		50000	5200	ug/L			07/22/24 20:49	2000
Carbon disulfide	ND		2000	1000	ug/L			07/22/24 20:49	2000
Carbon tetrachloride	ND		2000	380	ug/L			07/22/24 20:49	2000
Chlorobenzene	ND		2000	840	ug/L			07/22/24 20:49	2000
Chloroethane	ND		2000	1500	ug/L			07/22/24 20:49	2000
2-Chloroethyl vinyl ether	ND		10000	4000	ug/L			07/22/24 20:49	2000
Chloroform	ND		2000	1800	ug/L			07/22/24 20:49	2000
1-Chlorohexane	ND		2000	640	ug/L			07/22/24 20:49	2000
Chloromethane	ND		2000	800	ug/L			07/22/24 20:49	2000
cis-1,2-Dichloroethene	ND		2000	400	ug/L			07/22/24 20:49	2000
cis-1,3-Dichloropropene	ND		10000	1000	ug/L			07/22/24 20:49	2000
Dibromochloromethane	ND		2000	480	ug/L			07/22/24 20:49	2000
1,2-Dichlorobenzene	ND		2000	1000	ug/L			07/22/24 20:49	2000
1,3-Dichlorobenzene	ND		2000	1100	ug/L			07/22/24 20:49	2000
1,4-Dichlorobenzene	ND		2000	1300	ug/L			07/22/24 20:49	2000
Dichlorodifluoromethane	ND		2000	1700	ug/L			07/22/24 20:49	2000
1,1-Dichloroethane	ND		2000	1000	ug/L			07/22/24 20:49	2000
1,2-Dichloroethane	ND		2000	1100	ug/L			07/22/24 20:49	2000
1,1-Dichloroethene	ND		2000	1000	ug/L			07/22/24 20:49	2000
1,2-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:49	2000
1,3-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:49	2000
2,2-Dichloropropane	ND		2000	1000	ug/L			07/22/24 20:49	2000
1,1-Dichloropropene	ND		2000	180	ug/L			07/22/24 20:49	2000
Ethylbenzene	ND		2000	1000	ug/L			07/22/24 20:49	2000
Ethyl methacrylate	ND		2000	1200	ug/L			07/22/24 20:49	2000
Hexachlorobutadiene	ND		10000	1800	ug/L			07/22/24 20:49	2000
2-Hexanone	ND		50000	8500	ug/L			07/22/24 20:49	2000
Isopropylbenzene	ND		2000	1100	ug/L			07/22/24 20:49	2000
Methylene bromide	ND		10000	440	ug/L			07/22/24 20:49	2000
Methylene Chloride	ND		10000	6000	ug/L			07/31/24 17:28	2000
4-Methyl-2-pentanone (MIBK)	ND		50000	3600	ug/L			07/22/24 20:49	2000
Methyl tert-butyl ether	ND		2000	440	ug/L			07/22/24 20:49	2000
m-Xylene & p-Xylene	ND		10000	1300	ug/L			07/22/24 20:49	2000
Naphthalene	ND		10000	6000	ug/L			07/22/24 20:49	2000
n-Butylbenzene	ND		2000	1500	ug/L			07/22/24 20:49	2000
N-Propylbenzene	ND		2000	1400	ug/L			07/22/24 20:49	2000
o-Chlorotoluene	ND		2000	1100	ug/L			07/22/24 20:49	2000
o-Xylene	ND		10000	1200	ug/L			07/22/24 20:49	2000
p-Chlorotoluene	ND		2000	1100	ug/L			07/22/24 20:49	2000
p-Isopropyltoluene	ND		2000	1400	ug/L			07/22/24 20:49	2000

Client Sample ID: P58-ROX-071724-DUP
Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		2000	1400	ug/L			07/22/24 20:49	2000
Styrene	ND		2000	2000	ug/L			07/22/24 20:49	2000
tert-Butylbenzene	ND		2000	1300	ug/L			07/22/24 20:49	2000
1,1,1,2-Tetrachloroethane	ND		2000	760	ug/L			07/22/24 20:49	2000
1,1,2,2-Tetrachloroethane	ND		2000	1000	ug/L			07/22/24 20:49	2000
Tetrachloroethene	ND		2000	660	ug/L			07/22/24 20:49	2000
Toluene	ND		2000	1800	ug/L			07/22/24 20:49	2000
trans-1,2-Dichloroethene	ND		2000	1000	ug/L			07/22/24 20:49	2000
trans-1,3-Dichloropropene	ND		10000	400	ug/L			07/22/24 20:49	2000
1,2,3-Trichlorobenzene	ND		2000	1800	ug/L			07/22/24 20:49	2000
1,2,4-Trichlorobenzene	ND		2000	1600	ug/L			07/22/24 20:49	2000
1,1,1-Trichloroethane	ND		2000	360	ug/L			07/22/24 20:49	2000
1,1,2-Trichloroethane	ND		10000	420	ug/L			07/22/24 20:49	2000
Trichloroethene	ND		2000	300	ug/L			07/22/24 20:49	2000
Trichlorofluoromethane	ND		2000	500	ug/L			07/22/24 20:49	2000
1,2,3-Trichloropropane	ND		10000	1700	ug/L			07/22/24 20:49	2000
1,2,4-Trimethylbenzene	ND		2000	1600	ug/L			07/22/24 20:49	2000
1,3,5-Trimethylbenzene	ND		2000	1100	ug/L			07/22/24 20:49	2000
Vinyl acetate	ND		50000	1900	ug/L			07/22/24 20:49	2000
Vinyl chloride	ND		2000	1000	ug/L			07/22/24 20:49	2000
Xylenes, Total	ND		20000	3200	ug/L			07/22/24 20:49	2000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*07/22/24 20:49*	*2000*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/31/24 17:28*	*2000*
Dibromofluoromethane	*107*		*75 - 126*		*07/22/24 20:49*	*2000*
Dibromofluoromethane	*108*		*75 - 126*		*07/31/24 17:28*	*2000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*07/22/24 20:49*	*2000*
Toluene-d8 (Surr)	*90*		*64 - 132*		*07/31/24 17:28*	*2000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.59**		0.21	0.10	ug/L		07/24/24 14:30	07/25/24 14:36	1
Acenaphthylene	ND		0.21	0.045	ug/L		07/24/24 14:30	07/25/24 14:36	1
Anthracene	**0.21**	**B U**	0.21	0.048	ug/L		07/24/24 14:30	07/25/24 14:36	1
Benzo[a]anthracene	**0.059**	**J**	0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:36	1
Benzo[a]pyrene	ND		0.21	0.066	ug/L		07/24/24 14:30	07/25/24 14:36	1
Benzo[b]fluoranthene	ND		0.21	0.038	ug/L		07/24/24 14:30	07/25/24 14:36	1
Benzo[g,h,i]perylene	ND		0.21	0.028	ug/L		07/24/24 14:30	07/25/24 14:36	1
Benzo[k]fluoranthene	ND		0.21	0.064	ug/L		07/24/24 14:30	07/25/24 14:36	1
Chrysene	**0.083**	**J**	0.21	0.034	ug/L		07/24/24 14:30	07/25/24 14:36	1
Dibenz(a,h)anthracene	ND		0.21	0.049	ug/L		07/24/24 14:30	07/25/24 14:36	1
Fluoranthene	**0.056**	**J**	0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:36	1
Fluorene	**0.65**	**B**	0.21	0.091	ug/L		07/24/24 14:30	07/25/24 14:36	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.035	ug/L		07/24/24 14:30	07/25/24 14:36	1
Phenanthrene	**0.96**		0.21	0.092	ug/L		07/24/24 14:30	07/25/24 14:36	1
Pyrene	**0.16**	**J**	0.21	0.040	ug/L		07/24/24 14:30	07/25/24 14:36	1
1-Methylnaphthalene	**38**	**B**	0.21	0.082	ug/L		07/24/24 14:30	07/25/24 14:36	1
2-Methylnaphthalene	**15**	**B**	0.21	0.068	ug/L		07/24/24 14:30	07/25/24 14:36	1

Client Sample ID: P58-ROX-071724-DUP

Date Collected: 07/17/24 08:40
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-6

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*18 - 147*	*07/24/24 14:30*	*07/25/24 14:36*	*1*
2-Fluorobiphenyl	*31*		*15 - 128*	*07/24/24 14:30*	*07/25/24 14:36*	*1*
Nitrobenzene-d5	*62*		*10 - 144*	*07/24/24 14:30*	*07/25/24 14:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	8.9	ug/L		07/24/24 14:30	07/25/24 16:34	1
Benzenethiol	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:34	1
Benzoic acid	ND		31	25	ug/L		07/24/24 14:30	07/25/24 16:34	1
Benzyl alcohol	ND		10	7.5	ug/L		07/24/24 14:30	07/25/24 16:34	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		07/24/24 14:30	07/25/24 16:34	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Chloroaniline	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		07/24/24 14:30	07/25/24 16:34	1
2-Chloronaphthalene	ND		10	3.9	ug/L		07/24/24 14:30	07/25/24 16:34	1
2-Chlorophenol	ND		10	4.2	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		07/24/24 14:30	07/25/24 16:34	1
Dibenzofuran	ND		10	4.1	ug/L		07/24/24 14:30	07/25/24 16:34	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		07/24/24 14:30	07/25/24 16:34	1
Diethyl phthalate	ND		10	4.5	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4-Dimethylphenol	ND	UJ	10	5.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
Dimethyl phthalate	ND		10	4.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		07/24/24 14:30	07/25/24 16:34	1
Di-n-octyl phthalate	ND		10	6.2	ug/L		07/24/24 14:30	07/25/24 16:34	1
1,4-Dioxane	ND		10	4.4	ug/L		07/24/24 14:30	07/25/24 16:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		07/24/24 14:30	07/25/24 16:34	1
Hexachlorobenzene	ND		10	9.9	ug/L		07/24/24 14:30	07/25/24 16:34	1
Hexachlorocyclopentadiene	ND	UJ	21	4.6	ug/L		07/24/24 14:30	07/25/24 16:34	1
Hexachloroethane	ND		10	5.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
Indene	ND		10	3.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
Isophorone	ND		10	5.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
2-Methylphenol	ND		10	3.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
3 & 4 Methylphenol	ND		21	4.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
2-Nitroaniline	ND		10	5.1	ug/L		07/24/24 14:30	07/25/24 16:34	1
3-Nitroaniline	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Nitroaniline	ND		10	4.2	ug/L		07/24/24 14:30	07/25/24 16:34	1
Nitrobenzene	ND		10	4.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
2-Nitrophenol	ND		10	4.7	ug/L		07/24/24 14:30	07/25/24 16:34	1
4-Nitrophenol	ND		10	3.4	ug/L		07/24/24 14:30	07/25/24 16:34	1

Client Sample ID: P58-ROX-071724-DUP

Lab Sample ID: 400-259480-6

Date Collected: 07/17/24 08:40

Matrix: Water

Date Received: 07/19/24 10:08

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		10	2.3	ug/L		07/24/24 14:30	07/25/24 16:34	1
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		07/24/24 14:30	07/25/24 16:34	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		07/24/24 14:30	07/25/24 16:34	1
Pentachlorophenol	ND		21	12	ug/L		07/24/24 14:30	07/25/24 16:34	1
Pyridine	ND		10	10	ug/L		07/24/24 14:30	07/25/24 16:34	1
Quinoline	ND		10	2.5	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		07/24/24 14:30	07/25/24 16:34	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		07/24/24 14:30	07/25/24 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*21 - 114*	*07/24/24 14:30*	*07/25/24 16:34*	*1*
2-Fluorophenol	*41*		*10 - 105*	*07/24/24 14:30*	*07/25/24 16:34*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/24/24 14:30*	*07/25/24 16:34*	*1*
Phenol-d5	*34*		*10 - 129*	*07/24/24 14:30*	*07/25/24 16:34*	*1*
Terphenyl-d14	*82*		*13 - 150*	*07/24/24 14:30*	*07/25/24 16:34*	*1*
2,4,6-Tribromophenol	*67*		*10 - 150*	*07/24/24 14:30*	*07/25/24 16:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	**430**		51	22	ug/L		07/24/24 14:30	07/26/24 15:57	5

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		07/24/24 07:59	07/24/24 17:58	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		07/24/24 07:59	07/24/24 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*07/24/24 07:59*	*07/24/24 17:58*	*1*

Client Sample ID: P93B-ROX-071724
Date Collected: 07/17/24 09:10
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			07/21/24 20:48	1000
Acrolein	ND		20000	3300	ug/L			07/21/24 20:48	1000
Acrylonitrile	ND		10000	2800	ug/L			07/21/24 20:48	1000
Bromobenzene	ND		1000	540	ug/L			07/21/24 20:48	1000
Bromochloromethane	ND		1000	520	ug/L			07/21/24 20:48	1000
Bromodichloromethane	ND		1000	500	ug/L			07/21/24 20:48	1000
Bromoform	ND		5000	250	ug/L			07/21/24 20:48	1000
Bromomethane	ND		1000	980	ug/L			07/21/24 20:48	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			07/21/24 20:48	1000
Carbon disulfide	ND		1000	500	ug/L			07/21/24 20:48	1000
Carbon tetrachloride	ND		1000	190	ug/L			07/21/24 20:48	1000
Chlorobenzene	ND		1000	420	ug/L			07/21/24 20:48	1000
Chloroethane	ND		1000	760	ug/L			07/21/24 20:48	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			07/21/24 20:48	1000
Chloroform	ND		1000	900	ug/L			07/21/24 20:48	1000
1-Chlorohexane	ND		1000	320	ug/L			07/21/24 20:48	1000
Chloromethane	ND		1000	400	ug/L			07/21/24 20:48	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			07/21/24 20:48	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			07/21/24 20:48	1000
Dibromochloromethane	ND		1000	240	ug/L			07/21/24 20:48	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			07/21/24 20:48	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			07/21/24 20:48	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			07/21/24 20:48	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			07/21/24 20:48	1000
1,1-Dichloroethane	ND		1000	500	ug/L			07/21/24 20:48	1000
1,2-Dichloroethane	ND		1000	550	ug/L			07/21/24 20:48	1000
1,1-Dichloroethene	ND		1000	500	ug/L			07/21/24 20:48	1000
1,2-Dichloropropane	ND		1000	500	ug/L			07/21/24 20:48	1000
1,3-Dichloropropane	ND		1000	500	ug/L			07/21/24 20:48	1000
2,2-Dichloropropane	ND		1000	500	ug/L			07/21/24 20:48	1000
1,1-Dichloropropene	ND		1000	90	ug/L			07/21/24 20:48	1000
Ethylbenzene	ND		1000	500	ug/L			07/21/24 20:48	1000
Ethyl methacrylate	ND		1000	600	ug/L			07/21/24 20:48	1000
Hexachlorobutadiene	ND		5000	900	ug/L			07/21/24 20:48	1000
2-Hexanone	ND		25000	4300	ug/L			07/21/24 20:48	1000
Isopropylbenzene	ND		1000	530	ug/L			07/21/24 20:48	1000
Methylene bromide	ND		5000	220	ug/L			07/21/24 20:48	1000
Methylene Chloride	ND		5000	3000	ug/L			07/21/24 20:48	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			07/21/24 20:48	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			07/21/24 20:48	1000
m-Xylene & p-Xylene	**850**	**J**	5000	630	ug/L			07/21/24 20:48	1000
Naphthalene	ND		5000	3000	ug/L			07/21/24 20:48	1000
n-Butylbenzene	ND		1000	760	ug/L			07/21/24 20:48	1000
N-Propylbenzene	ND		1000	690	ug/L			07/21/24 20:48	1000
o-Chlorotoluene	ND		1000	570	ug/L			07/21/24 20:48	1000
o-Xylene	ND		5000	600	ug/L			07/21/24 20:48	1000
p-Chlorotoluene	ND		1000	560	ug/L			07/21/24 20:48	1000
p-Isopropyltoluene	ND		1000	710	ug/L			07/21/24 20:48	1000
sec-Butylbenzene	ND		1000	700	ug/L			07/21/24 20:48	1000

Client Sample ID: P93B-ROX-071724
Date Collected: 07/17/24 09:10
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1000	1000	ug/L			07/21/24 20:48	1000
tert-Butylbenzene	ND		1000	630	ug/L			07/21/24 20:48	1000
1,1,1,2-Tetrachloroethane	ND		1000	380	ug/L			07/21/24 20:48	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			07/21/24 20:48	1000
Tetrachloroethene	ND		1000	330	ug/L			07/21/24 20:48	1000
Toluene	ND		1000	900	ug/L			07/21/24 20:48	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			07/21/24 20:48	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			07/21/24 20:48	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			07/21/24 20:48	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			07/21/24 20:48	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			07/21/24 20:48	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			07/21/24 20:48	1000
Trichloroethene	ND		1000	150	ug/L			07/21/24 20:48	1000
Trichlorofluoromethane	ND		1000	250	ug/L			07/21/24 20:48	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			07/21/24 20:48	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			07/21/24 20:48	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			07/21/24 20:48	1000
Vinyl acetate	ND		25000	930	ug/L			07/21/24 20:48	1000
Vinyl chloride	ND		1000	500	ug/L			07/21/24 20:48	1000
Xylenes, Total	ND		10000	1600	ug/L			07/21/24 20:48	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/21/24 20:48*	*1000*
Dibromofluoromethane	*98*		*75 - 126*		*07/21/24 20:48*	*1000*
Toluene-d8 (Surr)	*97*		*64 - 132*		*07/21/24 20:48*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**990000**		10000	2400	ug/L			07/25/24 20:53	10000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/24 20:53*	*10000*
Dibromofluoromethane	*100*		*75 - 126*		*07/25/24 20:53*	*10000*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/24 20:53*	*10000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.095	ug/L		07/24/24 14:30	07/25/24 14:57	1
Acenaphthylene	ND		0.19	0.042	ug/L		07/24/24 14:30	07/25/24 14:57	1
Anthracene	ND		0.19	0.045	ug/L		07/24/24 14:30	07/25/24 14:57	1
Benzo[a]anthracene	ND		0.19	0.032	ug/L		07/24/24 14:30	07/25/24 14:57	1
Benzo[a]pyrene	ND		0.19	0.061	ug/L		07/24/24 14:30	07/25/24 14:57	1
Benzo[b]fluoranthene	ND		0.19	0.035	ug/L		07/24/24 14:30	07/25/24 14:57	1
Benzo[g,h,i]perylene	ND		0.19	0.026	ug/L		07/24/24 14:30	07/25/24 14:57	1
Benzo[k]fluoranthene	ND		0.19	0.059	ug/L		07/24/24 14:30	07/25/24 14:57	1
Chrysene	ND		0.19	0.032	ug/L		07/24/24 14:30	07/25/24 14:57	1
Dibenz(a,h)anthracene	ND		0.19	0.046	ug/L		07/24/24 14:30	07/25/24 14:57	1
Fluoranthene	ND		0.19	0.032	ug/L		07/24/24 14:30	07/25/24 14:57	1
Fluorene	ND		0.19	0.085	ug/L		07/24/24 14:30	07/25/24 14:57	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.032	ug/L		07/24/24 14:30	07/25/24 14:57	1

Client Sample ID: P93B-ROX-071724
Date Collected: 07/17/24 09:10
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		0.19	0.086	ug/L		07/24/24 14:30	07/25/24 14:57	1
Pyrene	ND		0.19	0.037	ug/L		07/24/24 14:30	07/25/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*18 - 147*	*07/24/24 14:30*	*07/25/24 14:57*	*1*
2-Fluorobiphenyl	*55*		*15 - 128*	*07/24/24 14:30*	*07/25/24 14:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND	UJ	0.95	0.38	ug/L		07/24/24 14:30	07/25/24 17:02	5
2-Methylnaphthalene	ND	UJ	0.95	0.32	ug/L		07/24/24 14:30	07/25/24 17:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*48*		*10 - 144*	*07/24/24 14:30*	*07/25/24 17:02*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	8.3	ug/L		07/24/24 14:30	07/25/24 16:59	1
Benzenethiol	ND		9.5	9.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
Benzoic acid	ND		29	23	ug/L		07/24/24 14:30	07/25/24 16:59	1
Benzyl alcohol	ND		9.5	7.0	ug/L		07/24/24 14:30	07/25/24 16:59	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		07/24/24 14:30	07/25/24 16:59	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		07/24/24 14:30	07/25/24 16:59	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		07/24/24 14:30	07/25/24 16:59	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Chloroaniline	ND		9.5	4.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		07/24/24 14:30	07/25/24 16:59	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		07/24/24 14:30	07/25/24 16:59	1
2-Chlorophenol	ND		9.5	3.9	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		07/24/24 14:30	07/25/24 16:59	1
Dibenzofuran	ND		9.5	3.8	ug/L		07/24/24 14:30	07/25/24 16:59	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		07/24/24 14:30	07/25/24 16:59	1
Diethyl phthalate	ND		9.5	4.2	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4-Dimethylphenol	ND	UJ	9.5	5.0	ug/L		07/24/24 14:30	07/25/24 16:59	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		07/24/24 14:30	07/25/24 16:59	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		07/24/24 14:30	07/25/24 16:59	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		07/24/24 14:30	07/25/24 16:59	1
1,4-Dioxane	ND		9.5	4.1	ug/L		07/24/24 14:30	07/25/24 16:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.2	ug/L		07/24/24 14:30	07/25/24 16:59	1
Hexachlorobenzene	ND		9.5	9.3	ug/L		07/24/24 14:30	07/25/24 16:59	1
Hexachlorocyclopentadiene	ND	UJ	19	4.3	ug/L		07/24/24 14:30	07/25/24 16:59	1
Hexachloroethane	ND		9.5	5.0	ug/L		07/24/24 14:30	07/25/24 16:59	1

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

Job ID: 400-259480-1

Client Sample ID: P93B-ROX-071724
Date Collected: 07/17/24 09:10
Date Received: 07/19/24 10:08

Lab Sample ID: 400-259480-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indene	ND		9.5	3.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
Isophorone	ND		9.5	5.0	ug/L		07/24/24 14:30	07/25/24 16:59	1
2-Methylphenol	ND		9.5	3.1	ug/L		07/24/24 14:30	07/25/24 16:59	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
2-Nitroaniline	ND		9.5	4.8	ug/L		07/24/24 14:30	07/25/24 16:59	1
3-Nitroaniline	ND		9.5	4.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Nitroaniline	ND		9.5	3.9	ug/L		07/24/24 14:30	07/25/24 16:59	1
Nitrobenzene	ND		9.5	4.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
2-Nitrophenol	ND		9.5	4.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
4-Nitrophenol	ND		9.5	3.2	ug/L		07/24/24 14:30	07/25/24 16:59	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		07/24/24 14:30	07/25/24 16:59	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		07/24/24 14:30	07/25/24 16:59	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
Pentachlorophenol	ND		19	11	ug/L		07/24/24 14:30	07/25/24 16:59	1
Phenol	**150**		9.5	4.0	ug/L		07/24/24 14:30	07/25/24 16:59	1
Pyridine	ND		9.5	9.5	ug/L		07/24/24 14:30	07/25/24 16:59	1
Quinoline	ND		9.5	2.3	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		07/24/24 14:30	07/25/24 16:59	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		07/24/24 14:30	07/25/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*07/24/24 14:30*	*07/25/24 16:59*	*1*
2-Fluorophenol	*44*		*10 - 105*	*07/24/24 14:30*	*07/25/24 16:59*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*07/24/24 14:30*	*07/25/24 16:59*	*1*
Phenol-d5	*33*		*10 - 129*	*07/24/24 14:30*	*07/25/24 16:59*	*1*
Terphenyl-d14	*95*		*13 - 150*	*07/24/24 14:30*	*07/25/24 16:59*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*07/24/24 14:30*	*07/25/24 16:59*	*1*

Method: EPA 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	**0.057**		0.033	0.019	ug/L		07/24/24 07:59	07/25/24 17:16	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		07/24/24 07:59	07/25/24 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*07/24/24 07:59*	*07/25/24 17:16*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable 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.
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

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

Job ID: 400-259480-1

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)
400-259480-1	TB-ROX-071724-8260-A	103	106	99
400-259480-1	TB-ROX-071724-8260-A	101	113	92
400-259480-3	TB-ROX-071724-8260-B	106	103	100
400-259480-5	P58-ROX-071724	99	107	99
400-259480-6	P58-ROX-071724-DUP	100	107	100
400-259480-6	P58-ROX-071724-DUP	98	108	90
400-259480-7	P93B-ROX-071724	106	98	97
400-259480-7 - DL	P93B-ROX-071724	97	100	99
LCS 400-678536/1002	Lab Control Sample	104	99	98
LCS 400-678572/1002	Lab Control Sample	95	106	100
LCS 400-678994/1002	Lab Control Sample	97	96	101
LCS 400-679561/1002	Lab Control Sample	95	107	94
MB 400-678536/6	Method Blank	106	101	98
MB 400-678572/5	Method Blank	98	105	99
MB 400-678994/4	Method Blank	97	102	99
MB 400-679561/5	Method Blank	100	108	93

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-259480-5	P58-ROX-071724	62	43	55	36	89	70
400-259480-6	P58-ROX-071724-DUP	59	41	61	34	82	67
400-259480-7	P93B-ROX-071724	61	44	55	33	95	74
LCS 400-678921/4-A	Lab Control Sample	0 S1-	0 S1-	0 S1-	0 S1-	0 S1-	0 S1-
LCSD 400-678921/5-A	Lab Control Sample Dup	64	50	61	38	93	59
MB 400-678921/1-A	Method Blank	63	49	61	40	88	58

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(18-147)	(15-128)	(10-144)
400-259480-5	P58-ROX-071724	75	28	64
400-259480-6	P58-ROX-071724-DUP	67	31	62

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)
400-259480-7	P93B-ROX-071724	83	55	
400-259480-7 - DL	P93B-ROX-071724			48
LCS 400-678921/2-A	Lab Control Sample	82	64	53
LCSD 400-678921/3-A	Lab Control Sample Dup	98	59	48
MB 400-678921/1-A	Method Blank	116	61	65

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)
400-259480-2	TB-ROX-071724-8011-A	115
400-259480-4	TB-ROX-071724-8011-B	112
400-259480-6	P58-ROX-071724-DUP	101
400-259480-7	P93B-ROX-071724	110
LCS 400-678832/2-A	Lab Control Sample	140
LCSD 400-678832/3-A	Lab Control Sample Dup	133
MB 400-678832/1-A	Method Blank	143

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)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-259480-5	P58-ROX-071724	87
LCS 400-679437/2-A	Lab Control Sample	129
LCSD 400-679437/3-A	Lab Control Sample Dup	135
MB 400-679437/1-A	Method Blank	110

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-259480-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
5030C	Purge and Trap	SW846	EET PEN
8011	Microextraction	SW846	EET PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-259480-1

Client Sample ID: TB-ROX-071724-8260-A
Lab Sample ID: 400-259480-1
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:08

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	678572	07/22/24 16:21	BPO	EET PEN
Total/NA	Analysis	8260D		1	5 mL	5 mL	679561	07/31/24 15:51	BPO	EET PEN

Client Sample ID: TB-ROX-071724-8011-A
Lab Sample ID: 400-259480-2
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			28.7 mL	35 mL	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 16:53	S1K	EET PEN

Client Sample ID: TB-ROX-071724-8260-B
Lab Sample ID: 400-259480-3
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:08

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	678572	07/22/24 16:45	BPO	EET PEN

Client Sample ID: TB-ROX-071724-8011-B
Lab Sample ID: 400-259480-4
Date Collected: 07/17/24 00:00
Matrix: Water
Date Received: 07/19/24 10:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.5 mL	35 mL	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 17:15	S1K	EET PEN

Client Sample ID: P58-ROX-071724
Lab Sample ID: 400-259480-5
Date Collected: 07/17/24 08:40
Matrix: Water
Date Received: 07/19/24 10:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	678572	07/22/24 20:24	BPO	EET PEN
Total/NA	Prep	3510C	DL		243.2 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E	DL	5	0.4 mL	0.4 mL	679160	07/26/24 15:33	S1B	EET PEN
Total/NA	Prep	3510C			243.2 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 16:09	VC1	EET PEN
Total/NA	Prep	3510C			243.2 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	679045	07/25/24 14:16	JAW	EET PEN
Total/NA	Prep	8011			32.2 mL	35 mL	679437	07/30/24 08:45	KR	EET PEN
Total/NA	Analysis	8011		1			679450	07/30/24 12:20	KR	EET PEN

Client Sample ID: P58-ROX-071724-DUP

Lab Sample ID: 400-259480-6

Date Collected: 07/17/24 08:40

Matrix: Water

Date Received: 07/19/24 10:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		2000	5 mL	5 mL	678572	07/22/24 20:49	BPO	EET PEN
Total/NA	Analysis	8260D		2000	5 mL	5 mL	679561	07/31/24 17:28	BPO	EET PEN
Total/NA	Prep	3510C	DL		243.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E	DL	5	0.4 mL	0.4 mL	679160	07/26/24 15:57	S1B	EET PEN
Total/NA	Prep	3510C			243.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 16:34	VC1	EET PEN
Total/NA	Prep	3510C			243.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	679045	07/25/24 14:36	JAW	EET PEN
Total/NA	Prep	8011			31.8 mL	35 mL	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 17:58	S1K	EET PEN

Client Sample ID: P93B-ROX-071724

Lab Sample ID: 400-259480-7

Date Collected: 07/17/24 09:10

Matrix: Water

Date Received: 07/19/24 10:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1000	5 mL	5 mL	678536	07/21/24 20:48	BPO	EET PEN
Total/NA	Analysis	8260D	DL	10000	5 mL	5 mL	678994	07/25/24 20:53	CAR	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 16:59	VC1	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	679045	07/25/24 14:57	JAW	EET PEN
Total/NA	Prep	3510C	DL		261.8 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E SIM	DL	5	0.4 mL	0.4 mL	679045	07/25/24 17:02	JAW	EET PEN
Total/NA	Prep	8011			31.9 mL	35 mL	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			679039	07/25/24 17:16	KR	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678536/6

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	678536	07/21/24 12:04	BPO	EET PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-678572/5

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	678572	07/22/24 13:31	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678832/1-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	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 11:32	S1K	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678921/1-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:28	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 13:15	VC1	EET PEN
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:28	STC	EET PEN
Total/NA	Analysis	8270E SIM		1	0.4 mL	0.4 mL	679045	07/25/24 16:00	JAW	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-678994/4
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	678994	07/25/24 12:32	CAR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-679437/1-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	679437	07/30/24 08:45	KR	EET PEN
Total/NA	Analysis	8011		1			679450	07/30/24 11:16	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-679561/5
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	679561	07/31/24 10:59	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-678536/1002
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	678536	07/21/24 11:02	BPO	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-678572/1002**
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	678572	07/22/24 10:11	BPO	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-678832/2-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	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 11:53	S1K	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-678921/2-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:28	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	679045	07/25/24 16:21	JAW	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-678921/4-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 15:20	VC1	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-678994/1002**
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	678994	07/25/24 10:55	CAR	EET PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-679437/2-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	679437	07/30/24 08:45	KR	EET PEN
Total/NA	Analysis	8011		1			679450	07/30/24 11:38	KR	EET PEN

Lab Chronicle

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

Job ID: 400-259480-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-679561/1002
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	679561	07/31/24 09:52	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678832/3-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	678832	07/24/24 07:59	KR	EET PEN
Total/NA	Analysis	8011		1			678864	07/24/24 12:14	S1K	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678921/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:28	STC	EET PEN
Total/NA	Analysis	8270E SIM		100	0.4 mL	0.4 mL	679045	07/25/24 13:55	JAW	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-678921/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	678921	07/24/24 14:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	679032	07/25/24 15:45	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-679437/3-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	679437	07/30/24 08:45	KR	EET PEN
Total/NA	Analysis	8011		1			679450	07/30/24 11:59	KR	EET PEN

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

GC/MS VOA

Analysis Batch: 678536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-7	P93B-ROX-071724	Total/NA	Water	8260D	
MB 400-678536/6	Method Blank	Total/NA	Water	8260D	
LCS 400-678536/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-1	TB-ROX-071724-8260-A	Total/NA	Water	8260D	
400-259480-3	TB-ROX-071724-8260-B	Total/NA	Water	8260D	
400-259480-5	P58-ROX-071724	Total/NA	Water	8260D	
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8260D	
MB 400-678572/5	Method Blank	Total/NA	Water	8260D	
LCS 400-678572/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 678994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-7 - DL	P93B-ROX-071724	Total/NA	Water	8260D	
MB 400-678994/4	Method Blank	Total/NA	Water	8260D	
LCS 400-678994/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 679561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-1	TB-ROX-071724-8260-A	Total/NA	Water	8260D	
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8260D	
MB 400-679561/5	Method Blank	Total/NA	Water	8260D	
LCS 400-679561/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 678921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5	P58-ROX-071724	Total/NA	Water	3510C	
400-259480-5 - DL	P58-ROX-071724	Total/NA	Water	3510C	
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	3510C	
400-259480-6 - DL	P58-ROX-071724-DUP	Total/NA	Water	3510C	
400-259480-7	P93B-ROX-071724	Total/NA	Water	3510C	
400-259480-7 - DL	P93B-ROX-071724	Total/NA	Water	3510C	
MB 400-678921/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-678921/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-678921/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-678921/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-678921/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 679032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5	P58-ROX-071724	Total/NA	Water	8270E	678921
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8270E	678921
400-259480-7	P93B-ROX-071724	Total/NA	Water	8270E	678921
MB 400-678921/1-A	Method Blank	Total/NA	Water	8270E	678921
LCS 400-678921/4-A	Lab Control Sample	Total/NA	Water	8270E	678921
LCSD 400-678921/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	678921

GC/MS Semi VOA

Analysis Batch: 679045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5	P58-ROX-071724	Total/NA	Water	8270E SIM	678921
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8270E SIM	678921
400-259480-7	P93B-ROX-071724	Total/NA	Water	8270E SIM	678921
400-259480-7 - DL	P93B-ROX-071724	Total/NA	Water	8270E SIM	678921
MB 400-678921/1-A	Method Blank	Total/NA	Water	8270E SIM	678921
LCS 400-678921/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	678921
LCSD 400-678921/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	678921

Analysis Batch: 679160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5 - DL	P58-ROX-071724	Total/NA	Water	8270E	678921
400-259480-6 - DL	P58-ROX-071724-DUP	Total/NA	Water	8270E	678921

GC Semi VOA

Prep Batch: 678832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-2	TB-ROX-071724-8011-A	Total/NA	Water	8011	
400-259480-4	TB-ROX-071724-8011-B	Total/NA	Water	8011	
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8011	
400-259480-7	P93B-ROX-071724	Total/NA	Water	8011	
MB 400-678832/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-678832/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-678832/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 678864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-2	TB-ROX-071724-8011-A	Total/NA	Water	8011	678832
400-259480-4	TB-ROX-071724-8011-B	Total/NA	Water	8011	678832
400-259480-6	P58-ROX-071724-DUP	Total/NA	Water	8011	678832
MB 400-678832/1-A	Method Blank	Total/NA	Water	8011	678832
LCS 400-678832/2-A	Lab Control Sample	Total/NA	Water	8011	678832
LCSD 400-678832/3-A	Lab Control Sample Dup	Total/NA	Water	8011	678832

Analysis Batch: 679039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-7	P93B-ROX-071724	Total/NA	Water	8011	678832

Prep Batch: 679437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5	P58-ROX-071724	Total/NA	Water	8011	
MB 400-679437/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-679437/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-679437/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 679450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-259480-5	P58-ROX-071724	Total/NA	Water	8011	679437
MB 400-679437/1-A	Method Blank	Total/NA	Water	8011	679437
LCS 400-679437/2-A	Lab Control Sample	Total/NA	Water	8011	679437
LCSD 400-679437/3-A	Lab Control Sample Dup	Total/NA	Water	8011	679437

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

Lab Sample ID: MB 400-678536/6
Matrix: Water
Analysis Batch: 678536

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			07/21/24 12:04	1
Acrolein	ND		20	3.3	ug/L			07/21/24 12:04	1
Acrylonitrile	ND		10	2.8	ug/L			07/21/24 12:04	1
Bromobenzene	ND		1.0	0.54	ug/L			07/21/24 12:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/21/24 12:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
Bromoform	ND		5.0	0.25	ug/L			07/21/24 12:04	1
Bromomethane	ND		1.0	0.98	ug/L			07/21/24 12:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/21/24 12:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/21/24 12:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/21/24 12:04	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/21/24 12:04	1
Chloroethane	ND		1.0	0.76	ug/L			07/21/24 12:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/21/24 12:04	1
Chloroform	ND		1.0	0.90	ug/L			07/21/24 12:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/21/24 12:04	1
Chloromethane	ND		1.0	0.40	ug/L			07/21/24 12:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/21/24 12:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/21/24 12:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/21/24 12:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/21/24 12:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/21/24 12:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/21/24 12:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/21/24 12:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/21/24 12:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/21/24 12:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/21/24 12:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/21/24 12:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/21/24 12:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/21/24 12:04	1
2-Hexanone	ND		25	4.3	ug/L			07/21/24 12:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/21/24 12:04	1
Methylene bromide	ND		5.0	0.22	ug/L			07/21/24 12:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/21/24 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/21/24 12:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/21/24 12:04	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/21/24 12:04	1
Naphthalene	ND		5.0	3.0	ug/L			07/21/24 12:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/21/24 12:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/21/24 12:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/21/24 12:04	1
o-Xylene	ND		5.0	0.60	ug/L			07/21/24 12:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/21/24 12:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/21/24 12:04	1

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

Lab Sample ID: MB 400-678536/6
Matrix: Water
Analysis Batch: 678536

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/21/24 12:04	1
Styrene	ND		1.0	1.0	ug/L			07/21/24 12:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/21/24 12:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/21/24 12:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/21/24 12:04	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/21/24 12:04	1
Toluene	ND		1.0	0.90	ug/L			07/21/24 12:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/21/24 12:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/21/24 12:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/21/24 12:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/21/24 12:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/21/24 12:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/21/24 12:04	1
Trichloroethene	ND		1.0	0.15	ug/L			07/21/24 12:04	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/21/24 12:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/21/24 12:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/21/24 12:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/21/24 12:04	1
Vinyl acetate	ND		25	0.93	ug/L			07/21/24 12:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/21/24 12:04	1
Xylenes, Total	ND		10	1.6	ug/L			07/21/24 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*07/21/24 12:04*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*07/21/24 12:04*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*07/21/24 12:04*	*1*

Lab Sample ID: LCS 400-678536/1002
Matrix: Water
Analysis Batch: 678536

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	168		ug/L		84	43 - 150
Acrolein	500	596		ug/L		119	38 - 150
Acrylonitrile	500	529		ug/L		106	64 - 142
Bromobenzene	50.0	52.9		ug/L		106	70 - 132
Bromochloromethane	50.0	52.3		ug/L		105	70 - 130
Bromodichloromethane	50.0	53.6		ug/L		107	67 - 133
Bromoform	50.0	46.8		ug/L		94	57 - 140
Bromomethane	50.0	62.9		ug/L		126	10 - 150
2-Butanone (MEK)	200	167		ug/L		83	61 - 145
Carbon disulfide	50.0	43.2		ug/L		86	61 - 137
Carbon tetrachloride	50.0	55.8		ug/L		112	61 - 137
Chlorobenzene	50.0	51.3		ug/L		103	70 - 130
Chloroethane	50.0	57.2		ug/L		114	55 - 141
2-Chloroethyl vinyl ether	50.0	54.3		ug/L		109	10 - 150
Chloroform	50.0	53.7		ug/L		107	69 - 130
1-Chlorohexane	50.0	59.1		ug/L		118	69 - 130

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

Lab Sample ID: LCS 400-678536/1002
Matrix: Water
Analysis Batch: 678536

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	67.9		ug/L		136	58 - 137
cis-1,2-Dichloroethene	50.0	54.5		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	56.2		ug/L		112	69 - 132
Dibromochloromethane	50.0	50.1		ug/L		100	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	53.6		ug/L		107	70 - 130
1,4-Dichlorobenzene	50.0	53.1		ug/L		106	70 - 130
Dichlorodifluoromethane	50.0	60.5		ug/L		121	41 - 146
1,1-Dichloroethane	50.0	54.7		ug/L		109	70 - 130
1,2-Dichloroethane	50.0	53.7		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	50.8		ug/L		102	63 - 134
1,2-Dichloropropane	50.0	55.8		ug/L		112	70 - 130
1,3-Dichloropropane	50.0	51.8		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	49.9		ug/L		100	52 - 135
1,1-Dichloropropene	50.0	54.7		ug/L		109	70 - 130
Ethylbenzene	50.0	53.5		ug/L		107	70 - 130
Ethyl methacrylate	50.0	52.4		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	52.4		ug/L		105	53 - 140
2-Hexanone	200	178		ug/L		89	65 - 137
Isopropylbenzene	50.0	53.8		ug/L		108	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	57.9		ug/L		116	66 - 135
4-Methyl-2-pentanone (MIBK)	200	227		ug/L		114	69 - 138
Methyl tert-butyl ether	50.0	51.6		ug/L		103	66 - 130
m-Xylene & p-Xylene	50.0	51.9		ug/L		104	70 - 130
Naphthalene	50.0	45.9		ug/L		92	47 - 149
n-Butylbenzene	50.0	57.0		ug/L		114	67 - 130
N-Propylbenzene	50.0	56.0		ug/L		112	70 - 130
o-Chlorotoluene	50.0	56.7		ug/L		113	70 - 130
o-Xylene	50.0	53.6		ug/L		107	70 - 130
p-Chlorotoluene	50.0	56.0		ug/L		112	70 - 130
p-Isopropyltoluene	50.0	55.3		ug/L		111	65 - 130
sec-Butylbenzene	50.0	55.5		ug/L		111	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	56.8		ug/L		114	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.8		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.1		ug/L		104	70 - 131
Tetrachloroethene	50.0	48.6		ug/L		97	65 - 130
Toluene	50.0	51.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	51.5		ug/L		103	70 - 130
trans-1,3-Dichloropropene	50.0	51.4		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	46.9		ug/L		94	60 - 138
1,2,4-Trichlorobenzene	50.0	46.9		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	53.9		ug/L		108	68 - 130
1,1,2-Trichloroethane	50.0	52.3		ug/L		105	70 - 130
Trichloroethene	50.0	53.9		ug/L		108	70 - 130
Trichlorofluoromethane	50.0	50.7		ug/L		101	65 - 138
1,2,3-Trichloropropane	50.0	50.8		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	50.0	52.2		ug/L		104	70 - 130

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

Lab Sample ID: LCS 400-678536/1002
Matrix: Water
Analysis Batch: 678536

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,3,5-Trimethylbenzene	50.0	54.3		ug/L		109	69 - 130
Vinyl acetate	100	95.0		ug/L		95	26 - 150
Vinyl chloride	50.0	60.1		ug/L		120	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-678572/5
Matrix: Water
Analysis Batch: 678572

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			07/22/24 13:31	1
Acrolein	ND		20	3.3	ug/L			07/22/24 13:31	1
Acrylonitrile	ND		10	2.8	ug/L			07/22/24 13:31	1
Benzene	ND		1.0	0.24	ug/L			07/22/24 13:31	1
Bromobenzene	ND		1.0	0.54	ug/L			07/22/24 13:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			07/22/24 13:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
Bromoform	ND		5.0	0.25	ug/L			07/22/24 13:31	1
Bromomethane	ND		1.0	0.98	ug/L			07/22/24 13:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			07/22/24 13:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			07/22/24 13:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			07/22/24 13:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			07/22/24 13:31	1
Chloroethane	ND		1.0	0.76	ug/L			07/22/24 13:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			07/22/24 13:31	1
Chloroform	ND		1.0	0.90	ug/L			07/22/24 13:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			07/22/24 13:31	1
Chloromethane	ND		1.0	0.40	ug/L			07/22/24 13:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			07/22/24 13:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			07/22/24 13:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			07/22/24 13:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			07/22/24 13:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			07/22/24 13:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			07/22/24 13:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			07/22/24 13:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			07/22/24 13:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 13:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			07/22/24 13:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			07/22/24 13:31	1

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

Lab Sample ID: MB 400-678572/5
Matrix: Water
Analysis Batch: 678572

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl methacrylate	ND		1.0	0.60	ug/L			07/22/24 13:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			07/22/24 13:31	1
2-Hexanone	ND		25	4.3	ug/L			07/22/24 13:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			07/22/24 13:31	1
Methylene bromide	ND		5.0	0.22	ug/L			07/22/24 13:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			07/22/24 13:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			07/22/24 13:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			07/22/24 13:31	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			07/22/24 13:31	1
Naphthalene	ND		5.0	3.0	ug/L			07/22/24 13:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			07/22/24 13:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/22/24 13:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			07/22/24 13:31	1
o-Xylene	ND		5.0	0.60	ug/L			07/22/24 13:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			07/22/24 13:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			07/22/24 13:31	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			07/22/24 13:31	1
Styrene	ND		1.0	1.0	ug/L			07/22/24 13:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			07/22/24 13:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			07/22/24 13:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			07/22/24 13:31	1
Tetrachloroethene	ND		1.0	0.33	ug/L			07/22/24 13:31	1
Toluene	ND		1.0	0.90	ug/L			07/22/24 13:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			07/22/24 13:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			07/22/24 13:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			07/22/24 13:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			07/22/24 13:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			07/22/24 13:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			07/22/24 13:31	1
Trichloroethene	ND		1.0	0.15	ug/L			07/22/24 13:31	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			07/22/24 13:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			07/22/24 13:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			07/22/24 13:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			07/22/24 13:31	1
Vinyl acetate	ND		25	0.93	ug/L			07/22/24 13:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			07/22/24 13:31	1
Xylenes, Total	ND		10	1.6	ug/L			07/22/24 13:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 130*		*07/22/24 13:31*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*07/22/24 13:31*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/22/24 13:31*	*1*

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

Lab Sample ID: LCS 400-678572/1002
Matrix: Water
Analysis Batch: 678572

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	484	*+	ug/L		242	43 - 150
Acrolein	250	379	*+	ug/L		151	38 - 150
Acrylonitrile	500	510		ug/L		102	64 - 142
Benzene	50.0	46.1		ug/L		92	70 - 130
Bromobenzene	50.0	49.2		ug/L		98	70 - 132
Bromochloromethane	50.0	46.5		ug/L		93	70 - 130
Bromodichloromethane	50.0	50.9		ug/L		102	67 - 133
Bromoform	50.0	50.8		ug/L		102	57 - 140
Bromomethane	25.0	31.7		ug/L		127	10 - 150
2-Butanone (MEK)	200	263		ug/L		132	61 - 145
Carbon disulfide	50.0	33.8		ug/L		68	61 - 137
Carbon tetrachloride	50.0	55.6		ug/L		111	61 - 137
Chlorobenzene	50.0	50.8		ug/L		102	70 - 130
Chloroethane	25.0	26.4		ug/L		106	55 - 141
2-Chloroethyl vinyl ether	25.0	31.3		ug/L		125	10 - 150
Chloroform	50.0	54.6		ug/L		109	69 - 130
1-Chlorohexane	50.0	54.8		ug/L		110	69 - 130
Chloromethane	25.0	33.3		ug/L		133	58 - 137
cis-1,2-Dichloroethene	50.0	45.5		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	49.5		ug/L		99	69 - 132
Dibromochloromethane	50.0	50.5		ug/L		101	67 - 135
1,2-Dichlorobenzene	50.0	56.0		ug/L		112	67 - 130
1,3-Dichlorobenzene	50.0	54.8		ug/L		110	70 - 130
1,4-Dichlorobenzene	50.0	54.4		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	22.9		ug/L		92	41 - 146
1,1-Dichloroethane	50.0	46.7		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	51.5		ug/L		103	69 - 130
1,1-Dichloroethene	50.0	45.4		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	46.7		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	48.5		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	55.0		ug/L		110	52 - 135
1,1-Dichloropropene	50.0	50.2		ug/L		100	70 - 130
Ethylbenzene	50.0	50.4		ug/L		101	70 - 130
Ethyl methacrylate	50.0	46.7		ug/L		93	68 - 130
Hexachlorobutadiene	50.0	65.5		ug/L		131	53 - 140
2-Hexanone	200	234		ug/L		117	65 - 137
Isopropylbenzene	50.0	49.0		ug/L		98	70 - 130
Methylene bromide	50.0	48.7		ug/L		97	70 - 130
Methylene Chloride	50.0	45.6		ug/L		91	66 - 135
4-Methyl-2-pentanone (MIBK)	200	200		ug/L		100	69 - 138
Methyl tert-butyl ether	50.0	46.2		ug/L		92	66 - 130
m-Xylene & p-Xylene	50.0	52.4		ug/L		105	70 - 130
Naphthalene	50.0	37.8		ug/L		76	47 - 149
n-Butylbenzene	50.0	55.8		ug/L		112	67 - 130
N-Propylbenzene	50.0	50.6		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.8		ug/L		100	70 - 130
o-Xylene	50.0	50.1		ug/L		100	70 - 130
p-Chlorotoluene	50.0	49.3		ug/L		99	70 - 130

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

Lab Sample ID: LCS 400-678572/1002
Matrix: Water
Analysis Batch: 678572

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
p-Isopropyltoluene	50.0	54.9		ug/L		110	65 - 130
sec-Butylbenzene	50.0	54.3		ug/L		109	66 - 130
Styrene	50.0	50.2		ug/L		100	70 - 130
tert-Butylbenzene	50.0	52.3		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	55.0		ug/L		110	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.6		ug/L		91	70 - 131
Tetrachloroethene	50.0	50.3		ug/L		101	65 - 130
Toluene	50.0	49.1		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	46.5		ug/L		93	70 - 130
trans-1,3-Dichloropropene	50.0	51.2		ug/L		102	63 - 130
1,2,3-Trichlorobenzene	50.0	53.3		ug/L		107	60 - 138
1,2,4-Trichlorobenzene	50.0	54.8		ug/L		110	60 - 140
1,1,1-Trichloroethane	50.0	55.8		ug/L		112	68 - 130
1,1,2-Trichloroethane	50.0	45.8		ug/L		92	70 - 130
Trichloroethene	50.0	50.5		ug/L		101	70 - 130
Trichlorofluoromethane	25.0	26.8		ug/L		107	65 - 138
1,2,3-Trichloropropane	50.0	47.7		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	52.9		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	50.0	50.4		ug/L		101	69 - 130
Vinyl acetate	50.0	59.0		ug/L		118	26 - 150
Vinyl chloride	25.0	25.6		ug/L		102	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 130*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

Lab Sample ID: MB 400-678994/4
Matrix: Water
Analysis Batch: 678994

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	0.24	ug/L			07/25/24 12:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*07/25/24 12:32*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*07/25/24 12:32*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*07/25/24 12:32*	*1*

Lab Sample ID: LCS 400-678994/1002
Matrix: Water
Analysis Batch: 678994

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	46.8		ug/L		94	70 - 130

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

Lab Sample ID: LCS 400-678994/1002
Matrix: Water
Analysis Batch: 678994

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		72 - 130
Dibromofluoromethane	96		75 - 126
Toluene-d8 (Surr)	101		64 - 132

Lab Sample ID: MB 400-679561/5
Matrix: Water
Analysis Batch: 679561

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		5.0	3.0	ug/L			07/31/24 10:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		72 - 130		07/31/24 10:59	1
Dibromofluoromethane	108		75 - 126		07/31/24 10:59	1
Toluene-d8 (Surr)	93		64 - 132		07/31/24 10:59	1

Lab Sample ID: LCS 400-679561/1002
Matrix: Water
Analysis Batch: 679561

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methylene Chloride			50.0	52.1		ug/L		104	66 - 135		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		72 - 130
Dibromofluoromethane	107		75 - 126
Toluene-d8 (Surr)	94		64 - 132

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

Lab Sample ID: MB 400-678921/1-A
Matrix: Water
Analysis Batch: 679032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
Benzenethiol	ND		10	9.9	ug/L		07/24/24 14:28	07/25/24 13:15	1
Benzoic acid	ND		30	24	ug/L		07/24/24 14:28	07/25/24 13:15	1
Benzyl alcohol	ND		10	7.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		07/24/24 14:28	07/25/24 13:15	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		07/24/24 14:28	07/25/24 13:15	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Chloroaniline	ND		10	4.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
2-Chloronaphthalene	ND		10	3.8	ug/L		07/24/24 14:28	07/25/24 13:15	1

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

Lab Sample ID: MB 400-678921/1-A
Matrix: Water
Analysis Batch: 679032

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		10	4.1	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		07/24/24 14:28	07/25/24 13:15	1
Dibenzofuran	ND		10	4.0	ug/L		07/24/24 14:28	07/25/24 13:15	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
Diethyl phthalate	ND		10	4.4	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
Dimethyl phthalate	ND		10	4.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		07/24/24 14:28	07/25/24 13:15	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		07/24/24 14:28	07/25/24 13:15	1
1,4-Dioxane	ND		10	4.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
Hexachlorobenzene	ND		10	9.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		07/24/24 14:28	07/25/24 13:15	1
Hexachloroethane	ND		10	5.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
Indene	ND		10	3.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
Isophorone	ND		10	5.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
2-Methylphenol	ND		10	3.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
2-Nitroaniline	ND		10	5.0	ug/L		07/24/24 14:28	07/25/24 13:15	1
3-Nitroaniline	ND		10	4.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Nitroaniline	ND		10	4.1	ug/L		07/24/24 14:28	07/25/24 13:15	1
Nitrobenzene	ND		10	4.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
2-Nitrophenol	ND		10	4.6	ug/L		07/24/24 14:28	07/25/24 13:15	1
4-Nitrophenol	ND		10	3.3	ug/L		07/24/24 14:28	07/25/24 13:15	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		07/24/24 14:28	07/25/24 13:15	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		07/24/24 14:28	07/25/24 13:15	1
Pentachlorophenol	ND		20	12	ug/L		07/24/24 14:28	07/25/24 13:15	1
Phenol	ND		10	4.2	ug/L		07/24/24 14:28	07/25/24 13:15	1
Pyridine	ND		10	10	ug/L		07/24/24 14:28	07/25/24 13:15	1
Quinoline	ND		10	2.4	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		07/24/24 14:28	07/25/24 13:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		07/24/24 14:28	07/25/24 13:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*07/24/24 14:28*	*07/25/24 13:15*	*1*
2-Fluorophenol	*49*		*10 - 105*	*07/24/24 14:28*	*07/25/24 13:15*	*1*
Nitrobenzene-d5	*61*		*16 - 127*	*07/24/24 14:28*	*07/25/24 13:15*	*1*
Phenol-d5	*40*		*10 - 129*	*07/24/24 14:28*	*07/25/24 13:15*	*1*
Terphenyl-d14	*88*		*13 - 150*	*07/24/24 14:28*	*07/25/24 13:15*	*1*
2,4,6-Tribromophenol	*58*		*10 - 150*	*07/24/24 14:28*	*07/25/24 13:15*	*1*

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

Lab Sample ID: LCS 400-678921/4-A
Matrix: Water
Analysis Batch: 679032

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678921

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	83.7		ug/L		70	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*0.8*	*S1-*	*21 - 114*
2-Fluorophenol	*0*	*S1-*	*10 - 105*
Nitrobenzene-d5	*0*	*S1-*	*16 - 127*
Phenol-d5	*0*	*S1-*	*10 - 129*
Terphenyl-d14	*0*	*S1-*	*13 - 150*
2,4,6-Tribromophenol	*0*	*S1-*	*10 - 150*

Lab Sample ID: LCSD 400-678921/5-A
Matrix: Water
Analysis Batch: 679032

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678921

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	84.7		ug/L		71	10 - 140	1	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*61*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*93*		*13 - 150*
2,4,6-Tribromophenol	*59*		*10 - 150*

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

Lab Sample ID: MB 400-678921/1-A
Matrix: Water
Analysis Batch: 679045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.099	ug/L		07/24/24 14:28	07/25/24 16:00	1
Acenaphthylene	0.0660	J	0.20	0.044	ug/L		07/24/24 14:28	07/25/24 16:00	1
Anthracene	0.0822	J	0.20	0.047	ug/L		07/24/24 14:28	07/25/24 16:00	1
Benzo[a]anthracene	ND		0.20	0.034	ug/L		07/24/24 14:28	07/25/24 16:00	1
Benzo[a]pyrene	ND	*3	0.20	0.064	ug/L		07/24/24 14:28	07/25/24 16:00	1
Benzo[b]fluoranthene	ND	*3	0.20	0.037	ug/L		07/24/24 14:28	07/25/24 16:00	1
Benzo[g,h,i]perylene	ND	*3	0.20	0.027	ug/L		07/24/24 14:28	07/25/24 16:00	1
Benzo[k]fluoranthene	ND	*3	0.20	0.062	ug/L		07/24/24 14:28	07/25/24 16:00	1
Chrysene	ND		0.20	0.033	ug/L		07/24/24 14:28	07/25/24 16:00	1
Dibenz(a,h)anthracene	ND	*3	0.20	0.048	ug/L		07/24/24 14:28	07/25/24 16:00	1
Fluoranthene	ND		0.20	0.034	ug/L		07/24/24 14:28	07/25/24 16:00	1
Fluorene	0.103	J	0.20	0.089	ug/L		07/24/24 14:28	07/25/24 16:00	1
Indeno[1,2,3-cd]pyrene	ND	*3	0.20	0.034	ug/L		07/24/24 14:28	07/25/24 16:00	1
Phenanthrene	ND		0.20	0.090	ug/L		07/24/24 14:28	07/25/24 16:00	1
Pyrene	ND		0.20	0.039	ug/L		07/24/24 14:28	07/25/24 16:00	1
1-Methylnaphthalene	0.136	J	0.20	0.080	ug/L		07/24/24 14:28	07/25/24 16:00	1

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

Lab Sample ID: MB 400-678921/1-A
Matrix: Water
Analysis Batch: 679045

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.189	J	0.20	0.066	ug/L		07/24/24 14:28	07/25/24 16:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*116*		*18 - 147*	*07/24/24 14:28*	*07/25/24 16:00*	*1*
2-Fluorobiphenyl	*61*		*15 - 128*	*07/24/24 14:28*	*07/25/24 16:00*	*1*
Nitrobenzene-d5	*65*		*10 - 144*	*07/24/24 14:28*	*07/25/24 16:00*	*1*

Lab Sample ID: LCS 400-678921/2-A
Matrix: Water
Analysis Batch: 679045

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	120	82.9		ug/L		69	10 - 140
Acenaphthylene	120	86.0		ug/L		72	10 - 140
Anthracene	120	87.5		ug/L		73	19 - 140
Benzo[a]anthracene	120	80.8		ug/L		67	25 - 140
Benzo[a]pyrene	120	72.2		ug/L		60	24 - 140
Benzo[b]fluoranthene	120	85.3		ug/L		71	34 - 140
Benzo[g,h,i]perylene	120	68.7		ug/L		57	13 - 140
Benzo[k]fluoranthene	120	75.5		ug/L		63	21 - 140
Chrysene	120	79.9		ug/L		67	28 - 140
Dibenz(a,h)anthracene	120	56.9		ug/L		47	10 - 140
Fluoranthene	120	95.5		ug/L		80	18 - 140
Fluorene	120	84.4		ug/L		70	16 - 140
Indeno[1,2,3-cd]pyrene	120	57.3		ug/L		48	10 - 140
Phenanthrene	120	93.2		ug/L		78	22 - 140
Pyrene	120	109		ug/L		90	38 - 140
1-Methylnaphthalene	120	69.9		ug/L		58	10 - 140
2-Methylnaphthalene	120	67.2		ug/L		56	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*82*		*18 - 147*
2-Fluorobiphenyl	*64*		*15 - 128*
Nitrobenzene-d5	*53*		*10 - 144*

Lab Sample ID: LCSD 400-678921/3-A
Matrix: Water
Analysis Batch: 679045

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678921

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	120	78.2		ug/L		65	10 - 140	6	40
Acenaphthylene	120	79.4		ug/L		66	10 - 140	8	40
Anthracene	120	91.1		ug/L		76	19 - 140	4	40
Benzo[a]anthracene	120	96.1		ug/L		80	25 - 140	17	40
Benzo[a]pyrene	120	83.9	*3	ug/L		70	24 - 140	15	40
Benzo[b]fluoranthene	120	98.2	*3	ug/L		82	34 - 140	14	40
Benzo[g,h,i]perylene	120	86.5	*3	ug/L		72	13 - 140	23	40
Benzo[k]fluoranthene	120	96.5	*3	ug/L		80	21 - 140	24	40

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

Lab Sample ID: LCSD 400-678921/3-A
Matrix: Water
Analysis Batch: 679045

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678921

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chrysene			120	98.4		ug/L		82	28 - 140	21	40
Dibenz(a,h)anthracene			120	72.7	*3	ug/L		61	10 - 140	24	40
Fluoranthene			120	94.7		ug/L		79	18 - 140	1	40
Fluorene			120	81.7		ug/L		68	16 - 140	3	40
Indeno[1,2,3-cd]pyrene			120	70.3	*3	ug/L		59	10 - 140	20	40
Phenanthrene			120	96.0		ug/L		80	22 - 140	3	40
Pyrene			120	137		ug/L		114	38 - 140	23	40
1-Methylnaphthalene			120	66.4		ug/L		55	10 - 140	5	40
2-Methylnaphthalene			120	63.3		ug/L		53	10 - 140	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*98*		*18 - 147*
2-Fluorobiphenyl	*59*		*15 - 128*
Nitrobenzene-d5	*48*		*10 - 144*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-678832/1-A
Matrix: Water
Analysis Batch: 678864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 678832

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		07/24/24 07:59	07/24/24 11:32	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/24/24 07:59	07/24/24 11:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*143*		*51 - 149*	*07/24/24 07:59*	*07/24/24 11:32*	*1*

Lab Sample ID: LCS 400-678832/2-A
Matrix: Water
Analysis Batch: 678864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 678832

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.120		ug/L		119	60 - 140		
1,2-Dibromoethane			0.100	0.0954	p	ug/L		95	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*140*		*51 - 149*

Lab Sample ID: LCSD 400-678832/3-A
Matrix: Water
Analysis Batch: 678864

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678832

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.114		ug/L		113	60 - 140	6	30
1,2-Dibromoethane			0.100	0.0896	p	ug/L		89	60 - 140	6	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-678832/3-A
Matrix: Water
Analysis Batch: 678864

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 678832

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*133*		*51 - 149*

Lab Sample ID: MB 400-679437/1-A
Matrix: Water
Analysis Batch: 679450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 679437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		07/30/24 08:45	07/30/24 11:16	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		07/30/24 08:45	07/30/24 11:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*07/30/24 08:45*	*07/30/24 11:16*	*1*

Lab Sample ID: LCS 400-679437/2-A
Matrix: Water
Analysis Batch: 679450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 679437

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.126		ug/L		125	60 - 140		
1,2-Dibromoethane			0.100	0.135		ug/L		135	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*129*		*51 - 149*

Lab Sample ID: LCSD 400-679437/3-A
Matrix: Water
Analysis Batch: 679450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 679437

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.126		ug/L		125	60 - 140	0	30
1,2-Dibromoethane			0.100	0.123		ug/L		123	60 - 140	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*135*		*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: 7/17/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 – 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 60721927 – 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	C. McDavid, E. Chalfant, 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; Vlad.Virjan@aecom.com**

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.3.2

400-259480 COC

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-071724-8260-A	7/17/2024	0000	Water	2					2	X			
	TB-ROX-071724-8011-A	7/17/2024	0000	Water	2					2		X		
	TB-ROX-071724-8260-B	7/17/2024	0000	Water	6			2		8	X	X	X	X
	TB-ROX-071724-8011-B	7/17/2024	0000	Water	6			2		8	X	X	X	X
	P58-ROX-071724	7/17/2024	0840	Water	6			2		8	X	X	X	X
	P58-ROX-071724-DUP	7/17/2024	0840	Water	6			2		8	X	X	X	X
	P93B-ROX-071724	7/17/2024	0910	Water	6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0543 6366	7/17/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		7-19-24	1008
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	5.8°C/IR10		

Version: 27Sept23

CUSTODY SEALS: 2355753, 2355652

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8/2/2024

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-259480-1

Login Number: 259480
List Number: 1
Creator: Pardonner, Brett

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.8°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.	False	SAMPLE 3AND4 ONLY RECIEVED 2 VOAS COC SAYS THERE IS 8 TOTAL CONTAINERS
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: 400-259480-1
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	06-30-25
ANAB	ISO/IEC 17025	L2471	02-22-26
Arkansas DEQ	State	88-00689	08-01-24
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-24
Kansas	NELAP	E-10253	10-31-24
Kentucky (UST)	State	53	06-30-25
Louisiana (All)	NELAP	30976	06-30-25
Louisiana (DW)	State	LA017	12-31-24
North Carolina (WW/SW)	State	314	12-31-24
Oklahoma	NELAP	9810	08-31-24
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-24
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	P330-21-00056	01-09-26
USDA	US Federal Programs	FLGNV23001	01-08-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Appendix D

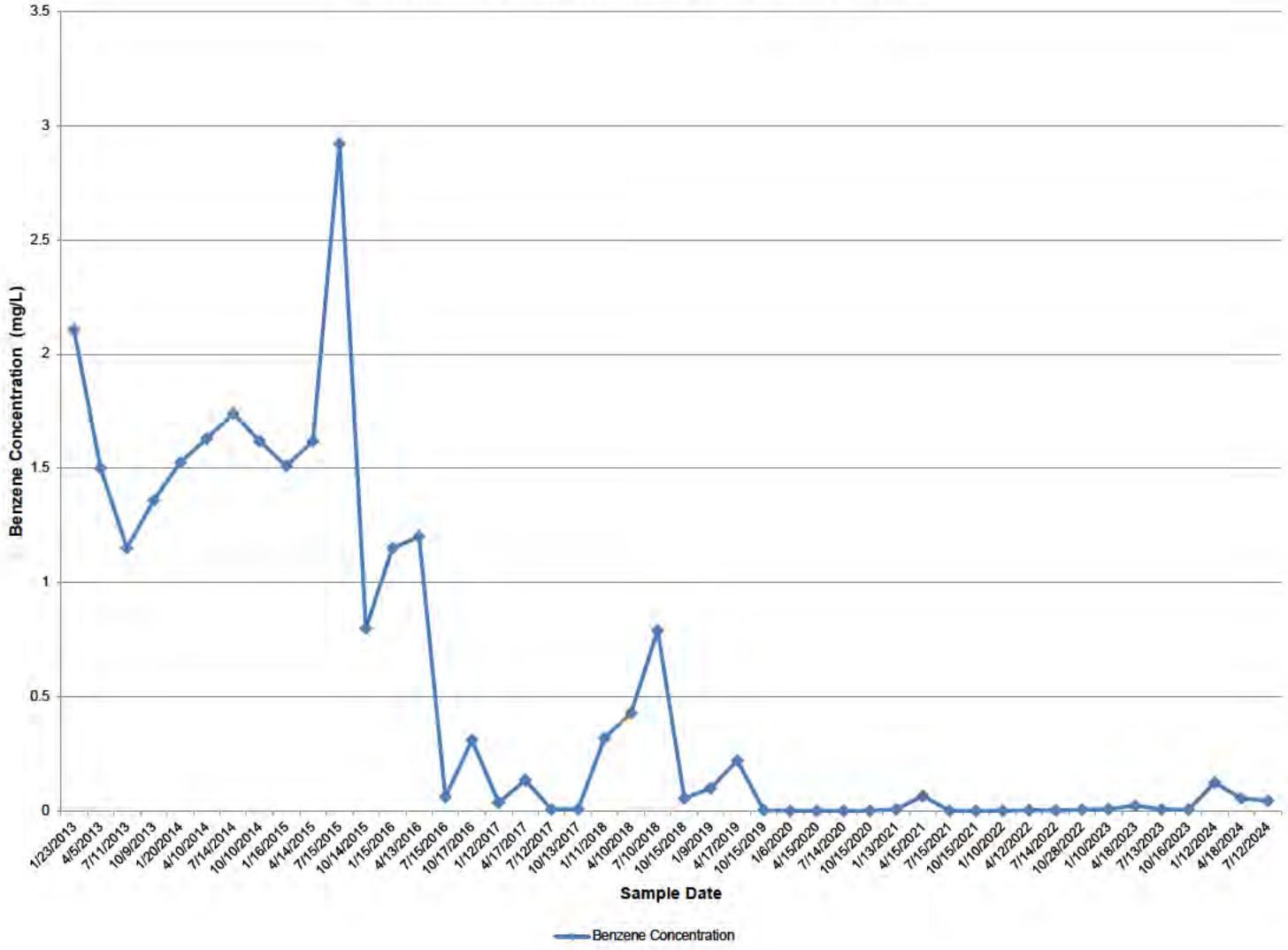
Appendix D – 1 Charts – Benzene Concentrations Over Time

Appendix D – 2 GWSDAT Charts

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

4th Street Area

Benzene Concentrations Over Time - MW-22



Notes:

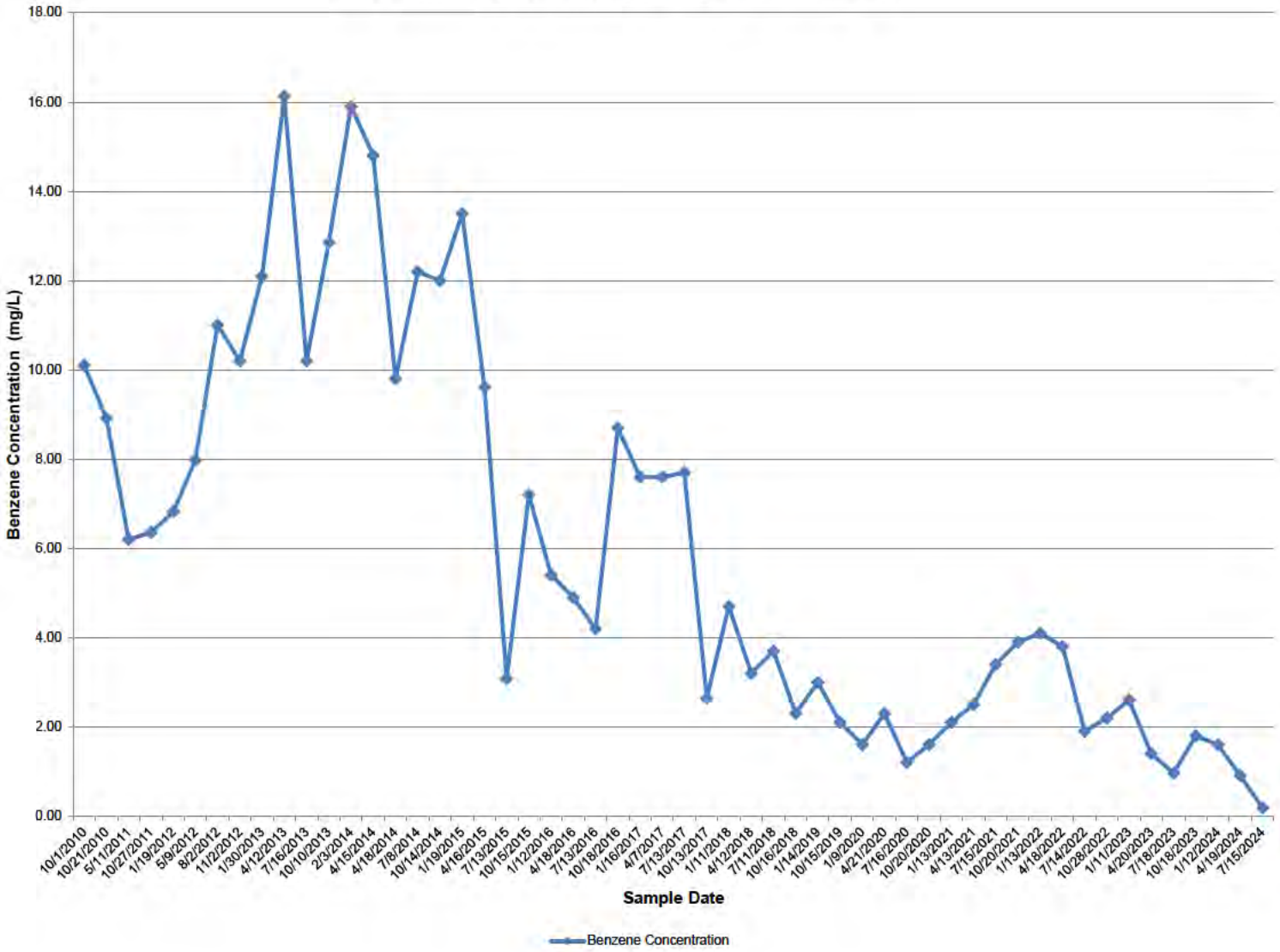
mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

Benzene Concentrations Over Time - P-59



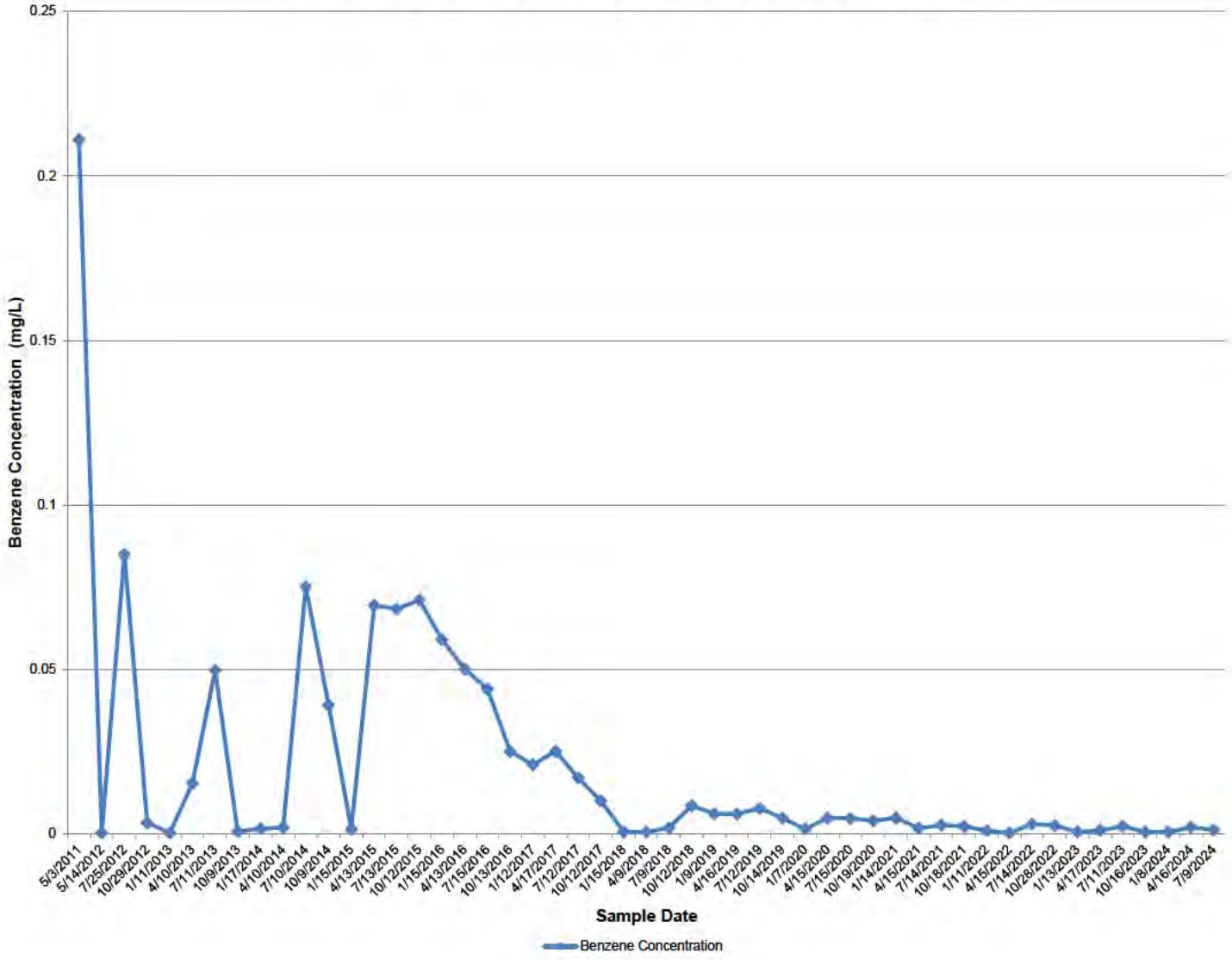
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - ROST-4-PZ(C)



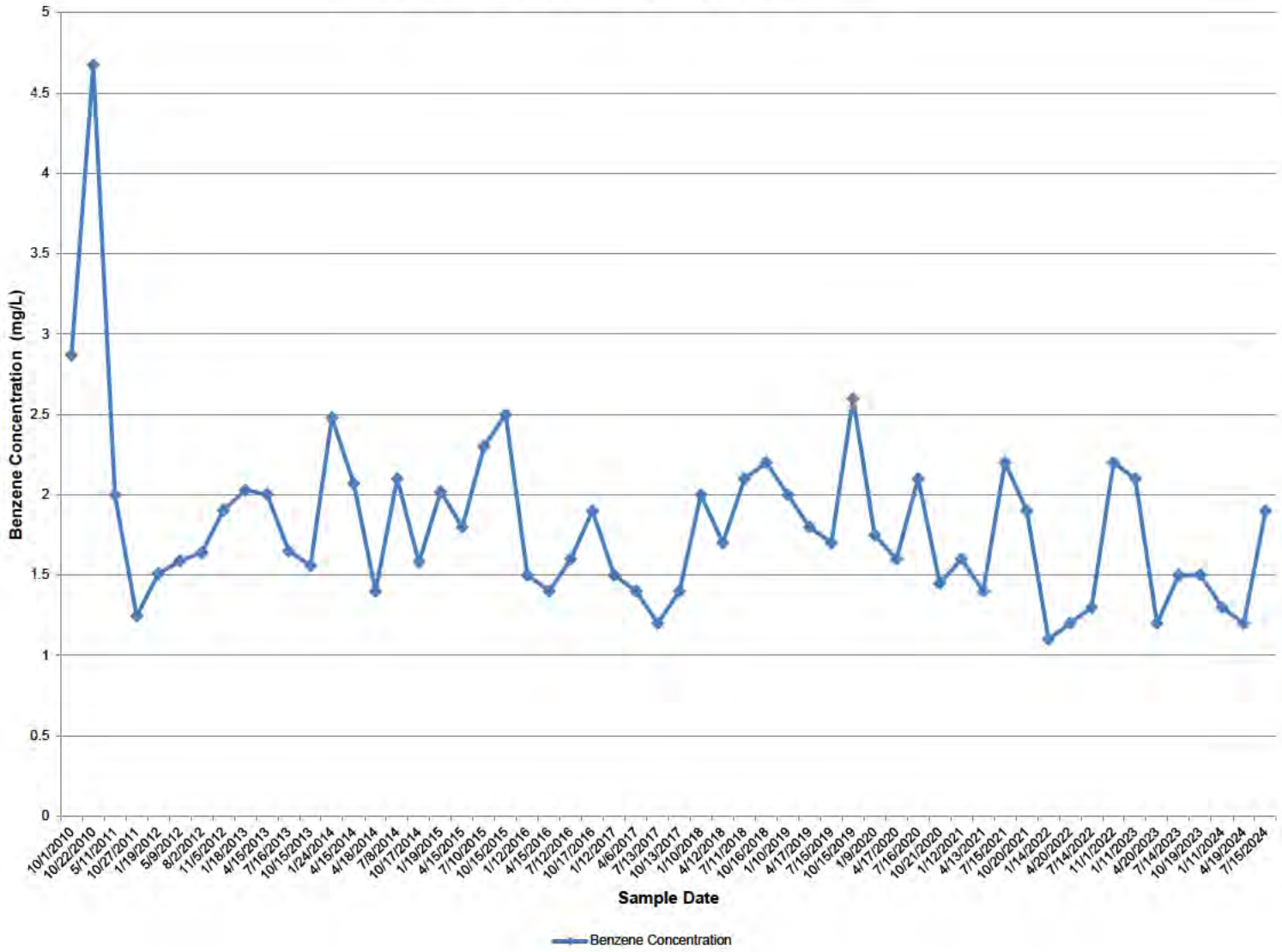
Notes:

mg/L = milligrams per liter

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

Benzene Concentrations Over Time - T-12



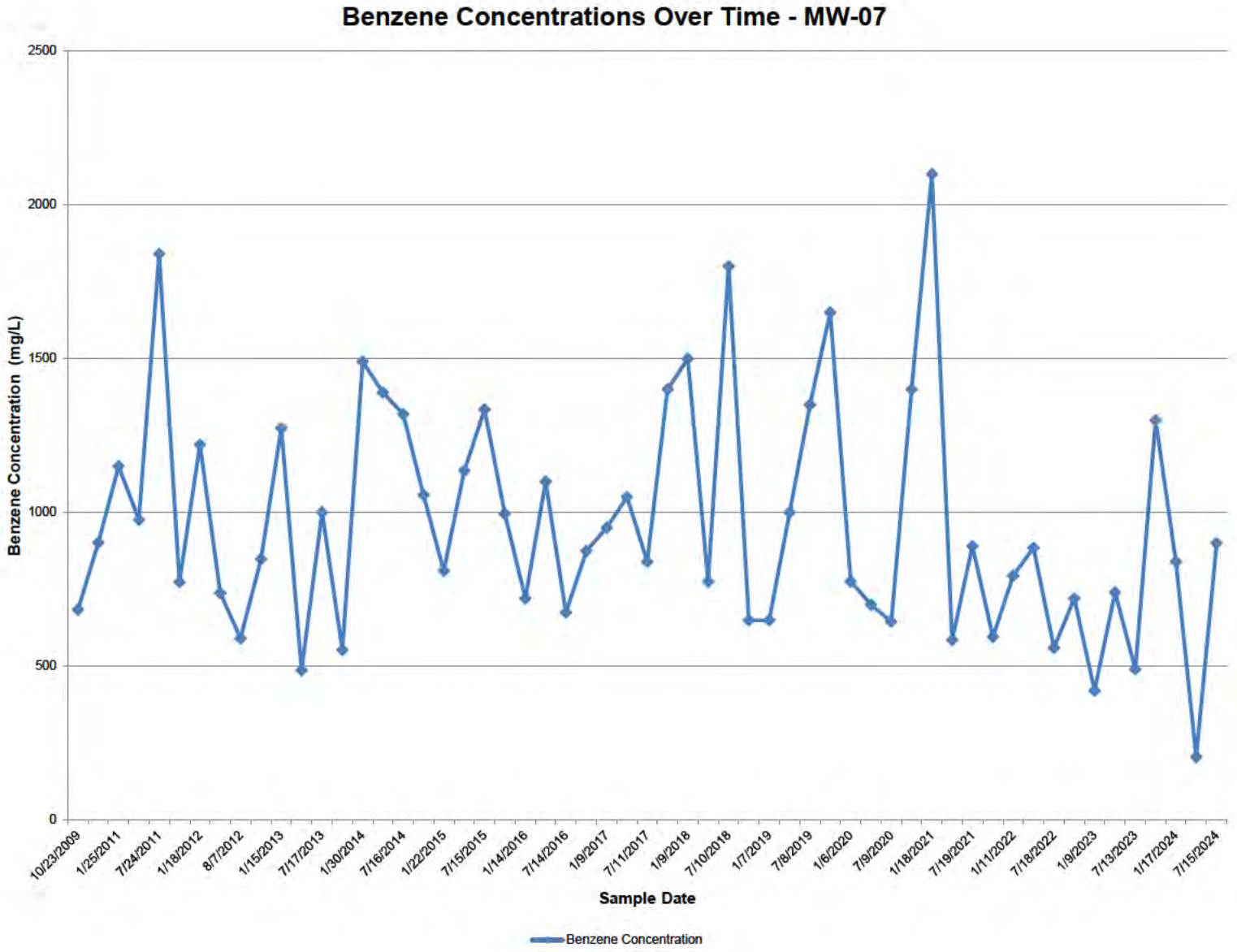
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area

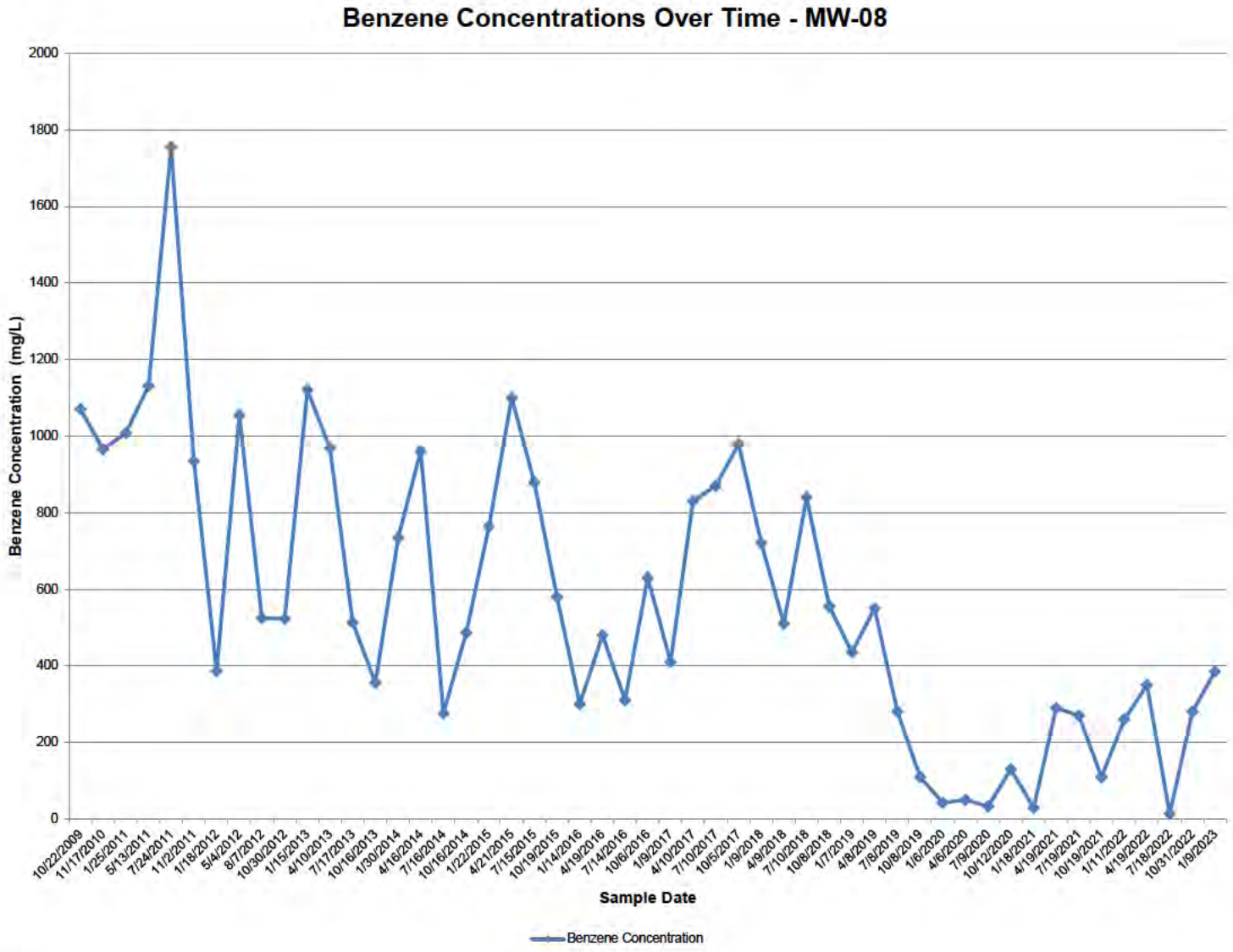


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



Notes:

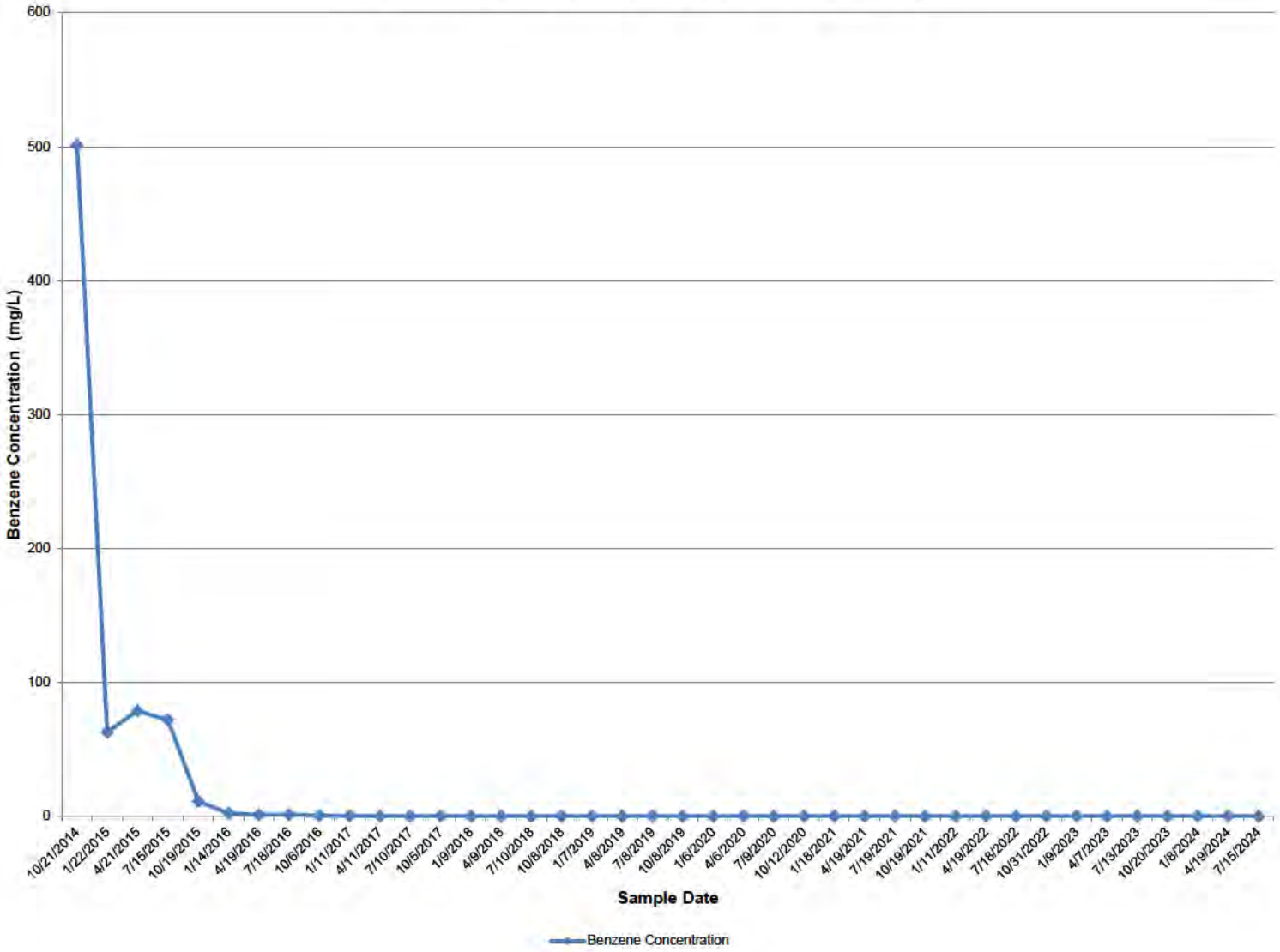
mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Well MW-8 was abandoned on January 10, 2023 after 1Q23 quarterly sampling. Abandonment of MW-8 was approved with conditions in the August 22, 2022 IEPA letter (IEPA 2022) in response to the PWY SEE Work Plan (AECOM 2022a); installation of MW-8A and MW-8B is planned as part of the post-SEE system activities.

Benzene Concentrations Over Time - MW-25



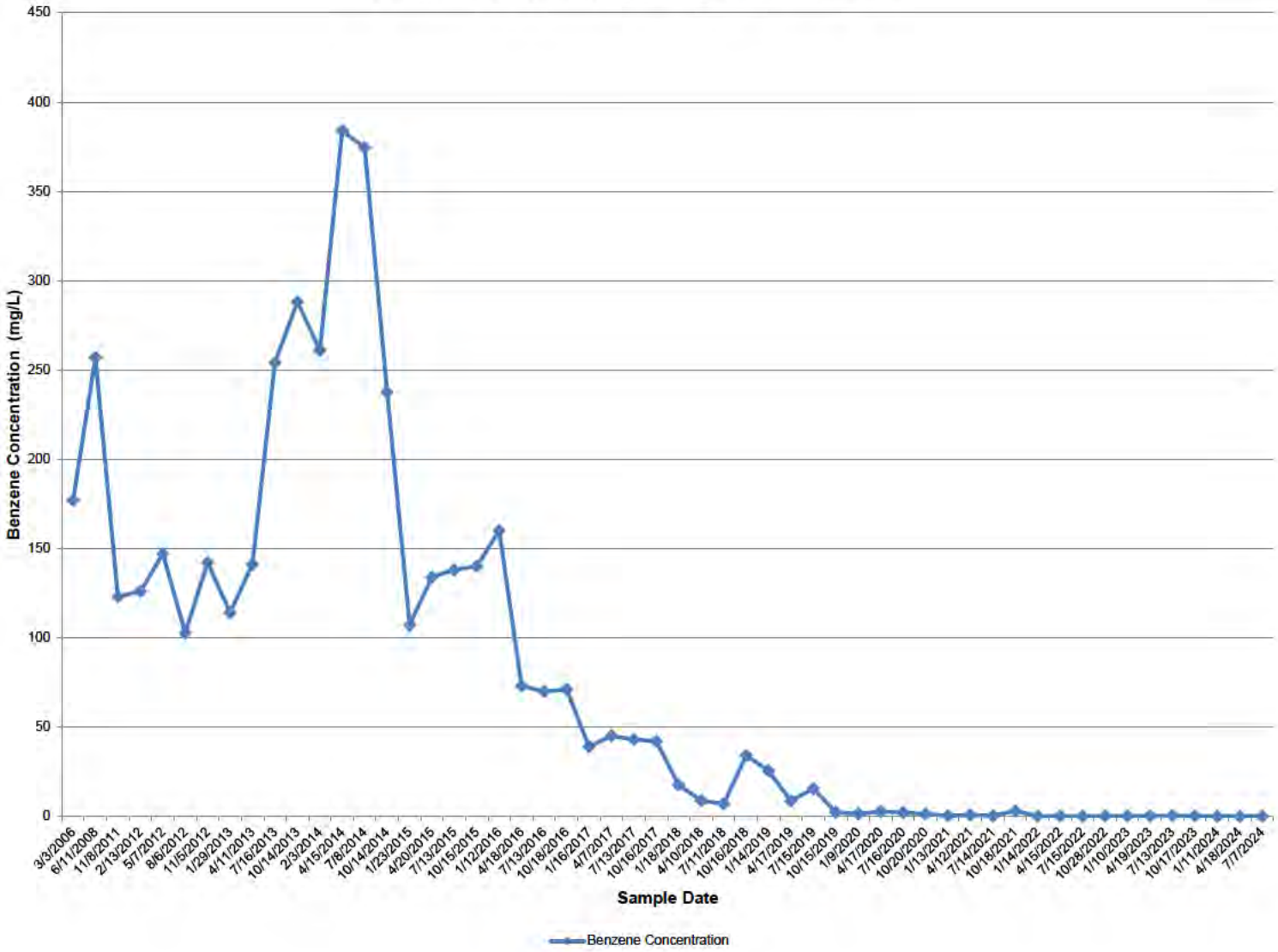
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - P-57



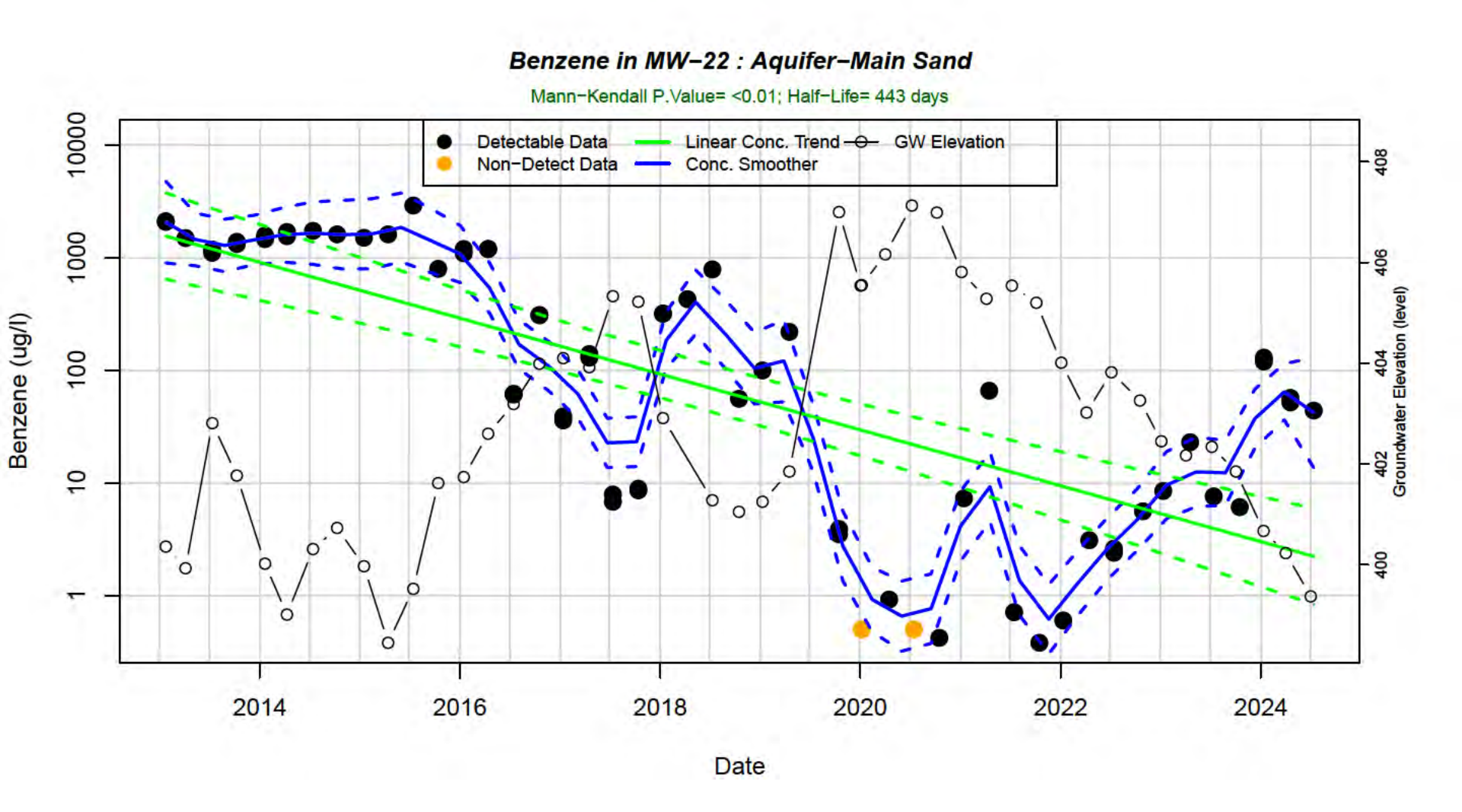
Notes:

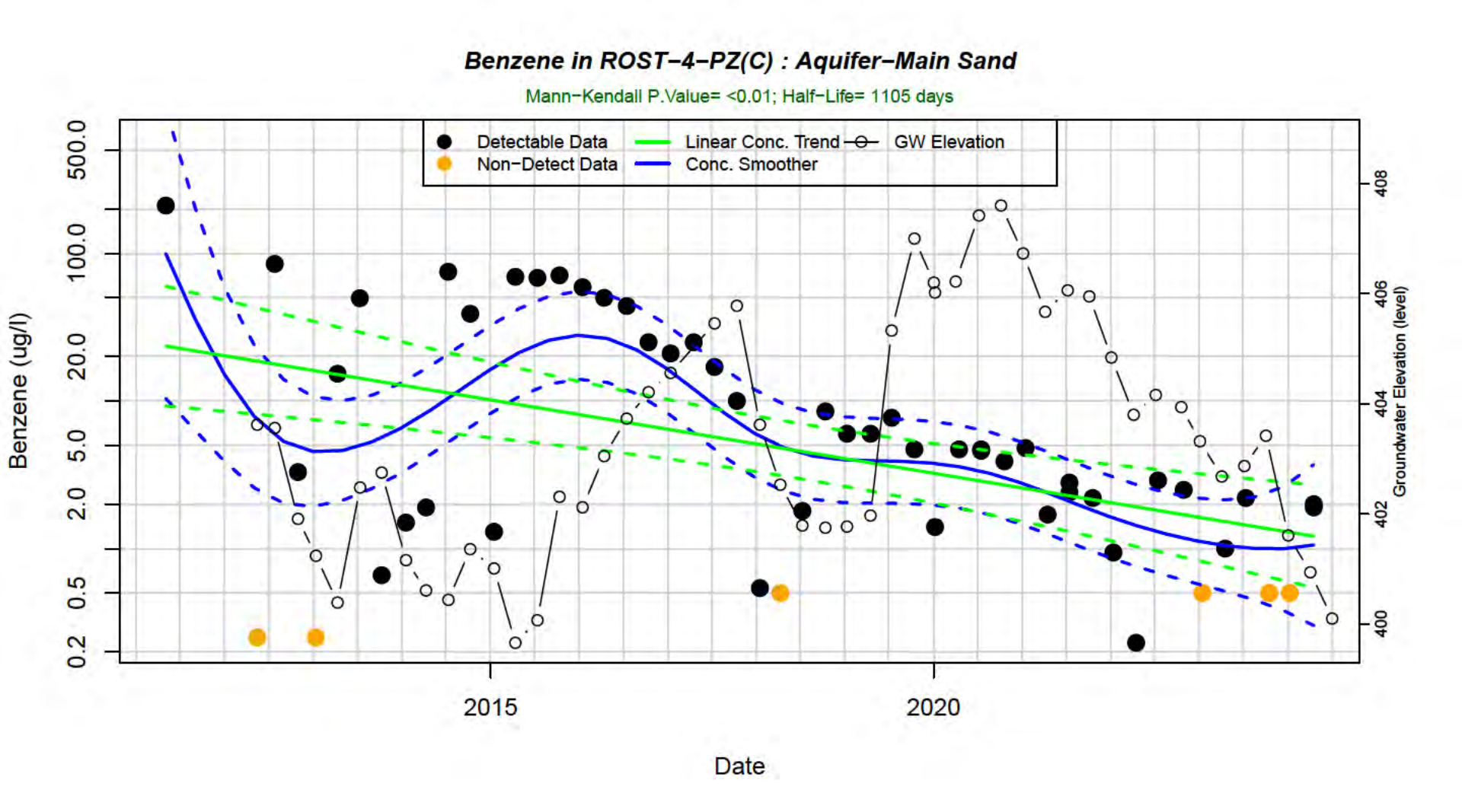
mg/L = milligrams per liter

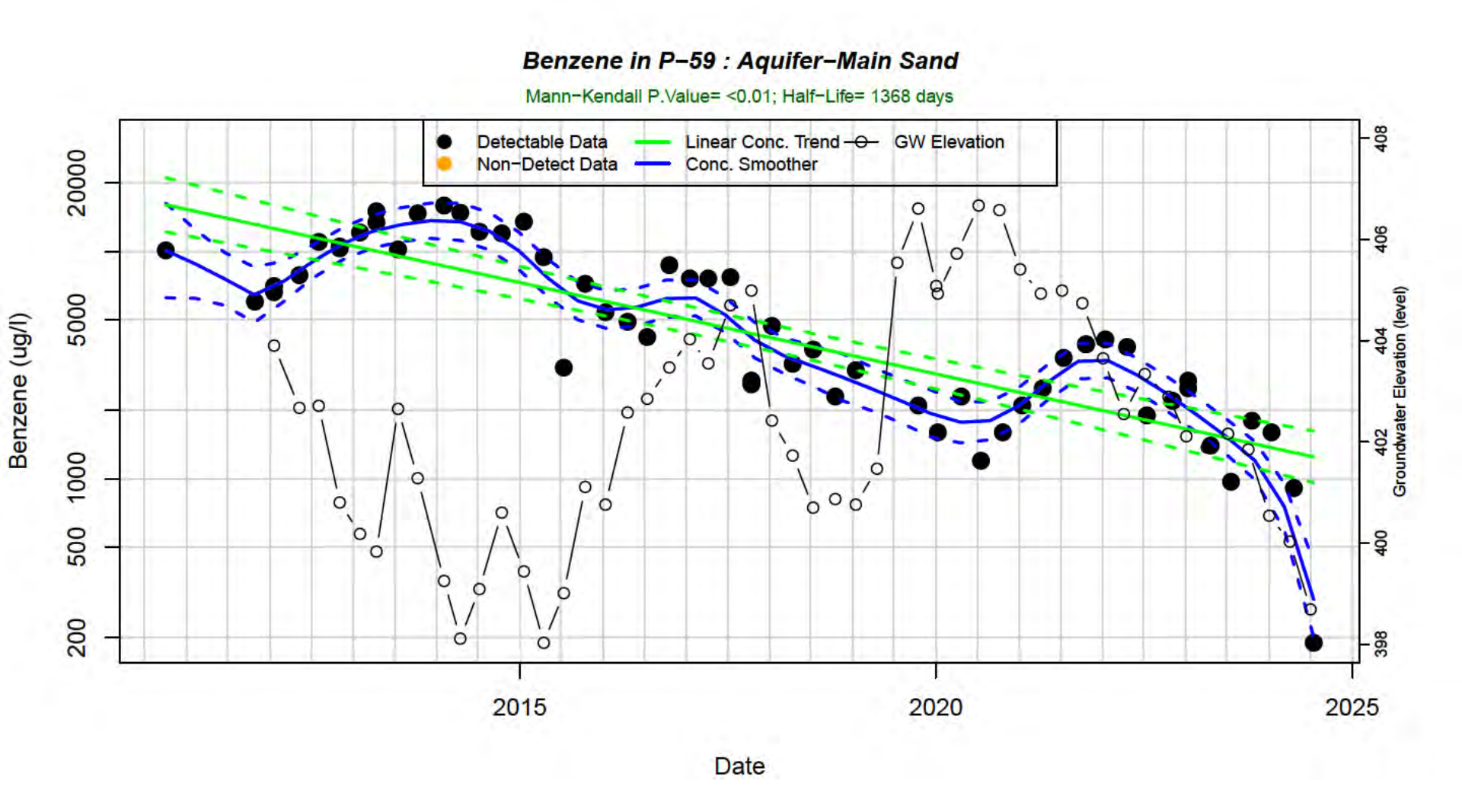
Duplicate values were averaged.

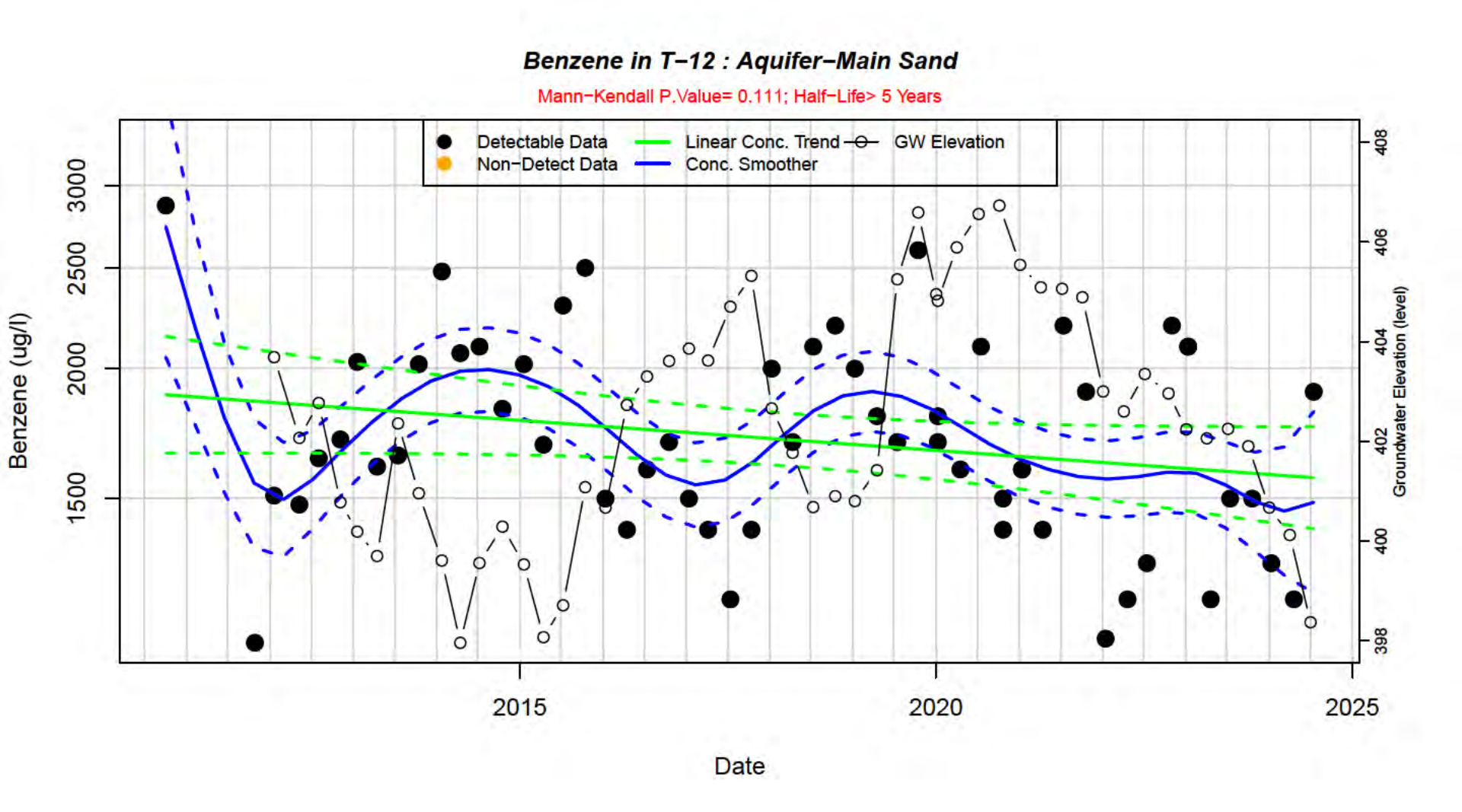
Timeframe specific to available data.

4th Street Area

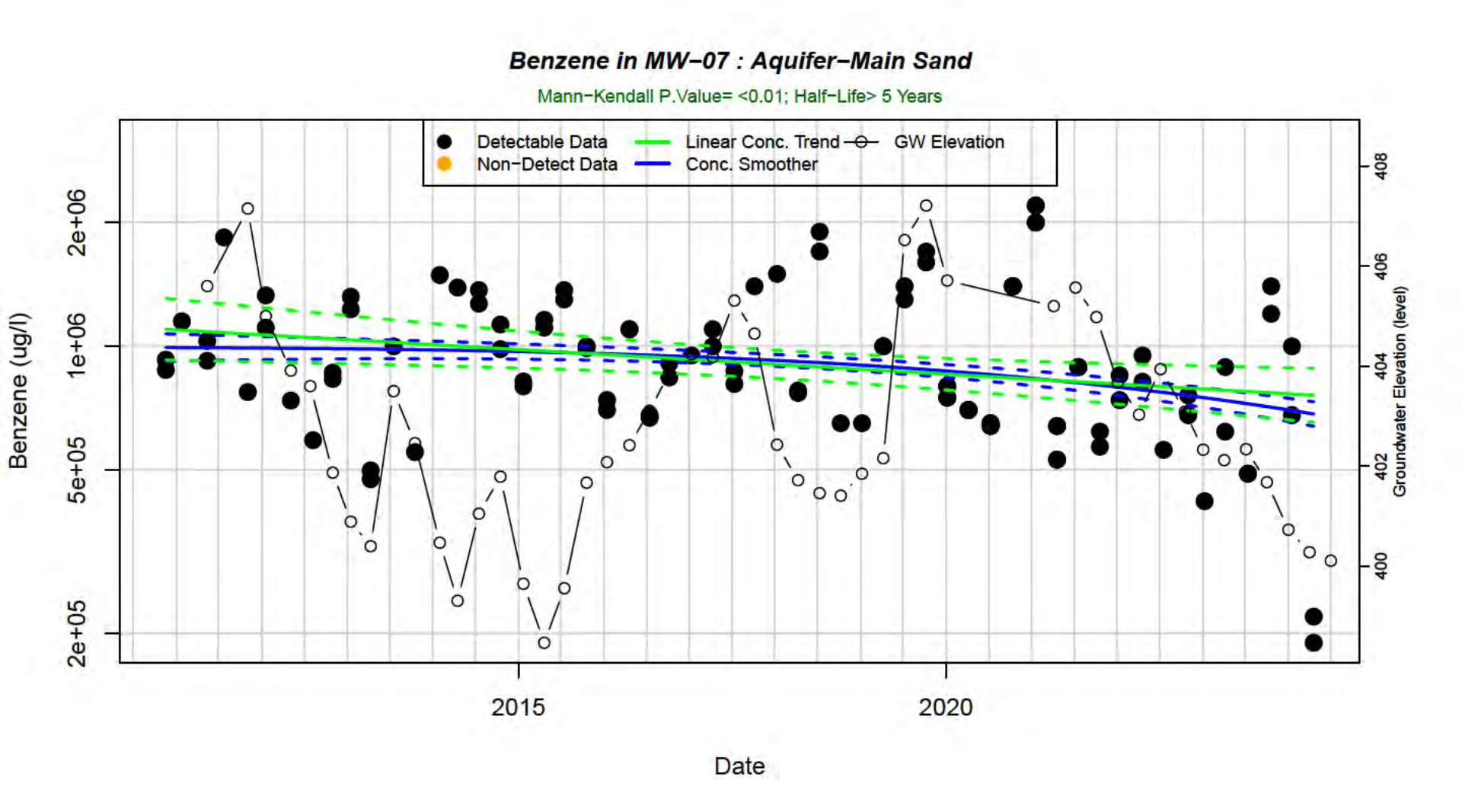

Benzene in MW-22 : Aquifer-Main Sand
Mann-Kendall P.Value= <0.01; Half-Life= 443 days
Detectable Data
Non-Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
10000
1000
100
10
1
Groundwater Elevation (level)
408
406
404
402
400
2014
2016
2018
2020
2022
2024
Date

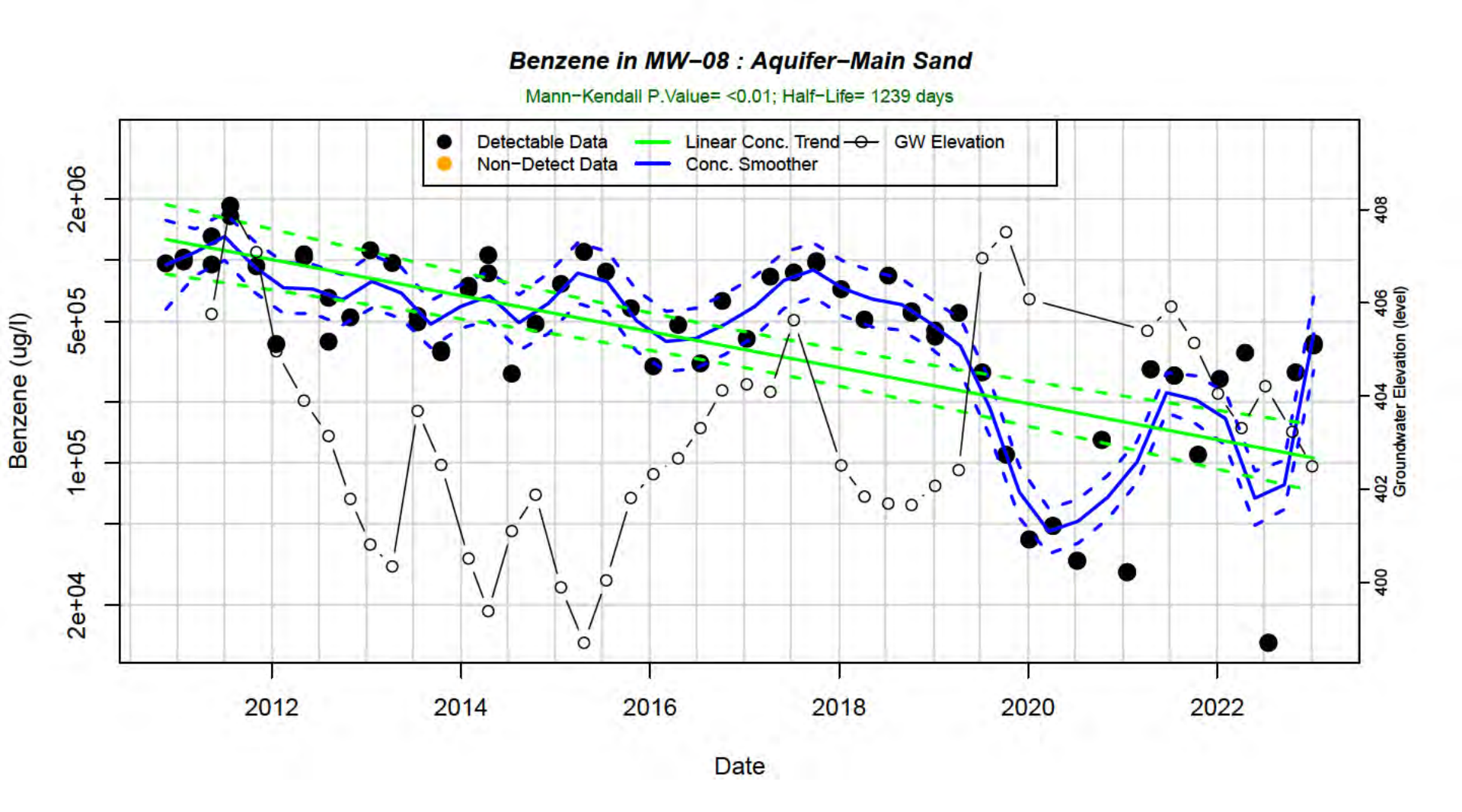

Benzene in ROST−4−PZ(C) : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1105 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
0.2
0.5
2.0
5.0
20.0
100.0
500.0
Groundwater Elevation (level)
400
402
404
406
408
2015
2020
Date

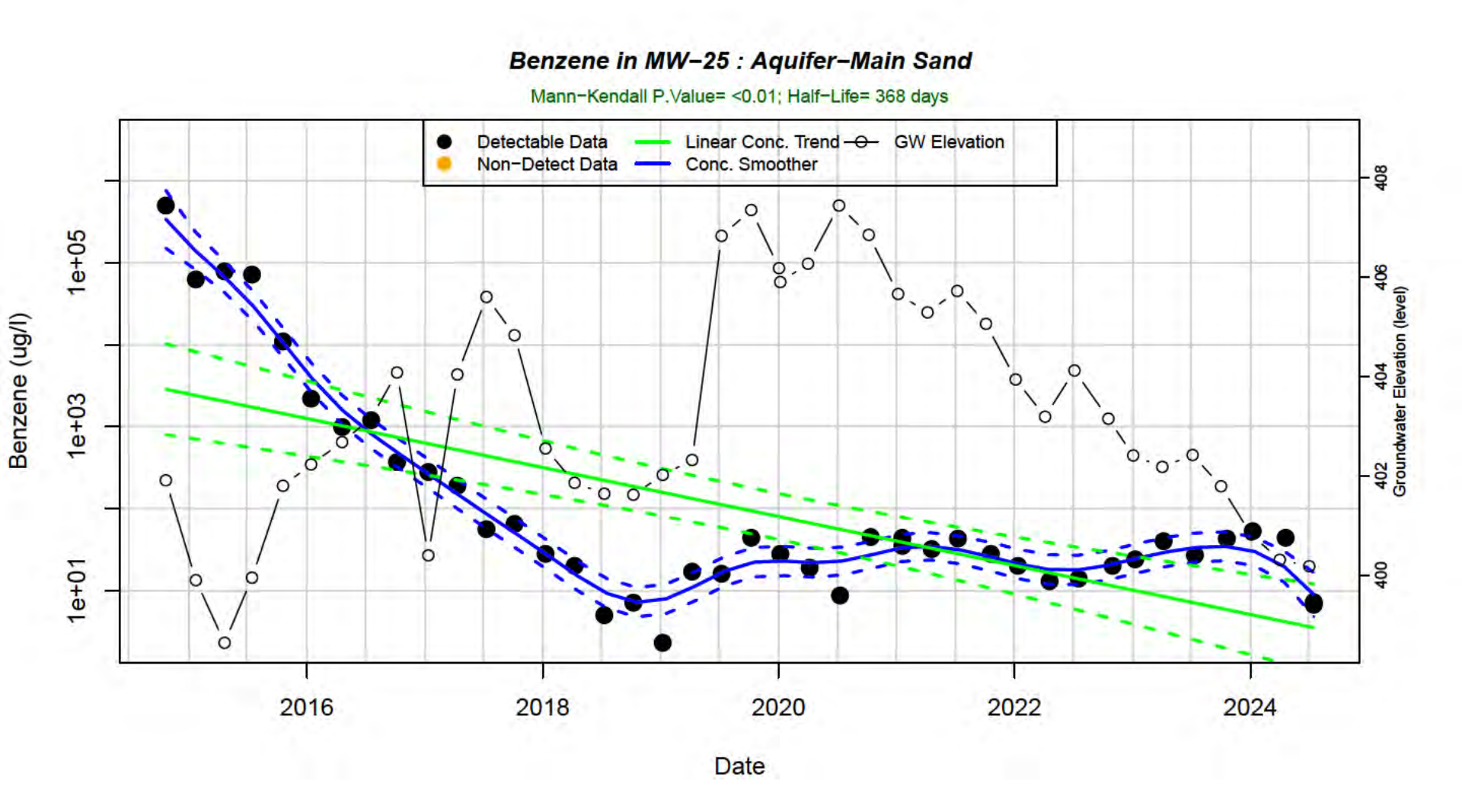

Benzene in P−59 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1368 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
200
500
1000
5000
20000
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

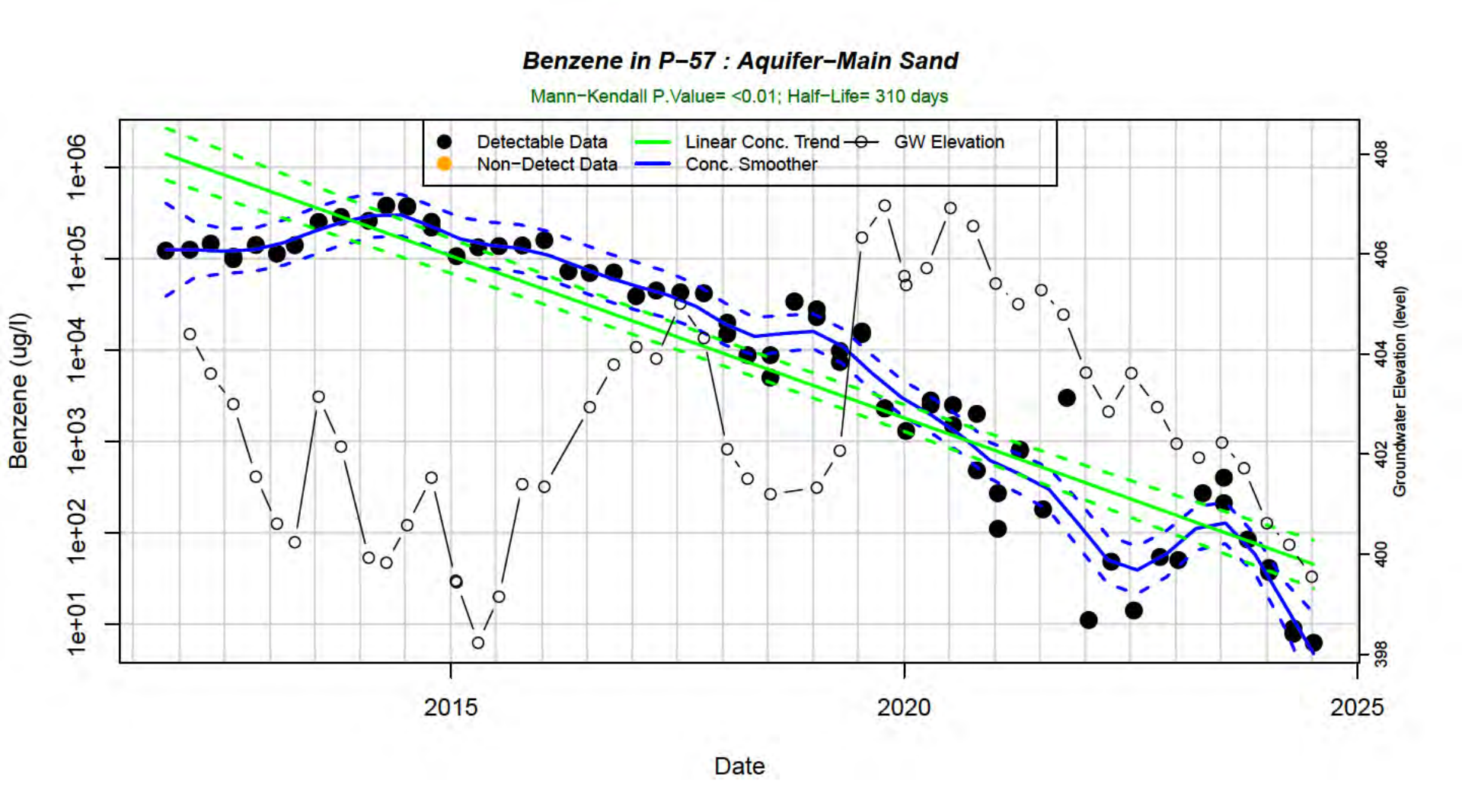

Benzene in T−12 : Aquifer−Main Sand
Mann−Kendall P.Value= 0.111; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1500
2000
2500
3000
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

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)
2e+05
5e+05
1e+06
2e+06
Groundwater Elevation (level)
400
402
404
406
408
2015
2020
Date


Benzene in MW−08 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1239 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
2e+04
1e+05
5e+05
2e+06
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
Date


Benzene in MW-25 : Aquifer-Main Sand
Mann-Kendall P.Value= <0.01; Half-Life= 368 days
Detectable Data
Non-Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1e+01
1e+03
1e+05
Groundwater Elevation (level)
400
402
404
406
408
2016
2018
2020
2022
2024
Date


Benzene in P−57 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 310 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (ug/l)
1e+01
1e+02
1e+03
1e+04
1e+05
1e+06
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

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