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)

4 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 Gary Ko.

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

January 31, 2025

Mr. Joshua Rhoades
Manager, Permit Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
Bureau of Land
2520 West Iles Avenue
Springfield, Illinois 62704

Groundwater Monitoring Report – 4th 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. Gary Ko, 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: 4th 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
Gary Ko, 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

4th Quarter 2024 Report

Roxana Interim Groundwater Monitoring Program

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

Project number: 60721927

January 2025

Delivering a better world

Quality information

Prepared by	Checked by	Verified by	Approved by
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Revision History

Revision	Revision date	Details	Authorized	Name	Position

Distribution List

# 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. Gary Ko IEPA, Springfield
None	Yes	IEPA Collinsville FOS IEPA, Collinsville
None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
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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 4th Quarter 2024 (4Q24) 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 groundwater-related regulatory correspondence between AECOM, on behalf of Shell, and the IEPA during this reporting period (October 2024 through December 2024); prior regulatory-related correspondences can be found in **Appendix A**.

Groundwater samples were collected and analyzed during 4Q24 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

The following additional work activities were conducted during 4Q24.

- Groundwater monitoring wells in the Interim Groundwater Monitoring Program, and the wells in the WRR Program, were surveyed by a licensed surveyor, in accordance with Permit Condition IV.J.9, which requires wells be surveyed every five (5) years. Surveying was performed in October and November 2024. Updated well coordinates and elevations will be incorporated beginning in the 1st quarter 2025.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between October 1st and 3rd, 2024. The gauging activities were conducted in conjunction with the 4Q24 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 October 4th through 18th, 2024. Groundwater samples were collected using the most current low-flow groundwater purging and sampling related SOPs, which have previously been provided to IEPA. Data are included in this report and discussed in **Section 3**.

Groundwater monitoring wells MW-1 through MW-6, 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

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

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

Groundwater monitoring wells located inside the WRR and designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-66, and P-68, contained LNAPL when gauged and, therefore, were not sampled.

Groundwater monitoring well MW-7, located within the Roxana Former Public Works Yard and designated for sampling in the Interim Groundwater Monitoring Program, was not sampled due to operation of the PWY SEE System, as approved in the August 22, 2022 IEPA letter (IEPA 2022) in response to the PWY SEE Work Plan (AECOM 2022a).

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 4Q24 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 4Q24 event was conducted between October 1st and October 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 risen approximately 0.27 foot since the 3Q24 gauging event. Groundwater levels in wells in the central and eastern portions of the WRR have risen approximately 0.17 foot since the 3Q24 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 4Q24 event. The potentiometric surface observed during the 4Q24 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 4Q24 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 0.17 to 0.32 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 4Q24 gauging event. Measured LNAPL thickness and the number of locations where it was observed during the 4Q24 quarterly gauging events was generally comparable to that observed in 3Q24.

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 4Q24, LNAPL was observed in groundwater monitoring wells P-55R, 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 15 sample delivery groups (SDGs) were prepared and sent to EETA Southeast for the 4Q24 event. Fifty different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 50 samples included 39 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 4Q24 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 15 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

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

[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 3Q24 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
- Naphthalene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethlybenzene
- 2-Methylnaphthalene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 4Q24. 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 4Q24, 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 4Q24 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 4Q24, 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 0.25 foot since the 3Q24 gauging event. Groundwater levels in most wells in the central and eastern portion of the WRR have risen approximately 0.1 foot since the 3Q24 gauging event.
- Measured LNAPL thickness and the number of locations where it was observed during the 4Q24 quarterly gauging events was generally comparable to that observed in 3Q24. 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 1Q25 Roxana Interim Groundwater Monitoring program.
- The analytical results from 4Q24 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, 2022 (AECOM, 2022a); *Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan*. Prepared for Shell Oil Products US (Shell), dated January 31, 2022.

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 December 6, 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 December 6, 2024.

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 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 December 6, 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											
1Q24	442.83	1/3/2024	NE	42.11	NA	NA	NA	400.72	394.03 - 384.03 (48.80 - 58.80)	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	*
4Q24		10/2/2024	NE	42.80	NA	NA	NA	400.03		0.0	*
MW-02											
1Q24	443.93	1/2/2024	NE	43.38	NA	NA	NA	400.55	394.06 - 384.06 (49.87 - 59.87)	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	*
4Q24		10/1/2024	NE	44.20	NA	NA	NA	399.73		173.2	*
MW-03											
1Q24	430.23	1/3/2024	NE	29.46	NA	NA	NA	400.77	395.56 - 385.56 (34.67 - 44.67)	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	*
4Q24		10/2/2024	NE	29.68	NA	NA	NA	400.55		0.0	*
MW-04											
1Q24	441.31	1/3/2024	NE	40.55	NA	NA	NA	400.76	396.25 - 386.25 (45.06 - 55.06)	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	*
4Q24		10/2/2024	NE	41.00	NA	NA	NA	400.31		0.0	*
MW-05											
1Q24	429.98	1/3/2024	NE	29.11	NA	NA	NA	400.87	396.01 - 386.01 (33.97 - 43.97)	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	*
4Q24		10/2/2024	NE	29.28	NA	NA	NA	400.70		0.0	*
MW-06A											
1Q24	432.33	1/3/2024	NE	31.36	NA	NA	NA	400.97	398.48 - 388.48 (33.85 - 43.85)	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	*
4Q24		10/2/2024	NE	31.28	NA	NA	NA	401.05		0.0	*
MW-06B											
1Q24	432.37	1/3/2024	NE	31.30	NA	NA	NA	401.07	368.32 - 363.32 (64.05 - 69.05)	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	*
4Q24		10/2/2024	NE	31.33	NA	NA	NA	401.04		0.0	*
MW-06C											
1Q24	432.18	1/3/2024	NE	31.10	NA	NA	NA	401.08	347.23 - 342.23 (84.95 - 89.95)	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	*
4Q24		10/2/2024	NE	31.10	NA	NA	NA	401.08		0.0	*
MW-06D											
1Q24	432.06	1/3/2024	NE	30.30	NA	NA	NA	401.76	327.34 - 322.34 (104.72 - 109.72)	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	*
4Q24		10/2/2024	NE	30.95	NA	NA	NA	401.11		0.0	*
MW-07											
1Q24	443.31	1/2/2024	NE	42.58	NA	NA	NA	400.73	400.39 - 390.39 (42.92 - 52.92)	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	
4Q24		10/1/2024	NE	42.90	NA	NA	NA	400.41		0.1	*
MW-09											
1Q24	445.28	1/2/2024	NE	44.07	NA	NA	NA	401.21	399.24 - 389.24 (46.04 - 56.04)	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	*
4Q24		10/1/2024	NE	44.85	NA	NA	NA	400.43		0.0	*
MW-10											
1Q24	445.06	1/2/2024	NE	43.93	NA	NA	NA	401.13	400.63 - 390.63 (44.43 - 54.43)	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	
4Q24		10/1/2024	NE	44.95	NA	NA	NA	400.11		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											
1Q24	442.38	1/2/2024	NE	41.73	NA	NA	NA	400.65	400.72 - 390.72 (41.66 - 51.66)	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	
4Q24		10/1/2024	NE	42.65	NA	NA	NA	399.73		0.0	
MW-12											
1Q24	442.64	1/3/2024	NE	41.88	NA	NA	NA	400.76	400.72 - 390.72 (41.92 - 51.92)	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	
4Q24		10/2/2024	NE	42.58	NA	NA	NA	400.06		0.0	
MW-13											
1Q24	430.30	1/3/2024	NE	29.21	NA	NA	NA	401.09	405.50 - 395.50 (24.80 - 34.80)	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	
4Q24		10/2/2024	NE	28.88	NA	NA	NA	401.42		0.0	
MW-14											
1Q24	434.61	1/4/2024	NE	33.47	NA	NA	NA	401.14	401.19 - 391.19 (33.42 - 43.42)	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	
4Q24		10/3/2024	NE	33.40	NA	NA	NA	401.21		59.0	*
MW-16											
1Q24	443.60	1/3/2024	NE	42.88	NA	NA	NA	400.72	406.10 - 396.10 (37.50 - 47.50)	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	
4Q24		10/1/2024	NE	44.00	NA	NA	NA	399.60		0.0	
MW-17											
1Q24	441.78	1/2/2024	NE	41.07	NA	NA	NA	400.71	407.49 - 392.49 (34.29 - 49.29)	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	
4Q24		10/1/2024	NE	42.98	NA	NA	NA	398.80		0.0	
MW-18											
1Q24	442.24	1/2/2024	NE	41.63	NA	NA	NA	400.61	407.32 - 392.32 (34.92 - 49.92)	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	
4Q24		10/1/2024	NE	43.48	NA	NA	NA	398.76		0.0	
MW-19											
1Q24	442.98	1/2/2024	NE	42.43	NA	NA	NA	400.55	406.64 - 391.64 (36.34 - 51.34)	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	
4Q24		10/1/2024	NE	44.00	NA	NA	NA	398.98		0.0	
MW-20											
1Q24	443.86	1/2/2024	NE	43.34	NA	NA	NA	400.52	407.98 - 392.98 (35.88 - 50.88)	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	
4Q24		10/1/2024	NE	44.50	NA	NA	NA	399.36		0.3	
MW-21											
1Q24	444.01	1/2/2024	NE	43.39	NA	NA	NA	400.62	409.00 - 394.00 (35.01 - 50.01)	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	
4Q24		10/1/2024	NE	44.03	NA	NA	NA	399.98		0.0	
MW-22											
1Q24	442.38	1/11/2024	NE	41.71	NA	NA	NA	400.67	403.95 - 393.95 (38.43 - 48.43)	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	
4Q24		10/1/2024	NE	42.85	NA	NA	NA	399.53		0.0	
MW-23											
1Q24	431.57	1/3/2024	NE	30.71	NA	NA	NA	400.86	402.55 - 392.55 (29.02 - 39.02)	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	
4Q24		10/2/2024	NE	30.50	NA	NA	NA	401.07		0.3	

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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											
1Q24	443.65	1/2/2024	NE	42.77	NA	NA	NA	400.88	404.04 - 394.04 (39.61 - 49.61)	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	
4Q24		10/1/2024	NE	43.58	NA	NA	NA	400.07		0.0	
MW-25											
1Q24	438.53	1/3/2024	NE	37.71	NA	NA	NA	400.82	402.94 - 392.94 (35.59 - 45.59)	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	
4Q24		10/2/2024	NE	38.03	NA	NA	NA	400.50		0.2	
MW-26											
1Q24	441.23	1/3/2024	NE	40.47	NA	NA	NA	400.76	403.08 - 393.08 (38.15 - 48.15)	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	
4Q24		10/2/2024	NE	41.05	NA	NA	NA	400.18		0.0	
MW-27											
1Q24	443.60	1/2/2024	NE	41.70	NA	NA	NA	401.90	403.81 - 393.81 (39.79 - 49.79)	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	
4Q24		10/1/2024	NE	42.63	NA	NA	NA	400.97		0.0	
MW-28											
1Q24	443.55	1/2/2024	NE	40.72	NA	NA	NA	402.83	409.94 - 399.94 (33.61 - 43.61)	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	
4Q24		10/1/2024	NE	41.83	NA	NA	NA	401.72		0.0	
P-01											
1Q24	442.98	1/4/2024	NE	37.34	NA	NA	NA	405.64	380.76 - 375.76 (62.22 - 67.22)	0.0	*
2Q24		4/10/2024	NE	37.74	NA	NA	NA	405.24		0.0	*
3Q24		7/2/2024	NE	36.93	NA	NA	NA	406.05		0.0	*
4Q24		10/3/2024	NE	36.51	NA	NA	NA	406.47		0.0	*
P-4U											
1Q24	442.74	1/4/2024	NE	38.46	NA	NA	NA	404.28	361.59 - 359.59 (81.15 - 83.15)	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	*
4Q24		10/3/2024	NE	37.86	NA	NA	NA	404.88		0.0	*
P-5L											
1Q24	444.01	1/4/2024	NE	38.57	NA	NA	NA	405.44	303.61 - 301.61 (140.40 - 142.40)	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	*
4Q24		10/3/2024	NE	38.12	NA	NA	NA	405.89		0.0	*
P-5U											
1Q24	444.42	1/4/2024	NE	39.94	NA	NA	NA	404.48	313.79 - 311.79 (130.63 - 132.63)	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	*
4Q24		10/3/2024	NE	39.17	NA	NA	NA	405.25		0.0	*
P-6U											
1Q24	443.63	1/4/2024	NE	39.11	NA	NA	NA	404.52	363.13 - 361.13 (80.50 - 82.50)	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	*
4Q24		10/3/2024	NE	38.77	NA	NA	NA	404.86		0.0	*
P-7U											
1Q24	444.08	1/4/2024	NE	39.32	NA	NA	NA	404.76	383.00 - 381.00 (61.08 - 63.08)	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	*
4Q24		10/3/2024	NE	39.10	NA	NA	NA	404.98		0.0	*
P-8U											
1Q24	442.07	1/2/2024	NE	39.04	NA	NA	NA	403.03	382.72 - 380.72 (59.35 - 61.35)	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	*
4Q24		10/3/2024	NE	38.95	NA	NA	NA	403.12		0.0	*

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P-9U											
1Q24	445.20	1/2/2024	NE	43.68	NA	NA	NA	401.52	344.61 - 342.61 (100.59 - 102.59)	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	*
4Q24		10/3/2024	NE	43.58	NA	NA	NA	401.62		0.0	*
P-11L											
1Q24	442.76	1/4/2024	NE	40.10	NA	NA	NA	402.66	332.55 - 330.55 (110.21 - 112.21)	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	*
4Q24		10/3/2024	NE	39.52	NA	NA	NA	403.24		0.0	*
P-11U											
1Q24	443.38	1/4/2024	NE	40.74	NA	NA	NA	402.64	343.46 - 341.46 (99.92 - 101.92)	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	*
4Q24		10/3/2024	NE	40.13	NA	NA	NA	403.25		0.0	*
P-14											
1Q24	443.01	1/4/2024	NE	37.39	NA	NA	NA	405.62	395.54 - 385.54 (47.47 - 57.47)	0.0	*
2Q24		4/10/2024	NE	37.81	NA	NA	NA	405.20		0.0	*
3Q24		7/2/2024	NE	37.05	NA	NA	NA	405.96		0.7	*
4Q24		10/3/2024	NE	36.62	NA	NA	NA	406.39		0.0	*
P-15											
1Q24	443.88	1/4/2024	NE	39.04	NA	NA	NA	404.84	398.43 - 388.43 (45.45 - 55.45)	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	*
4Q24		10/3/2024	NE	38.50	NA	NA	NA	405.38		0.0	*
P-16											
1Q24	442.84	1/4/2024	NE	38.03	NA	NA	NA	404.81	397.10 - 387.10 (45.74 - 55.74)	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	*
4Q24		10/3/2024	NE	37.55	NA	NA	NA	405.29		0.0	*
P-43											
1Q24	444.62	1/4/2024	NE	41.60	NA	NA	NA	403.02	381.06 - 371.06 (63.56 - 73.56)	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	*
4Q24		10/3/2024	NE	41.01	NA	NA	NA	403.61		0.0	*
P-53											
1Q24	446.57	1/2/2024	NE	43.97	NA	NA	NA	402.60	406.26 - 381.26 (40.31 - 65.31)	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	
4Q24		10/1/2024	NE	44.83	NA	NA	NA	401.74		0.0	
P-54											
1Q24	442.52	1/5/2024	NE	41.60	NA	NA	NA	400.92	404.52 - 379.52 (38.00 - 63.00)	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	
4Q24		10/1/2024	NE	42.20	NA	NA	NA	400.32		0.0	
P-55R											
1Q24	444.01	1/2/2024	41.11	41.13	402.88	402.90	0.02	402.90	403.58 - 393.58 (40.43 - 50.43)	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	
4Q24		10/1/2024	41.61	41.90	402.11	402.40	0.29	402.34		0.5	
P-56											
1Q24	446.32	1/2/2024	NE	45.87	NA	NA	NA	400.45	405.50 - 380.50 (40.82 - 65.82)	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	
4Q24		10/1/2024	NE	46.96	NA	NA	NA	399.36		0.0	
P-57											
1Q24	447.15	1/2/2024	NE	46.53	NA	NA	NA	400.62	402.96 - 392.96 (44.19 - 54.19)	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	
4Q24		10/1/2024	NE	47.12	NA	NA	NA	400.03		0.0	

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P-58											
1Q24	445.16	1/2/2024	NE	44.42	NA	NA	NA	400.74	404.95 - 379.95 (40.21 - 65.21)	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	
4Q24		10/1/2024	NE	44.76	NA	NA	NA	400.40		0.0	
P-59											
1Q24	447.07	1/2/2024	NE	46.53	NA	NA	NA	400.54	399.16 - 374.16 (47.91 - 72.91)	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	
4Q24		10/1/2024	NE	48.08	NA	NA	NA	398.99		0.0	
P-60											
1Q24	446.88	1/2/2024	NE	46.13	NA	NA	NA	400.75	402.23 - 382.23 (44.65 - 64.65)	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	
4Q24		10/1/2024	47.77	47.78	399.10	399.11	0.01	399.11		96.5	
P-61											
1Q24	444.66	1/3/2024	44.25	46.50	398.16	400.41	2.25	399.96	398.99 - 373.99 (45.68 - 70.68)	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	
4Q24		10/1/2024	45.58	47.24	397.42	399.08	1.66	398.75		119.4	
P-62											
1Q24	442.60	1/3/2024	42.06	43.34	399.26	400.54	1.28	400.28	401.13 - 376.13 (41.47 - 66.47)	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	
4Q24		10/1/2024	43.21	43.71	398.89	399.39	0.50	399.29		0.0	
P-63											
1Q24	446.06	1/3/2024	NE	46.19	NA	NA	NA	399.87	398.77 - 373.77 (47.29 - 72.29)	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	*
4Q24		10/2/2024	46.39	46.40	399.66	399.67	0.01	399.67		13.1	*
P-64											
1Q24	446.78	1/3/2024	47.34	47.45	399.33	399.44	0.11	399.42	399.55 - 374.55 (47.23 - 72.23)	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	
4Q24		10/1/2024	47.34	47.72	399.06	399.44	0.38	399.36		32.3	
P-65											
1Q24	444.77	1/3/2024	NE	44.82	NA	NA	NA	399.95	397.75 - 372.75 (47.02 - 72.02)	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	*
4Q24		10/1/2024	NE	44.76	NA	NA	NA	400.01		22.4	*
P-66											
1Q24	437.00	1/4/2024	35.97	37.00	400.00	401.03	1.03	400.82	402.28 - 377.28 (34.72 - 59.72)	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	
4Q24		10/3/2024	36.33	36.65	400.35	400.67	0.32	400.61		0.0	
P-67											
1Q24	444.30	1/4/2024	NE	42.73	NA	NA	NA	401.57	402.33 - 377.33 (41.98 - 66.98)	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	
4Q24		10/3/2024	NE	42.55	NA	NA	NA	401.75		0.0	
P-68											
1Q24	445.38	1/3/2024	44.57	44.64	400.74	400.81	0.07	400.80	401.62 - 376.62 (43.76 - 68.76)	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	
4Q24		10/2/2024	46.19	46.36	399.02	399.19	0.17	399.16		215.5	
P-69											
1Q24	443.77	1/3/2024	NE	43.56	NA	NA	NA	400.21	402.95 - 377.95 (40.82 - 65.82)	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	
4Q24		10/1/2024	NE	45.73	NA	NA	NA	398.04		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-70											
1Q24	443.11	1/3/2024	NE	42.82	NA	NA	NA	400.29	398.44 - 373.44 (44.67 - 69.67)	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	*
4Q24		10/1/2024	44.11	45.03	398.08	399.00	0.92	398.82		277.9	*
P-71											
1Q24	445.09	1/3/2024	NE	44.17	NA	NA	NA	400.92	402.48 - 377.48 (42.61 - 67.61)	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	
4Q24		10/2/2024	NE	44.51	NA	NA	NA	400.58		6.0	
P-72											
1Q24	444.70	1/3/2024	NE	43.71	NA	NA	NA	400.99	398.93 - 373.93 (45.77 - 70.77)	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	*
4Q24		10/2/2024	NE	44.02	NA	NA	NA	400.68		12.2	*
P-73											
1Q24	444.02	1/3/2024	NE	43.56	NA	NA	NA	400.46	402.43 - 377.43 (41.60 - 66.60)	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	
4Q24		10/2/2024	NE	44.14	NA	NA	NA	399.88		0.2	
P-74											
1Q24	442.93	1/3/2024	NE	42.44	NA	NA	NA	400.49	399.10 - 374.10 (43.83 - 68.83)	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	
4Q24		10/1/2024	NE	44.38	NA	NA	NA	398.55		76.4	
P-75											
1Q24	446.68	1/4/2024	NE	45.93	NA	NA	NA	400.75	403.55 - 378.55 (43.13 - 68.13)	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	
4Q24		10/3/2024	NE	46.20	NA	NA	NA	400.48		1.2	
P-82A											
1Q24	434.94	1/4/2024	NE	31.02	NA	NA	NA	403.92	401.73 - 386.73 (33.21 - 48.21)	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	*
4Q24		10/3/2024	NE	30.09	NA	NA	NA	404.85		0.0	*
P-82B											
1Q24	434.68	1/4/2024	NE	30.74	NA	NA	NA	403.94	371.88 - 369.88 (62.80 - 64.80)	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	*
4Q24		10/3/2024	NE	29.82	NA	NA	NA	404.86		0.0	*
P-82C											
1Q24	434.41	1/4/2024	NE	30.45	NA	NA	NA	403.96	351.64 - 349.64 (82.77 - 84.77)	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	*
4Q24		10/3/2024	NE	29.52	NA	NA	NA	404.89		0.0	*
P-82D											
1Q24	435.09	1/4/2024	NE	31.21	NA	NA	NA	403.88	323.55 - 321.55 (111.54 - 113.54)	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	*
4Q24		10/3/2024	NE	30.28	NA	NA	NA	404.81		0.0	*
P-83A											
1Q24	445.54	1/2/2024	NE	44.82	NA	NA	NA	400.72	398.14 - 383.14 (47.40 - 62.40)	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	*
4Q24		10/3/2024	NE	45.00	NA	NA	NA	400.54		0.0	*
P-83B											
1Q24	445.77	1/2/2024	NE	44.90	NA	NA	NA	400.87	371.97 - 369.97 (73.80 - 75.80)	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	*
4Q24		10/3/2024	NE	45.26	NA	NA	NA	400.51		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											
1Q24	445.95	1/2/2024	NE	45.20	NA	NA	NA	400.75	353.56 - 351.56 (92.39 - 94.39)	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	*
4Q24		10/3/2024	NE	45.41	NA	NA	NA	400.54		0.0	*
P-83D											
1Q24	445.86	1/2/2024	NE	44.98	NA	NA	NA	400.88	312.06 - 310.06 (133.80 - 135.80)	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	*
4Q24		10/3/2024	NE	45.34	NA	NA	NA	400.52		0.0	*
P-84A											
1Q24	446.63	1/3/2024	NE	44.84	NA	NA	NA	401.79	397.71 - 382.71 (48.92 - 63.92)	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	*
4Q24		10/2/2024	NE	45.60	NA	NA	NA	401.03		0.0	*
P-84B											
1Q24	446.35	1/3/2024	NE	44.57	NA	NA	NA	401.78	372.85 - 370.85 (73.50 - 75.50)	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	*
4Q24		10/2/2024	NE	45.35	NA	NA	NA	401.00		0.4	*
P-84C											
1Q24	446.37	1/3/2024	NE	44.57	NA	NA	NA	401.80	352.32 - 350.32 (94.05 - 96.05)	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	*
4Q24		10/2/2024	NE	45.38	NA	NA	NA	400.99		0.4	*
P-84D											
1Q24	446.38	1/3/2024	NE	44.57	NA	NA	NA	401.81	325.55 - 323.55 (120.83 - 122.83)	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	*
4Q24		10/2/2024	NE	45.35	NA	NA	NA	401.03		0.4	*
P-88A											
1Q24	443.27	1/4/2024	NE	36.97	NA	NA	NA	406.30	404.87 - 389.87 (38.40 - 53.40)	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	*
4Q24		10/3/2024	NE	36.45	NA	NA	NA	406.82		0.0	*
P-88B											
1Q24	443.35	1/4/2024	NE	37.03	NA	NA	NA	406.32	371.70 - 369.70 (71.65 - 73.65)	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	*
4Q24		10/3/2024	NE	36.52	NA	NA	NA	406.83		0.0	*
P-88C											
1Q24	443.31	1/4/2024	NE	36.99	NA	NA	NA	406.32	351.01 - 349.01 (92.30 - 94.30)	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	*
4Q24		10/3/2024	NE	36.48	NA	NA	NA	406.83		0.0	*
P-88D											
1Q24	443.38	1/4/2024	NE	37.10	NA	NA	NA	406.28	331.21 - 329.21 (112.17 - 114.17)	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	*
4Q24		10/3/2024	NE	36.55	NA	NA	NA	406.83		0.0	*
P-89B											
1Q24	447.64	1/3/2024	NE	46.47	NA	NA	NA	401.17	370.28 - 368.28 (77.36 - 79.36)	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	*
4Q24		10/3/2024	NE	46.01	NA	NA	NA	401.63		0.0	*
P-89C											
1Q24	447.96	1/3/2024	NE	46.86	NA	NA	NA	401.10	351.56 - 349.56 (96.40 - 98.40)	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	*
4Q24		10/3/2024	NE	46.38	NA	NA	NA	401.58		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-89D											
1Q24	447.83	1/3/2024	NE	46.88	NA	NA	NA	400.95	309.33 - 307.33 (138.50 - 140.50)	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	*
4Q24		10/3/2024	NE	46.42	NA	NA	NA	401.41		0.0	*
P-91A											
1Q24	447.43	1/2/2024	48.75	48.76	398.67	398.68	0.01	398.68	395.92 - 380.92 (51.52 - 66.52)	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	*
4Q24		10/1/2024	48.46	48.48	398.95	398.97	0.02	398.97		103.3	*
P-91B											
1Q24	447.47	1/2/2024	NE	48.78	NA	NA	NA	398.69	372.78 - 370.78 (74.69 - 76.69)	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	*
4Q24		10/1/2024	NE	48.49	NA	NA	NA	398.98		0.0	*
P-91C											
1Q24	447.27	1/2/2024	NE	48.54	NA	NA	NA	398.73	352.54 - 350.54 (94.73 - 96.73)	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	*
4Q24		10/1/2024	NE	48.26	NA	NA	NA	399.01		0.0	*
P-91D											
1Q24	447.26	1/2/2024	NE	48.81	NA	NA	NA	398.45	278.94 - 276.94 (168.32 - 170.32)	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	*
4Q24		10/1/2024	NE	48.27	NA	NA	NA	398.99		0.0	*
P-92A											
1Q24	446.39	1/3/2024	46.84	46.87	399.52	399.55	0.03	399.54	398.82 - 383.82 (47.57 - 62.57)	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	*
4Q24		10/2/2024	46.75	46.78	399.61	399.64	0.03	399.63		5.5	*
P-92B											
1Q24	446.33	1/3/2024	NE	46.81	NA	NA	NA	399.52	371.92 - 369.92 (74.41 - 76.41)	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	*
4Q24		10/2/2024	NE	46.69	NA	NA	NA	399.64		0.0	*
P-92C											
1Q24	446.34	1/3/2024	NE	46.79	NA	NA	NA	399.55	353.38 - 348.38 (92.96 - 97.96)	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	*
4Q24		10/2/2024	NE	46.67	NA	NA	NA	399.67		0.0	*
P-92D											
1Q24	446.15	1/3/2024	NE	45.68	NA	NA	NA	400.47	305.15 - 303.15 (141.00 - 143.00)	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	*
4Q24		10/2/2024	NE	46.55	NA	NA	NA	399.60		0.0	*
P-93A											
1Q24	445.37	1/2/2024	NE	44.71	NA	NA	NA	400.66	402.30 - 392.30 (43.07 - 53.07)	0.4	
2Q24		4/1/2024	NE	45.12	NA	NA	NA	400.25		0.0	
3Q24		7/1/2024	NE	45.68	NA	NA	NA	399.69		0.0	
4Q24		10/1/2024	NE	45.24	NA	NA	NA	400.13		0.0	
P-93B											
1Q24	446.70	1/2/2024	NE	46.07	NA	NA	NA	400.63	371.92 - 369.92 (74.78 - 76.78)	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	*
4Q24		10/1/2024	NE	46.65	NA	NA	NA	400.05		213.6	*
P-93C											
1Q24	446.55	1/2/2024	NE	45.90	NA	NA	NA	400.65	353.67 - 348.67 (92.88 - 97.88)	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	*
4Q24		10/1/2024	NE	46.44	NA	NA	NA	400.11		0.0	*

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											
1Q24	446.97	1/2/2024	NE	46.26	NA	NA	NA	400.71	321.31 - 319.31 (125.66 - 127.66)	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	*
4Q24		10/1/2024	NE	46.78	NA	NA	NA	400.19		0.0	*
P-94											
1Q24	445.04	1/2/2024	NE	42.39	NA	NA	NA	402.65	398.80 - 383.80 (46.24 - 61.24)	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	*
4Q24		10/3/2024	NE	42.59	NA	NA	NA	402.45		0.0	*
P-95											
1Q24	443.95	1/4/2024	NE	35.25	NA	NA	NA	408.70	407.43 - 392.43 (36.52 - 51.52)	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	*
4Q24		10/3/2024	NE	36.00	NA	NA	NA	407.95		0.0	*
P-102											
1Q24	445.14	1/4/2024	NE	39.48	NA	NA	NA	405.66	402.39 - 382.39 (42.75 - 62.75)	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	*
4Q24		10/3/2024	NE	39.00	NA	NA	NA	406.14		7.0	*
P-114R											
1Q24	429.48	1/3/2024	NE	28.45	NA	NA	NA	401.03	406.47 - 396.47 (23.01 - 33.01)	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	
4Q24		10/2/2024	NE	27.73	NA	NA	NA	401.75		42.4	
P-115											
1Q24	433.54	1/4/2024	NE	32.65	NA	NA	NA	400.89	401.24 - 381.24 (32.30 - 52.30)	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	*
4Q24		10/2/2024	NE	31.60	NA	NA	NA	401.94		0.0	*
P-116											
1Q24	436.79	1/4/2024	NE	36.09	NA	NA	NA	400.70	399.35 - 379.35 (37.44 - 57.44)	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	*
4Q24		10/2/2024	NE	34.98	NA	NA	NA	401.81		0.0	*
P-117											
1Q24	432.87	1/3/2024	NE	32.15	NA	NA	NA	400.72	399.94 - 379.94 (32.93 - 52.93)	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	*
4Q24		10/2/2024	NE	31.23	NA	NA	NA	401.64		0.0	*
P-118											
1Q24	431.48	1/4/2024	NE	31.33	NA	NA	NA	400.15	400.36 - 384.43 (31.12 - 47.05)	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	*
4Q24		10/2/2024	NE	30.00	NA	NA	NA	401.48		0.0	*
P-119											
1Q24	432.11	1/4/2024	NE	30.79	NA	NA	NA	401.32	401.44 - 385.51 (30.67 - 46.60)	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.
4Q24		10/2/2024	NE	30.15	NA	NA	NA	401.96		0.0	*
P-120											
1Q24	433.00	1/4/2024	NE	31.32	NA	NA	NA	401.68	401.62 - 385.69 (31.38 - 47.31)	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	*
4Q24		10/2/2024	NE	30.30	NA	NA	NA	402.70		0.0	*
P-129											
1Q24	432.66	1/3/2024	NE	33.41	NA	NA	NA	399.25	400.69 - 384.76 (31.97 - 47.90)	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	*
4Q24		10/2/2024	NE	32.10	NA	NA	NA	400.56		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
ROST-3-MW											
1Q24	442.52	1/2/2024	NE	41.47	NA	NA	NA	401.05	404.71 - 394.71 (37.81 - 47.81)	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	
4Q24		10/1/2024	NE	42.60	NA	NA	NA	399.92		0.0	
ROST-4-PZ											
1Q24	442.15	1/2/2024	NE	40.10	NA	NA	NA	402.05	407.22 - 397.22 (34.93 - 44.93)	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	
4Q24		10/1/2024	NE	41.40	NA	NA	NA	400.75		0.0	
ROST-4-PZ(A)											
1Q24	442.15	1/2/2024	NE	40.34	NA	NA	NA	401.81	407.38 - 397.38 (34.77 - 44.77)	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	
4Q24		10/1/2024	NE	42.18	NA	NA	NA	399.97		0.0	
ROST-4-PZ(B)											
1Q24	442.40	1/2/2024	NE	40.35	NA	NA	NA	402.05	407.35 - 397.35 (35.05 - 45.05)	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	
4Q24		10/1/2024	NE	41.15	NA	NA	NA	401.25		0.0	
ROST-4-PZ(C)											
1Q24	442.97	1/2/2024	NE	41.36	NA	NA	NA	401.61	408.02 - 398.02 (34.95 - 44.95)	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	
4Q24		10/1/2024	NE	42.50	NA	NA	NA	400.47		0.0	
ROST-4-PZ(D)											
1Q24	442.92	1/2/2024	NE	41.10	NA	NA	NA	401.82	407.95 - 397.95 (34.97 - 44.97)	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	
4Q24		10/1/2024	NE	42.28	NA	NA	NA	400.64		0.0	
ROST-4-PZ(E)											
1Q24	441.98	1/2/2024	NE	39.80	NA	NA	NA	402.18	407.23 - 397.23 (34.75 - 44.75)	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	
4Q24		10/1/2024	NE	41.28	NA	NA	NA	400.70		0.0	
ROST-4-PZ(F)											
1Q24	442.12	1/2/2024	NE	39.80	NA	NA	NA	402.32	407.59 - 397.59 (34.53 - 44.53)	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	
4Q24		10/1/2024	NE	40.23	NA	NA	NA	401.89		0.0	
ROST-4-PZ(G)											
1Q24	442.20	1/2/2024	NE	41.35	NA	NA	NA	400.85	407.92 - 397.92 (34.28 - 44.28)	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	
4Q24		10/1/2024	NE	42.88	NA	NA	NA	399.32		0.0	
S-1											
1Q24	444.06	1/3/2024	43.66	43.68	400.38	400.40	0.02	400.40	Unknown	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	
4Q24		10/2/2024	43.94	43.98	400.08	400.12	0.04	400.11		141.5	
T-1											
1Q24	445.61	1/2/2024	NE	44.33	NA	NA	NA	401.28	398.61 - 388.61 (47.00 - 57.00)	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	*
4Q24		10/1/2024	NE	45.25	NA	NA	NA	400.36		0.0	*
T-2											
1Q24	443.40	1/2/2024	NE	42.49	NA	NA	NA	400.91	392.91 - 372.76 (50.50 - 70.65)	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	*
4Q24		10/2/2024	NE	43.27	NA	NA	NA	400.13		0.0	*

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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
T-3											
1Q24	449.21	1/2/2024	NE	49.59	NA	NA	NA	399.62	403.99 - 388.99 (45.22 - 60.22)	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	
4Q24		10/1/2024	NE	49.59	NA	NA	NA	399.62		0.0	
T-4											
1Q24	446.82	1/2/2024	NE	48.21	NA	NA	NA	398.61	396.80 - 381.80 (50.02 - 65.02)	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	*
4Q24		10/2/2024	NE	48.32	NA	NA	NA	398.50		0.0	*
T-5											
1Q24	443.66	1/3/2024	NE	43.01	NA	NA	NA	400.65	395.33 - 378.78 (48.33 - 64.88)	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	*
4Q24		10/2/2024	NE	42.92	NA	NA	NA	400.74		40.4	*
T-6											
1Q24	446.78	1/2/2024	NE	46.19	NA	NA	NA	400.59	394.27 - 380.02 (52.51 - 66.76)	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	*
4Q24		10/1/2024	NE	46.86	NA	NA	NA	399.92		1.4	*
T-7											
1Q24	444.26	1/4/2024	NE	42.70	NA	NA	NA	401.56	395.54 - 380.54 (48.72 - 63.72)	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	*
4Q24		10/3/2024	NE	42.53	NA	NA	NA	401.73		4.5	*
T-12											
1Q24	444.99	1/2/2024	NE	44.32	NA	NA	NA	400.67	398.16 - 372.16 (46.83 - 72.83)	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	*
4Q24		10/1/2024	NE	46.40	NA	NA	NA	398.59		0.1	*
T-13											
1Q24	443.76	1/2/2024	NE	42.31	NA	NA	NA	401.45	399.95 - 373.95 (43.81 - 69.81)	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	*
4Q24		10/1/2024	NE	43.15	NA	NA	NA	400.61		0.0	*
T-15											
1Q24	445.35	1/2/2024	NE	44.56	NA	NA	NA	400.79	396.95 - 370.95 (48.40 - 74.40)	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	*
4Q24		10/2/2024	NE	45.02	NA	NA	NA	400.33		0.0	*
T-17											
1Q24	446.19	1/2/2024	NE	45.11	NA	NA	NA	401.08	401.72 - 375.72 (44.47 - 70.47)	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	
4Q24		10/3/2024	NE	45.27	NA	NA	NA	400.92		0.1	
T-19											
1Q24	446.99	1/2/2024	NE	48.38	NA	NA	NA	398.61	396.22 - 370.22 (50.77 - 76.77)	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	*
4Q24		10/2/2024	NE	48.44	NA	NA	NA	398.55		35.3	*
T-21											
1Q24	444.22	1/4/2024	NE	35.67	NA	NA	NA	408.55	412.26 - 386.26 (31.96 - 57.96)	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	
4Q24		10/3/2024	NE	35.45	NA	NA	NA	408.77		0.0	
T-22											
1Q24	442.37	1/4/2024	NE	36.77	NA	NA	NA	405.60	410.82 - 385.12 (31.55 - 57.25)	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	
4Q24		10/3/2024	NE	36.05	NA	NA	NA	406.32		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											
1Q24	432.90	1/4/2024	NE	29.42	NA	NA	NA	403.48	405.67 - 379.67 (27.23 - 53.23)	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	
4Q24		10/3/2024	NE	28.49	NA	NA	NA	404.41		0.0	
T-24											
1Q24	444.00	1/3/2024	43.17	45.03	398.97	400.83	1.86	400.46	402.50 - 376.85 (41.50 - 67.15)	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	
4Q24		10/1/2024	44.80	45.89	398.11	399.20	1.09	398.98		0.0	
T-28											
1Q24	444.56	1/2/2024	NE	43.90	NA	NA	NA	400.66	Unknown	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	
4Q24		10/3/2024	NE	44.14	NA	NA	NA	400.42		0.0	
T-37											
1Q24	447.44	1/3/2024	NE	46.33	NA	NA	NA	401.11	398.59 - 378.59 (48.86 - 68.86)	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	*
4Q24		10/3/2024	NE	45.88	NA	NA	NA	401.56		0.0	*
T-38											
1Q24	445.89	1/3/2024	NE	43.44	NA	NA	NA	402.45	396.75 - 376.75 (49.14 - 69.14)	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	*
4Q24		10/3/2024	NE	42.53	NA	NA	NA	403.36		0.0	*
T-62											
1Q24	432.16	1/4/2024	NE	30.86	NA	NA	NA	401.30	412.45 - 382.45 (19.71 - 49.71)	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	
4Q24		10/2/2024	NE	29.95	NA	NA	NA	402.21		0.0	
T-63											
1Q24	431.55	1/4/2024	NE	30.53	NA	NA	NA	401.02	411.57 - 381.57 (19.98 - 49.98)	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	
4Q24		10/2/2024	NE	29.45	NA	NA	NA	402.10		0.0	
T-64											
1Q24	429.10	1/4/2024	NE	27.58	NA	NA	NA	401.52	409.29 - 379.29 (19.81 - 49.81)	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	
4Q24		10/2/2024	NE	27.25	NA	NA	NA	401.85		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							
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	
4Q24	6.69	18.82	1.066	5.79	0.74	92.33	
MW-02							
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	
4Q24	7.07	21.68	0.794	7.54	0.62	-169.17	
MW-03							
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	
4Q24	6.91	21.47	1.058	2.88	0.66	-146.47	
MW-04							
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	
4Q24	6.97	18.55	1.116	0.00	0.43	-100.27	
MW-05							
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	
4Q24	6.46	19.50	1.143	6.90	0.68	-116.54	
MW-06A							
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	
4Q24	6.57	20.82	0.612	36.99	0.70	-67.57	
MW-06B							
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	
4Q24	6.99	21.31	0.769	45.35	0.62	-126.76	
MW-06C							
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	
4Q24	6.96	20.02	0.699	16.81	0.80	-138.94	
MW-06D							
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	
4Q24	6.92	19.17	0.924	28.83	0.60	-146.60	

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
MW-07							
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	
4Q24	NM	NM	NM	NM	NM	NM	Not sampled due to operation of FPWY SEE System
MW-09							
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	
4Q24	6.69	19.00	0.909	0.41	0.63	-124.50	
MW-10							
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	
4Q24	6.81	19.48	1.514	17.52	0.67	-142.59	
MW-11							
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	
4Q24	6.63	18.70	1.410	40.86	0.56	-66.39	
MW-12							
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	
4Q24	6.69	21.11	0.935	19.27	0.76	71.57	
MW-13							
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	
4Q24	6.35	21.22	1.210	22.55	0.63	-92.57	
MW-14							
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	
4Q24	6.46	22.06	1.027	7.22	0.60	-90.83	
MW-16							
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	
4Q24	6.77	20.51	1.027	7.01	0.74	-125.50	

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							
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	
4Q24	6.98	19.14	1.177	6.18	0.50	-138.41	
MW-23							
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	
4Q24	6.44	20.26	1.028	28.24	0.72	-84.62	
MW-24							
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	
4Q24	6.61	18.03	1.557	4.14	1.32	184.85	
MW-25							
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	
4Q24	7.12	19.46	0.965	24.08	0.46	-123.98	
MW-26							
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	
4Q24	6.64	18.63	0.698	16.10	0.76	144.39	
MW-27							
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	
4Q24	6.86	18.54	0.832	4.20	4.74	129.70	
MW-28							
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	
4Q24	6.65	18.32	1.575	37.09	0.48	-85.98	
P-54							
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	
4Q24	6.73	17.87	1.213	1.92	4.68	141.70	
P-55R							
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.
4Q24	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							
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	
4Q24	7.34	18.85	0.991	21.31	1.27	-205.41	
P-57							
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	
4Q24	6.79	18.96	1.073	0.00	0.43	-116.83	
P-58							
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	
4Q24	6.72	25.02	1.546	19.76	0.31	-137.09	
P-59							
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	
4Q24	6.85	22.10	1.564	0.00	1.02	-150.07	
P-66							
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.
4Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-68							
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.
4Q24	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-74							
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	
4Q24	6.21	20.09	0.501	8.40	0.50	-44.54	
P-93A							
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	
4Q24	6.82	19.57	1.221	5.41	1.10	-142.49	
P-93B							
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	
4Q24	6.88	19.28	0.985	130.31*	0.83	-145.25	

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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							
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	
4Q24	7.02	17.88	0.993	4.47	1.09	-150.74	
P-93D							
1Q24	7.09	15.87	1.003	0.00	0.68	0.20	
2Q24	7.02	17.83	0.969	0.00	1.31	38.26	
3Q24	7.03	20.34	1.109	0.00	0.39	-120.63	
4Q24	7.18	18.32	1.140	5.43	1.81	-111.61	
P-114R							
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	
4Q24	6.58	22.73	1.243	12.04	0.58	-146.83	
ROST-3-MW							
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	
4Q24	6.81	17.26	1.400	22.03	0.47	-117.41	
ROST-4-PZ(C)							
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	
4Q24	7.04	17.52	1.544	13.97	0.48	-138.06	
ROST-4-PZ(E)							
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	
4Q24	6.96	19.40	1.731	38.13	2.43	30.00	
ROST-4-PZ(G)							
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	
4Q24	7.16	20.23	1.343	25.65	0.43	-161.84	
T-12							
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	
4Q24	6.86	18.29	1.381	0.00	1.07	-137.28	

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	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]		**0.0002** [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-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000028 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00022 J	< 0.0050	< 0.0010
	MW1-ROX-100724	10/7/2024	< 0.01 UJ	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000034	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	0.00048 J	< 0.0010 UJ	< 0.0010
	MW1-ROX-100724-DUP	10/7/2024	< 0.01	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000033	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	0.0011	< 0.0010 UJ	< 0.0010
MW-02	MW2-ROX-011124	1/11/2024	0.026	0.0014	0.0058 J	0.0027	0.0044	0.00064 J	< 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	0.0041	< 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	0.0037	< 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	0.0039	< 0.000034	< 0.0020	0.051 J	0.043	< 0.05	< 0.0020	0.0079 J	0.068
	MW2-ROX-100924	10/9/2024	0.011 J	0.00089 J	0.0064 J	0.0025	0.0049	0.00063 J	< 0.0010	0.0025	< 0.000032	< 0.0010	0.013	0.03	< 0.025	< 0.0010	0.0045 J	0.048
MW-03	MW3-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 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	< 0.000029	< 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00025 J	< 0.0050	< 0.0010
	MW3-ROX-101024	10/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00039 J	< 0.0050	< 0.0010
MW-04	MW4-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000031	< 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0026	< 0.0050	< 0.0010
	MW4-ROX-101824	10/18/2024	< 0.025 UJ	0.00064 J	< 0.025	< 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
MW-05	MW5-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	0.0018	< 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	< 0.000030	< 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	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0029	< 0.0050	< 0.0010
	MW5-ROX-101124	10/11/2024	< 0.025	0.00026 J	< 0.025	< 0.0010	< 0.0010	0.0018	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0018	< 0.0050	< 0.0010
	MW5-ROX-101124-DUP	10/11/2024	< 0.025	0.00067 J	< 0.025	< 0.0010	< 0.0010	0.0014	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0018	< 0.0050	< 0.0010
MW-06A	MW6A-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029	< 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	< 0.000030	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00029 J	< 0.0050	< 0.0010
	MW6A-ROX-100924	10/9/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00031 J	< 0.0050	< 0.0010
MW-06B	MW6B-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029	< 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	< 0.000029	< 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00047 J	< 0.0050	< 0.0010
	MW6B-ROX-100824	10/8/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000035	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00035 J	< 0.0050	< 0.0010
MW-06C	MW6C-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6C-ROX-100824	10/8/2024	< 0.025	< 0.0010	< 0.025	< 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-06D	MW6D-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000033	< 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW6D-ROX-100824	10/8/2024	< 0.025 UJ	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000035	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
MW-07	MW7-ROX-011724	1/17/2024	< 50 UJ	680 J	< 50 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	< 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	< 0.000031	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	MW7-ROX-041924-DUP	4/19/2024	< 25	220	< 25	< 1	< 1	< 1	< 1	< 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	< 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	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]		**0.0002** [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-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000030	< 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	< 0.000037	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW9-ROX-100424	10/4/2024	< 0.01 UJ	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000032	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	< 0.0010	< 0.0010 UJ	< 0.0010
MW-10	MW10-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW10-ROX-100724	10/7/2024	< 0.01	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000034	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	< 0.0010	< 0.0010 UJ	< 0.0010
MW-11	MW11-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029	< 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW11-ROX-100424	10/4/2024	< 0.01 UJ	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000033	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	< 0.0010	< 0.0010 UJ	< 0.0010
MW-12	MW12-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029	< 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW12-ROX-101124	10/11/2024	< 0.025	< 0.0010	< 0.025	< 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-13	MW13-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000032	< 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	< 0.000035	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
	MW13-ROX-101024	10/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00093 J	< 0.0050	< 0.0010
MW-14	MW14-ROX-011724	1/17/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029	< 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	< 0.000036	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW14-ROX-100924	10/9/2024	< 0.025	< 0.0010	< 0.025	< 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-16	MW16-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW16-ROX-100424	10/4/2024	< 0.01 UJ	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000033	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	< 0.0010	< 0.0010 UJ	< 0.0010
MW-22	MW22-ROX-011224	1/12/2024	< 0.13	0.13	< 0.13	0.0093	0.0053	0.01	< 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	0.0039 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	< 0.000031	< 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	< 0.000031	< 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	0.0015 J	< 0.000032	< 0.0020	0.40	0.042	< 0.05	< 0.0020	0.13	0.065
	MW22-ROX-101624	10/16/2024	< 0.13	0.018	< 0.13	0.012	0.0074	0.0083	< 0.0050	0.0038 J	< 0.000032	< 0.0050	0.44	0.068	< 0.13	< 0.0050	0.16	0.14
MW-23	MW23-ROX-011124	1/11/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000031	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	< 0.000031	0.00069 J	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
	MW23-ROX-101124	10/11/2024	< 0.025	0.00059 J	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00061 J	< 0.0050	< 0.0010
MW-24	MW24-ROX-010924	1/9/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000032 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW24-ROX-101424	10/14/2024	< 0.025	0.00056 J	< 0.025	< 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
MW-25	MW25-ROX-011824	1/18/2024	< 0.025	0.053	< 0.025	< 0.0010	< 0.0010	0.00064 J	0.00050 J	< 0.0010	< 0.000030	< 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	< 0.000031	< 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	< 0.000034	< 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	< 0.000034	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00041 J	< 0.0050	< 0.0010
	MW25-ROX-101824	10/18/2024	< 0.025	0.043	< 0.025	< 0.0010	< 0.0010	0.0011	< 0.0010	< 0.0010	< 0.000037	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW25-ROX-101824-DUP	10/18/2024	< 0.025	0.039	< 0.025	< 0.0010	< 0.0010	0.00075 J	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 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	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]		0.0002 [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-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000030 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW26-ROX-100724	10/7/2024	< 0.01 UJ	< 0.00050	< 0.0050 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0020	< 0.0010	< 0.000033	< 0.0010	< 0.00050	< 0.0010	< 0.0050 UJ	< 0.0010	< 0.0010 UJ	< 0.0010
MW-27	MW27-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	MW27-ROX-101424	10/14/2024	< 0.025	0.00038 J	< 0.025	< 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-28	MW28-ROX-010524	1/5/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000030	< 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0020	< 0.0050	< 0.0010
	MW28-ROX-101524	10/15/2024	< 0.025 UJ	0.00025 J	< 0.025 UJ	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000034	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.00052 J	< 0.0050	< 0.0010
P-54	P54-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P54-ROX-101424	10/14/2024	< 0.025	< 0.0010	< 0.025	< 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
P-56	P56-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	0.0024	< 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	< 0.000030	< 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	< 0.000034	< 0.0010	< 0.0010	0.0065	< 0.025	< 0.0010	< 0.0050	0.0063
	P56-ROX-101524	10/15/2024	< 0.13	< 0.0050	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000031	< 0.0050	0.11	0.032	< 0.13	< 0.0050	0.016 J	0.036
P-57	P57-ROX-011124	1/11/2024	< 0.025	0.037	0.0031 J	0.0021	0.004	0.0051	< 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	< 0.000030	< 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	< 0.000031	< 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	< 0.000030	< 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	< 0.000032	< 0.0010	0.00054 J	0.018	< 0.025	< 0.0010	< 0.0050	0.016
	P57-ROX-101724	10/17/2024	< 0.025	0.066	< 0.025	0.0018	0.0040	0.0053	< 0.0010	< 0.0010	< 0.000033	< 0.0010	0.0017	0.015	< 0.025	< 0.0010	0.016	0.016
P-58	P58-ROX-011224	1/12/2024	< 25	240	< 25	< 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	< 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	< 0.000031 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	< 0.000033	< 2	< 2	< 2	< 50	< 2	< 10	< 2
	P58-ROX-071724-DUP	7/17/2024	< 50	300	< 50	< 2	< 2	< 2	< 2	< 2	< 0.000033	< 2	< 2	< 2	< 50	< 2	< 10	< 2
	P58-ROX-101724	10/17/2024	< 25	230	< 25	< 1	< 1	< 1	< 1	< 1	< 0.000032	< 1	< 1	< 1	< 25	< 1	< 5	< 1
P-59	P59-ROX-011224	1/12/2024	< 0.25	1.6	< 0.25	< 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	< 0.000030	< 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	< 0.000033	< 0.0050	0.035	0.011	< 0.13	< 0.0050	< 0.025	0.013
	P59-ROX-101624	10/16/2024	< 0.13	0.91	< 0.13	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.000032	< 0.0050	0.3	0.023	< 0.13	< 0.0050	0.055	0.034
P-74	P74-ROX-041824	4/18/2024	0.024 J	0.055	0.0083 J	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 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	< 0.000033	< 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	< 0.000032	< 0.0050	0.070	< 0.0050	< 0.13	< 0.0050	< 0.025	< 0.0050
	P74-ROX-101724	10/17/2024	< 0.25	1.8	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000031	< 0.01	0.11	< 0.01	< 0.25	< 0.01	< 0.05	< 0.01
	P74-ROX-101724-DUP	10/17/2024	< 0.25	1.8	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000032	< 0.01	0.1	< 0.01	< 0.25	< 0.01	< 0.05	< 0.01
P-93A	P93A-ROX-011024	1/10/2024	< 0.025	0.055	< 0.025	< 0.0010	< 0.0010	0.0023	< 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	< 0.000031	< 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	< 0.000040	< 0.2	< 0.2	< 0.2	< 5	< 0.2	< 1	< 0.2
	P93A-ROX-101724	10/17/2024	< 25	190	< 25	< 1	< 1	< 1	< 1	< 1	< 0.000034	< 1	< 1	< 1	< 25	< 1	< 5	< 1
P-93B	P93B-ROX-011224	1/12/2024	< 63	690	< 63	< 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	< 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	0.000057	< 1	< 1	< 1	< 25	< 1	< 5	< 1
	P93B-ROX-101724	10/17/2024	< 25 UJ	720	< 25 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 0.000032	< 1 UJ	< 1 UJ	< 1 UJ	< 25 UJ	< 1 UJ	< 5 UJ	< 1 UJ

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SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs															
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	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]		0.0002 [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-93C	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	< 0.000029	< 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	< 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	< 0.000032	< 0.0010	0.00068 J	< 0.0010	< 0.025	0.0012	< 0.0050	< 0.0010
	P93C-ROX-101724	10/17/2024	< 0.5	2.9	< 0.5	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.000032	< 0.02	< 0.02	< 0.02	< 0.5	< 0.02	< 0.1	< 0.02
P-93D	P93D-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000031	< 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	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	P93D-ROX-101524	10/15/2024	< 0.025	0.00027 J	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.02	< 0.0010	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0013	< 0.0050	< 0.0010
P-114R	P114R-ROX-011024	1/10/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000032	< 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	< 0.000032	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
	P114R-ROX-101024	10/10/2024	< 0.025	< 0.0010	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	< 0.0010	< 0.0010	< 0.025	0.0011	< 0.0050	< 0.0010
ROST-3-MW	ROST3MW-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000030 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST3MW-ROX-101524	10/15/2024	< 0.025	< 0.0010	< 0.025	< 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
ROST-4-PZ(C)	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000029 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	< 0.000029 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	< 0.000031	< 0.0010	0.00051 J	0.0014	< 0.025	< 0.0010	0.014	0.0019
	ROST4PZ(C)-ROX-101624	10/16/2024	< 0.025	0.0016	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000032	< 0.0010	0.00054 J	0.0044	< 0.025	< 0.0010	0.049	0.0066
	ROST4PZ(C)-ROX-101624-DUP	10/16/2024	< 0.025	0.0017	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000033	< 0.0010	0.00071 J	0.0037	< 0.025	< 0.0010	0.05	0.0055
ROST-4-PZ(E)	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	< 0.000029	< 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	< 0.000030 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	< 0.000031	< 0.0010	< 0.0010	< 0.0010	< 0.025	< 0.0010	< 0.0050	< 0.0010
	ROST4PZE-ROX-101524	10/15/2024	< 0.025	< 0.0010	< 0.025	< 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
ROST-4-PZ(G)	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.025	< 0.0010	< 0.025	< 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	< 0.000030	< 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	< 0.000032	< 0.0010	< 0.0010	0.00091 J	< 0.025	< 0.0010	< 0.0050	0.00095 J
	ROST4PZG-ROX-101624	10/16/2024	< 0.025	0.0056	< 0.025	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.000031	< 0.0010	0.00093 J	0.0041	< 0.025	< 0.0010	0.0040 J	0.0055
T-12	T12-ROX-011124	1/11/2024	< 0.25	1.3	< 0.25	< 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	< 0.000031	< 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	< 0.000032	< 0.01	0.19	0.013	< 0.25	< 0.01	< 0.05	0.022
	T12-ROX-101624	10/16/2024	< 0.25	1.4	< 0.25	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.000034	< 0.01	0.044	0.019	< 0.25	< 0.01	< 0.05	0.033

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs									SVOCs						
			Styrene	Tetrachloroethene	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
Screening Values (mg/L)			0.1 [1]	0.005 [1]	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]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
MW-01	MW1-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 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
	MW1-ROX-040424	4/4/2024	< 0.0010	< 0.0010	< 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
	MW1-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW1-ROX-100724	10/7/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	MW1-ROX-100724-DUP	10/7/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
MW-02	MW2-ROX-011124	1/11/2024	< 0.0010	< 0.0010	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
	MW2-ROX-041724	4/17/2024	< 0.0010	< 0.0010	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
	MW2-ROX-071124	7/11/2024	< 0.0020	< 0.0020	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
	MW2-ROX-071124-DUP	7/11/2024	< 0.0020	< 0.0020	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
	MW2-ROX-100924	10/9/2024	< 0.0010	< 0.0010	0.0015	< 0.0010	0.0037	0.0066	0.0050	< 0.0050	0.0060 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
MW-03	MW3-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW3-ROX-010924-DUP	1/9/2024	< 0.0010	< 0.0010	< 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
	MW3-ROX-041224	4/12/2024	< 0.0010	< 0.0010	< 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
	MW3-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW3-ROX-101024	10/10/2024	< 0.0010	< 0.0010	< 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
MW-04	MW4-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 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
	MW4-ROX-041924	4/19/2024	< 0.0010	< 0.0010	< 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
	MW4-ROX-071224	7/12/2024	< 0.0010	< 0.0010	< 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
	MW4-ROX-101824	10/18/2024	< 0.0010	< 0.0010	< 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
MW-05	MW5-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW5-ROX-041224	4/12/2024	< 0.0010	< 0.0010	< 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
	MW5-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW5-ROX-101124	10/11/2024	< 0.0010	< 0.0010	< 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
	MW5-ROX-101124-DUP	10/11/2024	< 0.0010	< 0.0010	< 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
MW-06A	MW6A-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW6A-ROX-041124	4/11/2024	< 0.0010	< 0.0010	< 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
	MW6A-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	MW6A-ROX-100924	10/9/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.000046 J	< 0.00020
MW-06B	MW6B-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW6B-ROX-041124	4/11/2024	< 0.0010	< 0.0010	< 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
	MW6B-ROX-041124-DUP	4/11/2024	< 0.0010	< 0.0010	< 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
	MW6B-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	MW6B-ROX-100824	10/8/2024	< 0.0010	< 0.0010	< 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
MW-06C	MW6C-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW6C-ROX-040924	4/9/2024	< 0.0010	< 0.0010	< 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
	MW6C-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	MW6C-ROX-100824	10/8/2024	< 0.0010	< 0.0010	< 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
MW-06D	MW6D-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW6D-ROX-040924	4/9/2024	< 0.0010	< 0.0010	< 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
	MW6D-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	MW6D-ROX-071024-DUP	7/10/2024	< 0.0010	< 0.0010	< 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
	MW6D-ROX-100824	10/8/2024	< 0.0010	< 0.0010	< 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
MW-07	MW7-ROX-011724	1/17/2024	< 2	< 2	< 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
	MW7-ROX-011724-DUP	1/17/2024	< 2	< 2	< 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
	MW7-ROX-041924	4/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00025	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	MW7-ROX-041924-DUP	4/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00034	< 0.00019	0.000047 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019
	MW7-ROX-071524	7/15/2024	< 2.5 UJ	< 2.5 UJ	< 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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs									SVOCs						
			Styrene	Tetrachloroethene	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
Screening Values (mg/L)			0.1 [1]	0.005 [1]	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]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
MW-09	MW9-ROX-010524	1/5/2024	< 0.0010	< 0.0010	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
	MW9-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 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
	MW9-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW9-ROX-100424	10/4/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019
MW-10	MW10-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 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
	MW10-ROX-040424	4/4/2024	< 0.0010	< 0.0010	< 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
	MW10-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW10-ROX-100724	10/7/2024	0.00063 J	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
MW-11	MW11-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 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
	MW11-ROX-040524	4/5/2024	< 0.0010	< 0.0010	< 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
	MW11-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW11-ROX-100424	10/4/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019
MW-12	MW12-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 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
	MW12-ROX-041224	4/12/2024	< 0.0010	< 0.0010	< 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
	MW12-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW12-ROX-101124	10/11/2024	< 0.0010	< 0.0010	< 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
MW-13	MW13-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 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
	MW13-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 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
	MW13-ROX-071124	7/11/2024	< 0.0010	< 0.0010	< 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
	MW13-ROX-101024	10/10/2024	< 0.0010	< 0.0010	< 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
MW-14	MW14-ROX-011724	1/17/2024	< 0.0010	< 0.0010	< 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
	MW14-ROX-041124	4/11/2024	< 0.0010	< 0.0010	< 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
	MW14-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW14-ROX-100924	10/9/2024	< 0.0010	< 0.0010	< 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
MW-16	MW16-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	MW16-ROX-040924	4/9/2024	< 0.0010	< 0.0010	< 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
	MW16-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW16-ROX-100424	10/4/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019
MW-22	MW22-ROX-011224	1/12/2024	< 0.0050	< 0.0050	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
	MW22-ROX-011224-DUP	1/12/2024	< 0.0050	< 0.0050	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
	MW22-ROX-041824	4/18/2024	< 0.0050	< 0.0050	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
	MW22-ROX-041824-DUP	4/18/2024	< 0.0050	< 0.0050	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
	MW22-ROX-071224	7/12/2024	< 0.0020	< 0.0020	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
	MW22-ROX-101624	10/16/2024	< 0.0050	0.0025 J	0.048	< 0.0050	0.17	0.11	0.85	0.046	0.89	0.00012 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
MW-23	MW23-ROX-011124	1/11/2024	< 0.0010	< 0.0010	< 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
	MW23-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 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
	MW23-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW23-ROX-101124	10/11/2024	< 0.0010	< 0.0010	< 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
MW-24	MW24-ROX-010924	1/9/2024	< 0.0010	< 0.0010	< 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
	MW24-ROX-040824	4/8/2024	< 0.0010	< 0.0010	< 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
	MW24-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 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
	MW24-ROX-101424	10/14/2024	< 0.0010	< 0.0010	< 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
MW-25	MW25-ROX-011824	1/18/2024	< 0.0010	< 0.0010	< 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
	MW25-ROX-041924	4/19/2024	< 0.0010	< 0.0010	< 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
	MW25-ROX-071524	7/15/2024	< 0.0010	< 0.0010	< 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
	MW25-ROX-071524-DUP	7/15/2024	< 0.0010	< 0.0010	< 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
	MW25-ROX-101824	10/18/2024	< 0.0010	< 0.0010	< 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
	MW25-ROX-101824-DUP	10/18/2024	< 0.0010	< 0.0010	< 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

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs									SVOCs						
			Styrene	Tetrachloroethene	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
Screening Values (mg/L)			0.1 [1]	0.005 [1]	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]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
MW-26	MW26-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 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
	MW26-ROX-040424	4/4/2024	< 0.0010	< 0.0010	< 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
	MW26-ROX-070524	7/5/2024	< 0.0010	< 0.0010	< 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
	MW26-ROX-100724	10/7/2024	< 0.0010	< 0.0010	< 0.00050	< 0.00050	< 0.0010	< 0.0010	< 0.0010	< 0.00050	< 0.0010	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
MW-27	MW27-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	MW27-ROX-040424	4/4/2024	< 0.0010	< 0.0010	< 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
	MW27-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW27-ROX-101424	10/14/2024	< 0.0010	< 0.0010	< 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
MW-28	MW28-ROX-010524	1/5/2024	< 0.0010	< 0.0010	< 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
	MW28-ROX-041224	4/12/2024	< 0.0010	< 0.0010	< 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
	MW28-ROX-070824	7/8/2024	< 0.0010	< 0.0010	< 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
	MW28-ROX-101524	10/15/2024	< 0.0010	< 0.0010	< 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
P-54	P54-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	P54-ROX-040824	4/8/2024	< 0.0010	< 0.0010	< 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
	P54-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 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
	P54-ROX-101424	10/14/2024	< 0.0010	< 0.0010	< 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
P-56	P56-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 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
	P56-ROX-041824	4/18/2024	< 0.0010	< 0.0010	< 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
	P56-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	P56-ROX-101524	10/15/2024	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.047	0.015	0.12	< 0.025	0.12	0.0012	0.00012 J	0.00015 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-57	P57-ROX-011124	1/11/2024	< 0.0010	< 0.0010	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
	P57-ROX-011124-DUP	1/11/2024	< 0.0010	< 0.0010	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
	P57-ROX-041824	4/18/2024	< 0.0010	< 0.0010	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
	P57-ROX-041824-DUP	4/18/2024	< 0.0010	< 0.0010	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
	P57-ROX-071024	7/10/2024	< 0.0010	< 0.0010	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
	P57-ROX-101724	10/17/2024	< 0.0010	< 0.0010	0.0032	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00056	0.000072 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-58	P58-ROX-011224	1/12/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00058	< 0.00021	0.00036	0.00034	0.00029	0.00016 J	0.00013 J
	P58-ROX-011224-DUP	1/12/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00060	< 0.00020	0.00046	0.00033	0.00028	0.00018 J	0.00012 J
	P58-ROX-041724	4/17/2024	< 0.5	< 0.5	< 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
	P58-ROX-071724	7/17/2024	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 10	< 20	0.00060	< 0.00021	< 0.00027 U	0.000086 J	< 0.00021	0.000038 J	< 0.00021
	P58-ROX-071724-DUP	7/17/2024	< 2	< 2	< 2	< 2	< 2	< 2	< 10	< 10	< 20	0.00059	< 0.00021	< 0.00021 U	0.000059 J	< 0.00021	< 0.00021	< 0.00021
	P58-ROX-101724	10/17/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00020	0.00026	0.00010 J	0.00012 J	0.00014 J	0.000080 J	0.000057 J
P-59	P59-ROX-011224	1/12/2024	< 0.01	< 0.01	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
	P59-ROX-041924	4/19/2024	< 0.0050	< 0.0050	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
	P59-ROX-071524	7/15/2024	< 0.0050	< 0.0050	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
	P59-ROX-101624	10/16/2024	< 0.0050	< 0.0050	0.12	< 0.0050	0.12	0.021	0.37	< 0.025	0.38	0.00078	< 0.00020	0.000099 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-74	P74-ROX-041824	4/18/2024	< 0.0010	< 0.0010	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
	P74-ROX-071224	7/12/2024	< 0.0050	< 0.0050	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
	P74-ROX-071224-DUP	7/12/2024	< 0.0050	< 0.0050	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
	P74-ROX-101724	10/17/2024	< 0.01	< 0.01	0.035	< 0.01	0.034	0.011	0.19	< 0.05	0.2	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	P74-ROX-101724-DUP	10/17/2024	< 0.01	< 0.01	0.033	< 0.01	0.028	0.0083 J	0.17	< 0.05	0.18	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-93A	P93A-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 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
	P93A-ROX-041824	4/18/2024	< 0.0050	< 0.0050	< 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
	P93A-ROX-071224	7/12/2024	< 0.2	< 0.2	< 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
	P93A-ROX-101724	10/17/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	0.00011 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-93B	P93B-ROX-011224	1/12/2024	< 2.5	< 2.5	< 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
	P93B-ROX-041924	4/19/2024	< 2 UJ	< 2 UJ	< 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
	P93B-ROX-071724	7/17/2024	< 1	< 1	< 1	< 1	< 1	< 1	0.85 J	< 5	< 10	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019	< 0.00019
	P93B-ROX-101724	10/17/2024	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 1 UJ	< 5 UJ	< 5 UJ	< 10 UJ	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			VOCs									SVOCs						
			Styrene	Tetrachloroethene	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
Screening Values (mg/L)			0.1 [1]	0.005 [1]	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]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
P-93C	P93C-ROX-011124	1/11/2024	< 0.5	< 0.5	< 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
	P93C-ROX-041924	4/19/2024	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 5	< 10	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021	< 0.00021
	P93C-ROX-071524	7/15/2024	< 0.0010	< 0.0010	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
	P93C-ROX-101724	10/17/2024	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1	< 0.2	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
P-93D	P93D-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 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
	P93D-ROX-042224	4/22/2024	< 0.0010	< 0.0010	< 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
	P93D-ROX-071224	7/12/2024	< 0.0010	< 0.0010	< 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
	P93D-ROX-101524	10/15/2024	< 0.0010	< 0.0010	< 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
P-114R	P114R-ROX-011024	1/10/2024	< 0.0010	< 0.0010	< 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
	P114R-ROX-041524	4/15/2024	< 0.0010	< 0.0010	< 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
	P114R-ROX-071124	7/11/2024	< 0.0010	< 0.0010	< 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
	P114R-ROX-101024	10/10/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00039	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
ROST-3-MW	ROST3MW-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	ROST3MW-ROX-041624	4/16/2024	< 0.0010	< 0.0010	< 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
	ROST3MW-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 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
	ROST3MW-ROX-101524	10/15/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	0.00011 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
ROST-4-PZ(C)	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	ROST4PZ(C)-ROX-041624	4/16/2024	< 0.0010	< 0.0010	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
	ROST4PZ(C)-ROX-041624-DUP	4/16/2024	< 0.0010	< 0.0010	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
	ROST4PZ(C)-ROX-070924	7/9/2024	< 0.0010	< 0.0010	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
	ROST4PZ(C)-ROX-101624	10/16/2024	< 0.0010	< 0.0010	0.0088	< 0.0010	0.0064	0.00094 J	0.024	< 0.0050	0.026	0.0010	0.00013 J	0.00035	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	ROST4PZ(C)-ROX-101624-DUP	10/16/2024	< 0.0010	< 0.0010	0.0078	< 0.0010	0.0059	0.00097 J	0.022	< 0.0050	0.024	0.00093	0.00010 J	0.00031	< 0.00020	< 0.00020	< 0.00020	< 0.00020
ROST-4-PZ(E)	ROST4PZ(E)-ROX-011124	1/11/2024	< 0.0010	< 0.0010	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
	ROST4PZ(E)-ROX-041624	4/16/2024	< 0.0010	< 0.0010	< 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
	ROST4PZ(E)-ROX-071024	7/10/2024	< 0.0010	< 0.0010	< 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
	ROST4PZE-ROX-101524	10/15/2024	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0050	< 0.0050	< 0.01	< 0.00020	< 0.00020	0.00017 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020
ROST-4-PZ(G)	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.0010	< 0.0010	< 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
	ROST4PZ(G)-ROX-040524	4/5/2024	< 0.0010	< 0.0010	< 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
	ROST4PZ(G)-ROX-070924	7/9/2024	< 0.0010	< 0.0010	< 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
	ROST4PZG-ROX-101624	10/16/2024	< 0.0010	< 0.0010	0.0014	< 0.0010	< 0.0010	< 0.0010	0.0081	< 0.0050	0.0093 J	0.00010 J	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
T-12	T12-ROX-011124	1/11/2024	< 0.01	< 0.01	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
	T12-ROX-041924	4/19/2024	< 0.01	< 0.01	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
	T12-ROX-071524	7/15/2024	< 0.01	< 0.01	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
	T12-ROX-101624	10/16/2024	< 0.01	< 0.01	0.1	< 0.01	< 0.01	0.012	0.23	< 0.05	0.25	0.00047	0.000050 J	0.000073 J	< 0.00019	< 0.00019	< 0.00019	< 0.00019

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs																
			Benzo(k)fluoranthene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	2,4-Dimethylphenol	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	4-Nitrophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.00017** [1]	**0.012** [1]		**0.0003** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]		**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																
MW-01	MW1-ROX-010524	1/5/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW1-ROX-040424	4/4/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	0.000036 J	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 U	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW1-ROX-070524	7/5/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW1-ROX-100724	10/7/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0095	< 0.00020	< 0.0095	< 0.00020
	MW1-ROX-100724-DUP	10/7/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
MW-02	MW2-ROX-011124	1/11/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.00020	0.0069	0.0091	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW2-ROX-041724	4/17/2024	< 0.00019	< 0.00019	< 0.0097 UJ	< 0.00019 UJ	< 0.0097	< 0.00019	< 0.00019	< 0.0097 UJ	< 0.00019	0.0055	0.0090 B	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW2-ROX-071124	7/11/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019 UJ	< 0.0096 UJ	< 0.00019	< 0.00019	< 0.0096	< 0.00019	0.0048	0.0067	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW2-ROX-071124-DUP	7/11/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.0099 UJ	< 0.00020	< 0.00020	< 0.0099	< 0.00020	0.0056	0.0078	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020
	MW2-ROX-100924	10/9/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	0.0056	0.0057	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
MW-03	MW3-ROX-010924	1/9/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020
	MW3-ROX-010924-DUP	1/9/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW3-ROX-041224	4/12/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-070524	7/5/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW3-ROX-101024	10/10/2024	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.02	< 0.01	< 0.00019	< 0.01	< 0.00019
MW-04	MW4-ROX-011724	1/17/2024	< 0.00023	< 0.00023	< 0.011	< 0.00023	< 0.011	< 0.00023	< 0.00023	< 0.011	< 0.00023	< 0.00023	< 0.00023	< 0.023	< 0.011	< 0.00023	< 0.011	< 0.00023
	MW4-ROX-041924	4/19/2024	< 0.00020	< 0.00020 UJ	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.00033	< 0.00048 U	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020 UJ
	MW4-ROX-071224	7/12/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	0.000089 J	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW4-ROX-101824	10/18/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.00020	< 0.019	0.0036 J	< 0.00020	< 0.0093	< 0.00020
MW-05	MW5-ROX-010924	1/9/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW5-ROX-041224	4/12/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW5-ROX-070824	7/8/2024	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0094	< 0.00019	< 0.0094	< 0.00019
	MW5-ROX-101124	10/11/2024	< 0.00019	< 0.00019	< 0.0098	< 0.00019	< 0.0098	< 0.00019	< 0.00019	< 0.0098	< 0.00019	< 0.00019	< 0.00019	< 0.02	< 0.0098	< 0.00019	< 0.0098	< 0.00019
	MW5-ROX-101124-DUP	10/11/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
MW-06A	MW6A-ROX-010924	1/9/2024	< 0.00021	0.000077 J	< 0.01	< 0.00021	< 0.01	0.000073 J	< 0.00021	< 0.01	0.000043 J	< 0.00021	< 0.00021	< 0.021	< 0.01	0.00011 J	< 0.01	0.000091 J
	MW6A-ROX-041124	4/11/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW6A-ROX-071024	7/10/2024	< 0.00020	0.000036 J	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 U	< 0.02	< 0.01	< 0.00020	< 0.01	0.000055 J
	MW6A-ROX-100924	10/9/2024	< 0.00020	0.000055 J	< 0.0098	< 0.00020	< 0.0098	0.000041 J	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	0.000046 J	0.0064 J	0.000062 J
MW-06B	MW6B-ROX-010924	1/9/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.011	< 0.00021	< 0.011	< 0.00021
	MW6B-ROX-041124	4/11/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW6B-ROX-041124-DUP	4/11/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW6B-ROX-071024	7/10/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	0.00013 J	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW6B-ROX-100824	10/8/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0095	< 0.00020	< 0.0095	< 0.00020
MW-06C	MW6C-ROX-010924	1/9/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW6C-ROX-040924	4/9/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW6C-ROX-071024	7/10/2024	< 0.00019	< 0.00019	< 0.0094	< 0.00019 UJ	< 0.0094 UJ	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	0.000092 J	< 0.019	< 0.0094	< 0.00019	< 0.0094	< 0.00019
	MW6C-ROX-100824	10/8/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
MW-06D	MW6D-ROX-010924	1/9/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW6D-ROX-040924	4/9/2024	< 0.00020	0.000054 J	< 0.0099	< 0.00020	< 0.0099	0.00054	0.00099	< 0.0099	< 0.00020	< 0.00079 U	< 0.0011 U	< 0.02	< 0.0099	0.00097	< 0.0099	0.00049
	MW6D-ROX-071024	7/10/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01 UJ	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW6D-ROX-071024-DUP	7/10/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	0.000098 J	0.00018 J	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW6D-ROX-100824	10/8/2024	< 0.00020	< 0.00020	< 0.0097	< 0.00020	< 0.0097	< 0.00020	< 0.00020	< 0.0097	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0097	< 0.00020	< 0.0097 UJ	< 0.00020
MW-07	MW7-ROX-011724	1/17/2024	< 0.00024	< 0.00024	< 0.012	< 0.00024	< 0.012	< 0.00024	0.00014 J	< 0.012	< 0.00024	0.0013	0.0017	< 0.024	< 0.012	0.00024	0.095	< 0.00024
	MW7-ROX-011724-DUP	1/17/2024	< 0.00023	< 0.00023	< 0.011	< 0.00023	< 0.011	< 0.00023	0.00016 J	< 0.011	< 0.00023	0.0012	0.0016	< 0.023	< 0.011	0.00024	0.088	< 0.00023
	MW7-ROX-041924	4/19/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.0099	< 0.00020	0.00024	< 0.0099	< 0.00020	0.0021	0.0019	< 0.02	< 0.0099	0.00051	0.045	< 0.00020 UJ
	MW7-ROX-041924-DUP	4/19/2024	< 0.00019	< 0.00019 UJ	< 0.0097	< 0.00019	< 0.0097	0.000033 J	0.00026	< 0.0097	< 0.00019	0.0020	0.0020	< 0.019	< 0.0097	0.00058	0.051	0.000094 J
	MW7-ROX-071524	7/15/2024	< 0.00022	< 0.00022	< 0.011	< 0.00022 UJ	< 0.011 UJ	< 0.00022	0.00016 J	< 0.011	< 0.00022	0.0014	0.0014	< 0.022	< 0.011	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															
			Benzo(k)fluoranthene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	2,4-Dimethylphenol	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	4-Nitrophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			0.00017 [1]	0.012 [1]		0.0003 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.14 [3]		0.21 [3]	0.1 [1]	0.21 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
MW-09	MW9-ROX-010524	1/5/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	0.000093 J	< 0.021	< 0.011	< 0.00021	< 0.011	< 0.00021
	MW9-ROX-041524	4/15/2024	< 0.00020	< 0.00020	0.0038 J	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW9-ROX-070524	7/5/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW9-ROX-100424	10/4/2024	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.02	< 0.01	< 0.00019	< 0.01	< 0.00019
MW-10	MW10-ROX-010524	1/5/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.011	< 0.00021	< 0.011	< 0.00021
	MW10-ROX-040424	4/4/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019 U	< 0.019	< 0.0095	< 0.00019	< 0.0095	< 0.00019
	MW10-ROX-070824	7/8/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019 U	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW10-ROX-100724	10/7/2024	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0096	< 0.00020	< 0.0096	< 0.00020
MW-11	MW11-ROX-010524	1/5/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW11-ROX-040524	4/5/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW11-ROX-070524	7/5/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW11-ROX-100424	10/4/2024	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.02	< 0.01	< 0.00019	< 0.01	< 0.00019
MW-12	MW12-ROX-011124	1/11/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	0.000034 J J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW12-ROX-041224	4/12/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW12-ROX-070524	7/5/2024	< 0.00019	0.000038 J	< 0.0097	< 0.00019	< 0.0097 UJ	0.000048 J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097 UJ	< 0.00019
	MW12-ROX-101124	10/11/2024	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.00019	< 0.00019 UJ	< 0.019 UJ	< 0.0094	< 0.00019	< 0.0094 UJ	< 0.00019
MW-13	MW13-ROX-011024	1/10/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW13-ROX-041524	4/15/2024	< 0.00020	< 0.00020	0.0039 J	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW13-ROX-071124	7/11/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.0098 UJ	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW13-ROX-101024	10/10/2024	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0096	< 0.00020	< 0.0096	< 0.00020
MW-14	MW14-ROX-011724	1/17/2024	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.022	< 0.011	< 0.00022	< 0.011	< 0.00022
	MW14-ROX-041124	4/11/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW14-ROX-070824	7/8/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW14-ROX-100924	10/9/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0095	< 0.00020	< 0.0095	< 0.00020
MW-16	MW16-ROX-010824	1/8/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW16-ROX-040924	4/9/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.02	< 0.01	< 0.00020	< 0.01 UJ	< 0.00020
	MW16-ROX-070524	7/5/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW16-ROX-100424	10/4/2024	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.01	< 0.00019	< 0.00019	< 0.00019	< 0.02	< 0.01	< 0.00019	< 0.01	< 0.00019
MW-22	MW22-ROX-011224	1/12/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.01 J	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.012	0.017	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW22-ROX-011224-DUP	1/12/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	0.011 J	< 0.00019	0.000090 J	< 0.0096	< 0.00019	0.013	0.018	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW22-ROX-041824	4/18/2024	< 0.00022 UJ	< 0.00022	< 0.011 UJ	< 0.00022	< 0.011	< 0.00022	0.00013 J	< 0.011	< 0.00022	0.0076	0.010	< 0.022	< 0.011	< 0.00022	< 0.011	< 0.00022
	MW22-ROX-041824-DUP	4/18/2024	< 0.00021 UJ	< 0.00021	< 0.01 UJ	< 0.00021	0.0054 J	< 0.00021	< 0.00021	< 0.01	< 0.00021	0.0084	0.011	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW22-ROX-071224	7/12/2024	< 0.00022	< 0.00022	< 0.011	< 0.00022 UJ	< 0.011 UJ	< 0.00022	< 0.00022	0.0070 J	< 0.00022	0.012	0.017	< 0.022	< 0.011	< 0.00022	< 0.011	< 0.00022
	MW22-ROX-101624	10/16/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	0.0071 J*+ J	< 0.00020	< 0.00020	< 0.0094	< 0.00020	0.018	0.026	< 0.019	< 0.0094	0.000087 J	< 0.0094	< 0.00020
MW-23	MW23-ROX-011124	1/11/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	< 0.00020 UJ	< 0.00020	< 0.0095	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0095	< 0.00020	< 0.0095	< 0.00020
	MW23-ROX-041524	4/15/2024	< 0.00019	< 0.00019	< 0.0096 UJ	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	MW23-ROX-070824	7/8/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW23-ROX-101124	10/11/2024	< 0.00020	< 0.00020	< 0.0097	< 0.00020	< 0.0097	< 0.00020	< 0.00020	< 0.0097	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0097	< 0.00020	< 0.0097	< 0.00020
MW-24	MW24-ROX-010924	1/9/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW24-ROX-040824	4/8/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	< 0.00019 H UJ	< 0.00019 H UJ	< 0.0096	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.019	< 0.0096	< 0.00019 H UJ	< 0.0096	< 0.00019
	MW24-ROX-070924	7/9/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021 UJ	< 0.01 UJ	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	0.00012 J	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	MW24-ROX-101424	10/14/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
MW-25	MW25-ROX-011824	1/18/2024	< 0.00023	< 0.00023	< 0.012	< 0.00023	< 0.012	< 0.00023	< 0.00023	< 0.012	< 0.00023	< 0.00023	< 0.00023	< 0.023	< 0.012	< 0.00023	< 0.012	< 0.00023
	MW25-ROX-041924	4/19/2024	< 0.00020	< 0.00020 UJ	< 0.0099	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020 UJ
	MW25-ROX-071524	7/15/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	MW25-ROX-071524-DUP	7/15/2024	< 0.00022	< 0.00022	< 0.011	< 0.00022 UJ	< 0.011 UJ	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.022	< 0.011	< 0.00022	< 0.011	< 0.00022
	MW25-ROX-101824	10/18/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0093	< 0.00020	< 0.0093	< 0.00020
	MW25-ROX-101824-DUP	10/18/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0093	< 0.00020	< 0.0093	< 0.00020

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs															
			Benzo(k)fluoranthene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	2,4-Dimethylphenol	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	4-Nitrophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.00017** [1]	**0.012** [1]		**0.0003** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]		**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
MW-26	MW26-ROX-010524	1/5/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0099	< 0.00020	< 0.0099 UJ	< 0.00020
	MW26-ROX-040424	4/4/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW26-ROX-070524	7/5/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW26-ROX-100724	10/7/2024	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.0096	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0096	< 0.00020	0.067	< 0.00020
MW-27	MW27-ROX-010824	1/8/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0095	< 0.00019	< 0.0095	< 0.00019
	MW27-ROX-040424	4/4/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.00020	< 0.00020 U	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	MW27-ROX-070824	7/8/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	0.00011 J	< 0.0097	< 0.00019	0.000080 J	< 0.00019 U	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW27-ROX-101424	10/14/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
MW-28	MW28-ROX-010524	1/5/2024	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.011	< 0.00022	< 0.00022	< 0.00022	< 0.022	< 0.011	< 0.00022	< 0.011	< 0.00022
	MW28-ROX-041224	4/12/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW28-ROX-070824	7/8/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	MW28-ROX-101524	10/15/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0095	< 0.00019	< 0.0095	< 0.00019
P-54	P54-ROX-010824	1/8/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020
	P54-ROX-040824	4/8/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096 UJ	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019 H UJ	< 0.00019 H UJ	< 0.019 UJ	< 0.0096	< 0.00019	< 0.0096 UJ	< 0.00019
	P54-ROX-070924	7/9/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019 UJ	< 0.0095 UJ	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00019	0.00011 J	< 0.019	< 0.0095	< 0.00019	< 0.0095	< 0.00019
	P54-ROX-101424	10/14/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.00020 UJ	< 0.019	< 0.0094	< 0.00020	< 0.0094	< 0.00020
P-56	P56-ROX-011024	1/10/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095	< 0.00019 UJ	0.00034	< 0.0095	< 0.00019	0.0068	0.0048	< 0.019	< 0.0095	0.00052	< 0.0095	< 0.00019
	P56-ROX-041824	4/18/2024	< 0.00022 UJ	< 0.00022	< 0.011 UJ	< 0.00022	< 0.011	< 0.00022	0.00022	< 0.011	< 0.00022	0.0026	0.00087	< 0.022	< 0.011	0.00029	< 0.011	< 0.00022
	P56-ROX-071024	7/10/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	0.00028	< 0.01	< 0.00020	0.0043	0.0018	< 0.02	< 0.01	0.00043	< 0.01	0.000049 J
	P56-ROX-101524	10/15/2024	< 0.00020	< 0.00020	< 0.0092	< 0.00020	0.0060 J*+ J	< 0.00020	0.00062	< 0.0092	< 0.00020	0.017	0.017	< 0.018	< 0.0092	0.0012	< 0.0092	< 0.00020
P-57	P57-ROX-011124	1/11/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021 UJ	0.00054	< 0.011	< 0.00021	0.027	0.022	< 0.022	< 0.011	0.0004	< 0.011	< 0.00021
	P57-ROX-011124-DUP	1/11/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021 UJ	0.00051	< 0.011	< 0.00021	0.025	0.019	< 0.021	< 0.011	0.00037	< 0.011	< 0.00021
	P57-ROX-041824	4/18/2024	< 0.00021 UJ	< 0.00021	< 0.011 UJ	< 0.00021	< 0.011	0.000044 J	0.00042	< 0.011	< 0.00021	0.015	0.0014	< 0.021	< 0.011	0.00025	< 0.011	< 0.00021
	P57-ROX-041824-DUP	4/18/2024	< 0.00022 UJ	< 0.00022	< 0.011 UJ	< 0.00022	< 0.011	< 0.00022	0.00036	< 0.011	< 0.00022	0.015	0.0015	< 0.022	< 0.011	0.00019 J	< 0.011	< 0.00022
	P57-ROX-071024	7/10/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	0.00046	< 0.01	< 0.00020	0.022	0.013	< 0.02	< 0.01	0.00042	< 0.01	< 0.00020
	P57-ROX-101724	10/17/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	0.00072	< 0.0093	< 0.00020	0.019	0.013	< 0.019	< 0.0093	0.00029	< 0.0093	< 0.00020
P-58	P58-ROX-011224	1/12/2024	< 0.00021	0.00056	< 0.01	0.000071 J	< 0.01	0.00020 J	0.0014	< 0.01	0.000073 J	0.058	0.019	< 0.021	< 0.01	0.0021	0.31	0.00088
	P58-ROX-011224-DUP	1/12/2024	< 0.00020	0.00061	< 0.01	0.000087 J	< 0.01	0.00019 J	0.0014	< 0.01	0.000070 J	0.058	0.019	< 0.02	< 0.01	0.0021	0.28	0.00094
	P58-ROX-041724	4/17/2024	< 0.00020	0.00028	< 0.01 UJ	< 0.00020 UJ	< 0.01	0.00016 J	0.0013	< 0.01 UJ	< 0.00020	0.031	0.013 B	< 0.02	< 0.01	0.0011	0.19	0.00045
	P58-ROX-071724	7/17/2024	< 0.00021	0.00012 J	< 0.01	< 0.00021	< 0.01 UJ	0.000081 J	0.00063 B	< 0.01	< 0.00021	0.039 B	0.015 B	< 0.021	< 0.01	0.0012	0.48	0.00027
	P58-ROX-071724-DUP	7/17/2024	< 0.00021	0.000083 J	< 0.01	< 0.00021	< 0.01 UJ	0.000056 J	0.00065 B	< 0.01	< 0.00021	0.038 B	0.015 B	< 0.021	< 0.01	0.00096	0.43	0.00016 J
	P58-ROX-101724	10/17/2024	< 0.00020	0.00022	< 0.0093	< 0.00020	< 0.0093	0.000079 J	0.0018	< 0.0093	< 0.00020	0.062	0.036	< 0.019	< 0.0093	0.0012	0.25	0.00031
P-59	P59-ROX-011224	1/12/2024	< 0.00021	0.000084 J	< 0.011	< 0.00021	< 0.011	0.00014 J	0.00025	< 0.011	< 0.00021	0.0082	0.011	< 0.021	< 0.011	0.00071	0.017	0.00036
	P59-ROX-041924	4/19/2024	< 0.00021	0.00020 J J	< 0.011	< 0.00021	< 0.011	< 0.00021	0.00037	< 0.011	< 0.00021	0.009	0.012	< 0.021	< 0.011	0.00073	0.0071 J	0.00063
	P59-ROX-071524	7/15/2024	< 0.00020	0.000059 J	< 0.0098	< 0.00020 UJ	< 0.0098 UJ	0.000082 J	0.00014 J	< 0.0098	< 0.00020	0.0081	0.0066	< 0.02	< 0.0098	0.00022	0.0041 J	0.00021
	P59-ROX-101624	10/16/2024	< 0.00020	0.000059 J	< 0.0093	< 0.00020	< 0.0093	0.00011 J	0.00039	< 0.0093	< 0.00020	0.016	0.017	< 0.019	< 0.0093	0.00040	0.02	0.00025
P-74	P74-ROX-041824	4/18/2024	< 0.00022 UJ	< 0.00022	< 0.011 UJ	< 0.00022	< 0.011	0.000085 J	0.00011 J	< 0.011	< 0.00022	0.00020 J	0.00020 J	< 0.022	< 0.011	0.00010 J	< 0.011	0.000063 J
	P74-ROX-071224	7/12/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.0098 UJ	< 0.00020	< 0.00020	< 0.0098	< 0.00020	0.0016	0.0017	0.018 J	< 0.0098	0.00041	< 0.0098	0.000061 J
	P74-ROX-071224-DUP	7/12/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019 UJ	< 0.0097 UJ	< 0.00019	< 0.00019	< 0.0097	< 0.00019	0.0014	0.0015	0.019	< 0.0097	0.00034	< 0.0097	0.000055 J
	P74-ROX-101724	10/17/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.0093	< 0.00020	0.0010	0.0011	< 0.019	< 0.0093	0.000070 J	0.016	< 0.00020
	P74-ROX-101724-DUP	10/17/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	< 0.00020	0.000088 J	< 0.0095	< 0.00020	0.00099	0.0011	< 0.019	< 0.0095	0.000070 J	0.011	< 0.00020
P-93A	P93A-ROX-011024	1/10/2024	< 0.00019	< 0.00019	< 0.0094	< 0.00019	< 0.0094	< 0.00019 UJ	< 0.00019	< 0.0094	< 0.00019	0.000075 J	< 0.00019	< 0.019	< 0.0094	< 0.00019	< 0.0094	< 0.00019
	P93A-ROX-041824	4/18/2024	< 0.00021 UJ	< 0.00021	< 0.011 UJ	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	0.00022	< 0.00021	< 0.021	< 0.011	< 0.00021	0.0098 J	< 0.00021
	P93A-ROX-071224	7/12/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019 UJ	< 0.0096 UJ	< 0.00019	< 0.00019	< 0.0096	< 0.00019	0.0011	0.000063 J	< 0.019	< 0.0096	< 0.00019	0.13	< 0.00019
	P93A-ROX-101724	10/17/2024	< 0.00020	< 0.00020	< 0.0092	< 0.00020	< 0.0092	< 0.00020	0.00015 J	< 0.0092	< 0.00020	0.0050	0.00054	< 0.018	< 0.0092	0.000069 J	0.13	< 0.00020
P-93B	P93B-ROX-011224	1/12/2024	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	0.00022	0.00017 J	< 0.021	< 0.011	< 0.00021	0.2	< 0.00021
	P93B-ROX-041924	4/19/2024	< 0.00021	< 0.00021 UJ	< 0.011	< 0.00021	< 0.011	0.000036 J	< 0.00021	< 0.011	< 0.00021	0.00018 J	0.00019 J	< 0.021	< 0.011	< 0.00021	0.17	< 0.00021 UJ
	P93B-ROX-071724	7/17/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095 UJ	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.00095 UJ	< 0.00095 UJ	< 0.019	< 0.0095	< 0.00019	0.15	< 0.00019
	P93B-ROX-101724	10/17/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	< 0.00020	< 0.0093	< 0.00020	0.00024	0.00022	< 0.019	< 0.0093	0.000080 J	0.055	< 0.00020

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SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

			SVOCs															
			Benzo(k)fluoranthene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene	2,4-Dimethylphenol	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	3&4-Methylphenol	4-Nitrophenol	Phenanthrene	Phenol	Pyrene
Screening Values (mg/L)			**0.00017** [1]	**0.012** [1]		**0.0003** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.14** [3]		**0.21** [3]	**0.1** [1]	**0.21** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**															
P-93C	P93C-ROX-011124	1/11/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021 UJ	< 0.00021	< 0.01	< 0.00021	< 0.00021	0.000095 J	< 0.021	< 0.01	< 0.00021	0.063	< 0.00021
	P93C-ROX-041924	4/19/2024	< 0.00021	< 0.00021 UJ	< 0.011	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.011	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.011	< 0.00021	0.059	< 0.00021 UJ
	P93C-ROX-071524	7/15/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019 UJ	< 0.0096 UJ	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	0.000070 J	< 0.019	< 0.0096	< 0.00019	0.024	< 0.00019
	P93C-ROX-101724	10/17/2024	< 0.00020	< 0.00020	< 0.0092	< 0.00020	< 0.0092	0.000059 J	< 0.00020	< 0.0092	< 0.00020	< 0.00020	< 0.00020	< 0.018	< 0.0092	0.000093 J	0.011	0.000041 J
P-93D	P93D-ROX-011024	1/10/2024	< 0.00019	< 0.00019	< 0.0095	< 0.00019	< 0.0095	< 0.00019 UJ	< 0.00019	< 0.0095	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0095	< 0.00019	< 0.0095	< 0.00019
	P93D-ROX-042224	4/22/2024	< 0.00020 UJ	< 0.00020 UJ	< 0.01	< 0.00020 UJ	< 0.01	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	0.000086 J	0.000094 J	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020 UJ
	P93D-ROX-071224	7/12/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019 UJ	< 0.0096 UJ	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0096	< 0.00019	< 0.0096	< 0.00019
	P93D-ROX-101524	10/15/2024	< 0.00020	< 0.00020	< 0.0092	< 0.00020	< 0.0092	< 0.00020	< 0.00020	< 0.0092	< 0.00020	< 0.00020	< 0.00020	< 0.018	< 0.0092	< 0.00020	< 0.0092	< 0.00020
P-114R	P114R-ROX-011024	1/10/2024	< 0.00020	< 0.00020	< 0.0095	< 0.00020	< 0.0095	0.000065 J J	< 0.00020	< 0.0095	< 0.00020	0.00022	< 0.00020	< 0.019	< 0.0095	< 0.00020	< 0.0095	< 0.00020
	P114R-ROX-041524	4/15/2024	< 0.00020	< 0.00020	0.0038 J	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.0099	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020
	P114R-ROX-071124	7/11/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020 UJ	< 0.01 UJ	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	< 0.00020
	P114R-ROX-101024	10/10/2024	< 0.00020	< 0.00020	< 0.0097	< 0.00020	< 0.0097	< 0.00020	< 0.00020	< 0.0097	< 0.00020	0.000094 J	< 0.00020	< 0.019	< 0.0097	< 0.00020	< 0.0097	< 0.00020
ROST-3-MW	ROST3MW-ROX-010824	1/8/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	< 0.00019	0.00015 J	< 0.0096 UJ	< 0.00019	0.00029 J	< 0.00019 UJ	< 0.019 UJ	< 0.0096	0.000087 J	< 0.0096 UJ	< 0.00019
	ROST3MW-ROX-041624	4/16/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	< 0.00020	0.00013 J	< 0.0098	< 0.00020	0.000080 J	< 0.00020 U	< 0.02	< 0.0098	< 0.00020	< 0.0098	< 0.00020
	ROST3MW-ROX-070924	7/9/2024	< 0.00019 UJ	< 0.00019	< 0.0097	< 0.00019 UJ	< 0.0097 UJ	< 0.00019	0.00010 J	< 0.0097	< 0.00019 UJ	0.00012 J	0.00016 J	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	ROST3MW-ROX-101524	10/15/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	0.00012 J	< 0.0093	< 0.00020	< 0.00020	< 0.00020	< 0.019	< 0.0093	< 0.00020	< 0.0093	< 0.00020
ROST-4-PZ(C)	ROST4PZ(C)-ROX-010824	1/8/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	< 0.00020	0.00017 J	< 0.01	< 0.00020	< 0.00020	< 0.00020	< 0.02	< 0.01	< 0.00020	< 0.01	0.000057 J
	ROST4PZ(C)-ROX-041624	4/16/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	0.000042 J	0.00036	< 0.0097	< 0.00019	0.0021	< 0.00019 U	< 0.019	< 0.0097	0.00010 J	< 0.0097	0.000039 J
	ROST4PZ(C)-ROX-041624-DUP	4/16/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020	< 0.0098	0.000051 J	0.00036	< 0.0098	< 0.00020	0.0023	< 0.00020 U	< 0.02	< 0.0098	0.00013 J	< 0.0098	0.000046 J
	ROST4PZ(C)-ROX-070924	7/9/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.0099 UJ	< 0.00020	0.00027 J	< 0.0099	< 0.00020	0.0051	0.00035	< 0.02	< 0.0099	0.00022	< 0.0099	0.000070 J
	ROST4PZ(C)-ROX-101624	10/16/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	0.000034 J	0.00080	< 0.0093	< 0.00020	0.018	0.0020	< 0.019	< 0.0093	0.00071	< 0.0093	0.000065 J
	ROST4PZ(C)-ROX-101624-DUP	10/16/2024	< 0.00020	< 0.00020	< 0.0093	< 0.00020	< 0.0093	< 0.00020	0.00087	< 0.0093	< 0.00020	0.015	0.0016	< 0.019	< 0.0093	0.00062	< 0.0093	0.000066 J
ROST-4-PZ(E)	ROST4PZ(E)-ROX-011124	1/11/2024	< 0.00020	0.00011 J	< 0.01	< 0.00020	< 0.01	0.00037	0.00064	< 0.01	< 0.00020	0.0092	0.0026	< 0.02	< 0.01	0.0047	< 0.01	0.00049
	ROST4PZ(E)-ROX-041624	4/16/2024	< 0.00019	< 0.00019	< 0.0096	< 0.00019	< 0.0096	0.000054 J	0.00021	< 0.0096	< 0.00019	0.0019	0.00082 B	< 0.019	< 0.0096	0.00074	< 0.0096	0.000084 J
	ROST4PZ(E)-ROX-071024	7/10/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019 UJ	< 0.0097 UJ	0.000037 J	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	0.000072 J
	ROST4PZE-ROX-101524	10/15/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	0.000040 J	< 0.00020	< 0.0094	< 0.00020	0.00017 J	< 0.00020	< 0.019	< 0.0094	0.00026	< 0.0094	0.00011 J
ROST-4-PZ(G)	ROST4PZ(G)-ROX-010824	1/8/2024	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.01	< 0.00021	< 0.00021	< 0.00021	< 0.021	< 0.01	< 0.00021	< 0.01	< 0.00021
	ROST4PZ(G)-ROX-040524	4/5/2024	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.0097	< 0.00019	< 0.00019	< 0.00019	< 0.019	< 0.0097	< 0.00019	< 0.0097	< 0.00019
	ROST4PZ(G)-ROX-070924	7/9/2024	< 0.00020	< 0.00020	< 0.0099	< 0.00020 UJ	< 0.0099 UJ	< 0.00020	< 0.00020	< 0.0099	< 0.00020	0.00015 J	0.00021	< 0.02	< 0.0099	< 0.00020	< 0.0099	< 0.00020
	ROST4PZG-ROX-101624	10/16/2024	< 0.00020	< 0.00020	< 0.0094	< 0.00020	< 0.0094	< 0.00020	< 0.00020	< 0.0094	< 0.00020	0.0015	0.00024	< 0.019	< 0.0094	0.00019 J	< 0.0094	< 0.00020
T-12	T12-ROX-011124	1/11/2024	< 0.00020	< 0.00020	< 0.01	< 0.00020	< 0.01	0.000037 J J	0.00028	< 0.01	< 0.00020	0.016	0.024	< 0.021	< 0.01	0.00052	0.030	0.000039 J
	T12-ROX-041924	4/19/2024	< 0.00022	< 0.00022 UJ	< 0.011	< 0.00022	< 0.011	< 0.00022	0.00035	< 0.011	< 0.00022	0.016	0.023	< 0.022	< 0.011	0.00054	0.032	< 0.00022 UJ
	T12-ROX-071524	7/15/2024	< 0.00020	< 0.00020	< 0.0098	< 0.00020 UJ	< 0.0098 UJ	< 0.00020	0.0002	< 0.0098	< 0.00020	0.012	0.018	< 0.02	< 0.0098	0.00044	0.022	< 0.00020
	T12-ROX-101624	10/16/2024	< 0.00019	< 0.00019	< 0.0092	< 0.00019	< 0.0092	< 0.00019	0.00028	< 0.0092	< 0.00019	0.021	0.032	< 0.018	< 0.0092	0.00062	0.0050 J	< 0.00019

Notes:

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

2 Denotes screening criteria 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:

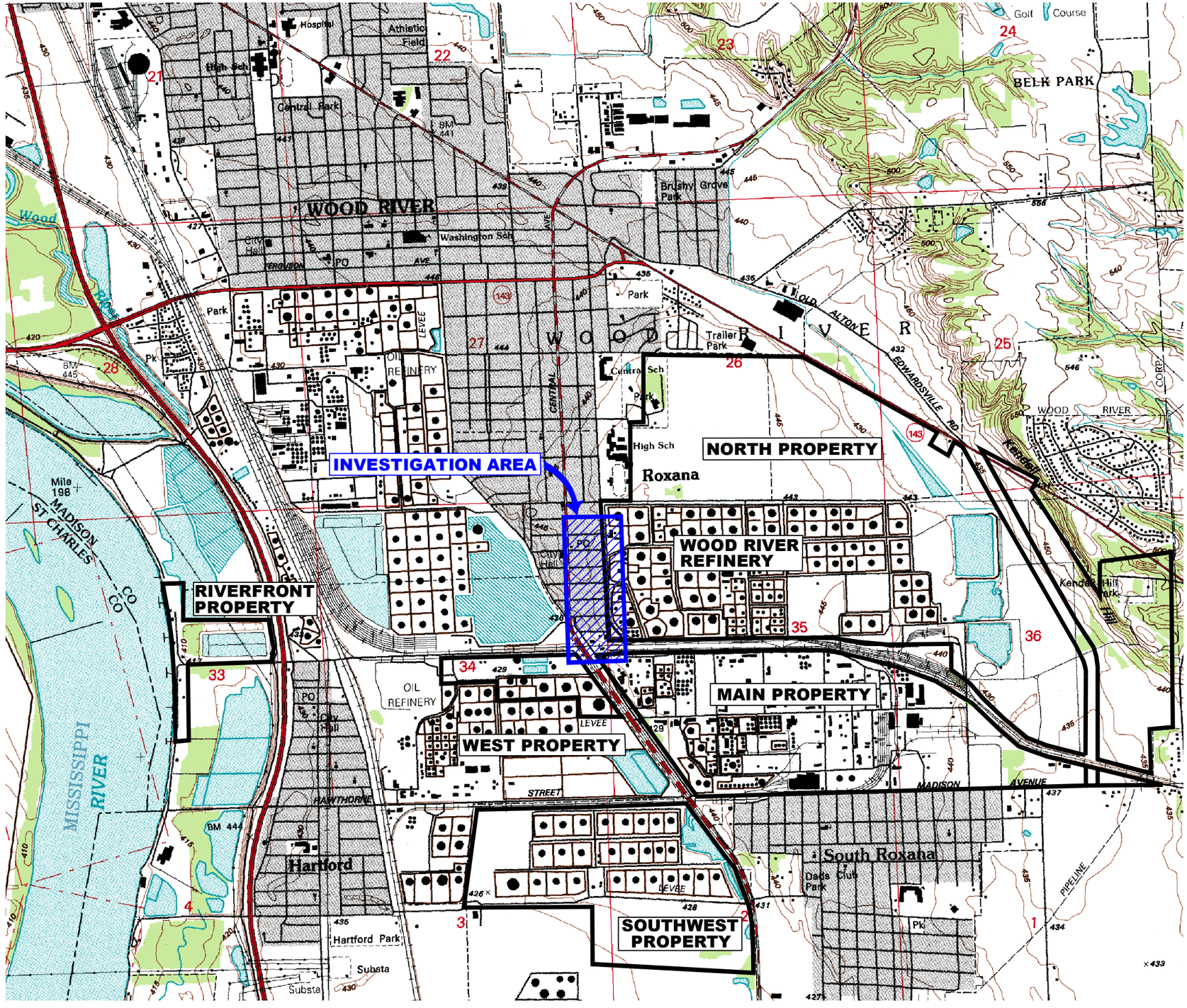
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

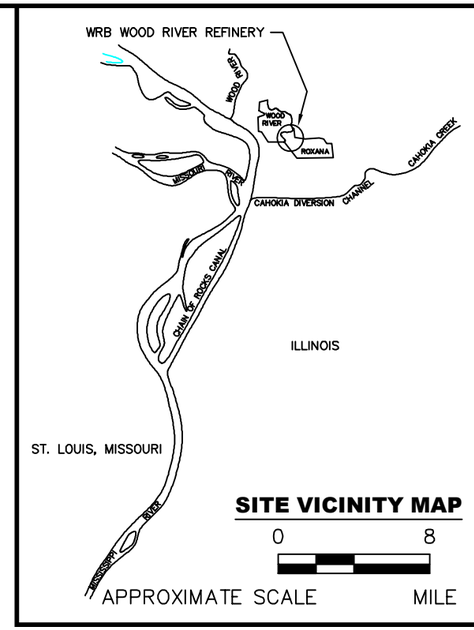
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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 January 2025 DSGN. BY:mar CHKD. BY:wmp	Investigation Area Location Map	FIG. NO. 1

File: C:\USERS\LORENTE.MEDINA\GIS GIS SERVICES - GIS CAD PROJECTS\GIS AMERICAS\SHELL\ILLINOIS\USP00666-ROX_S_CENTRAL_AVE--ROXANA--IL\ROXANA 4024 GW RPT\WORKSPACE\FIGURE 1 INVESTIGATION AREA LOCATION MAP.DWG Last edited: 09/26/24 ● 10:57 AM ● WCC-ST.LOUIS

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4Q24 GW RPT\WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Sep. 20, 24 @ 11:00 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
VILLAGE OF ROXANA
FIFTH ST
SIXTH ST
SEVENTH ST
EIGHTH ST
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
1ST STREET
2ND STREET
RAND AVENUE
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
BP
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

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

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

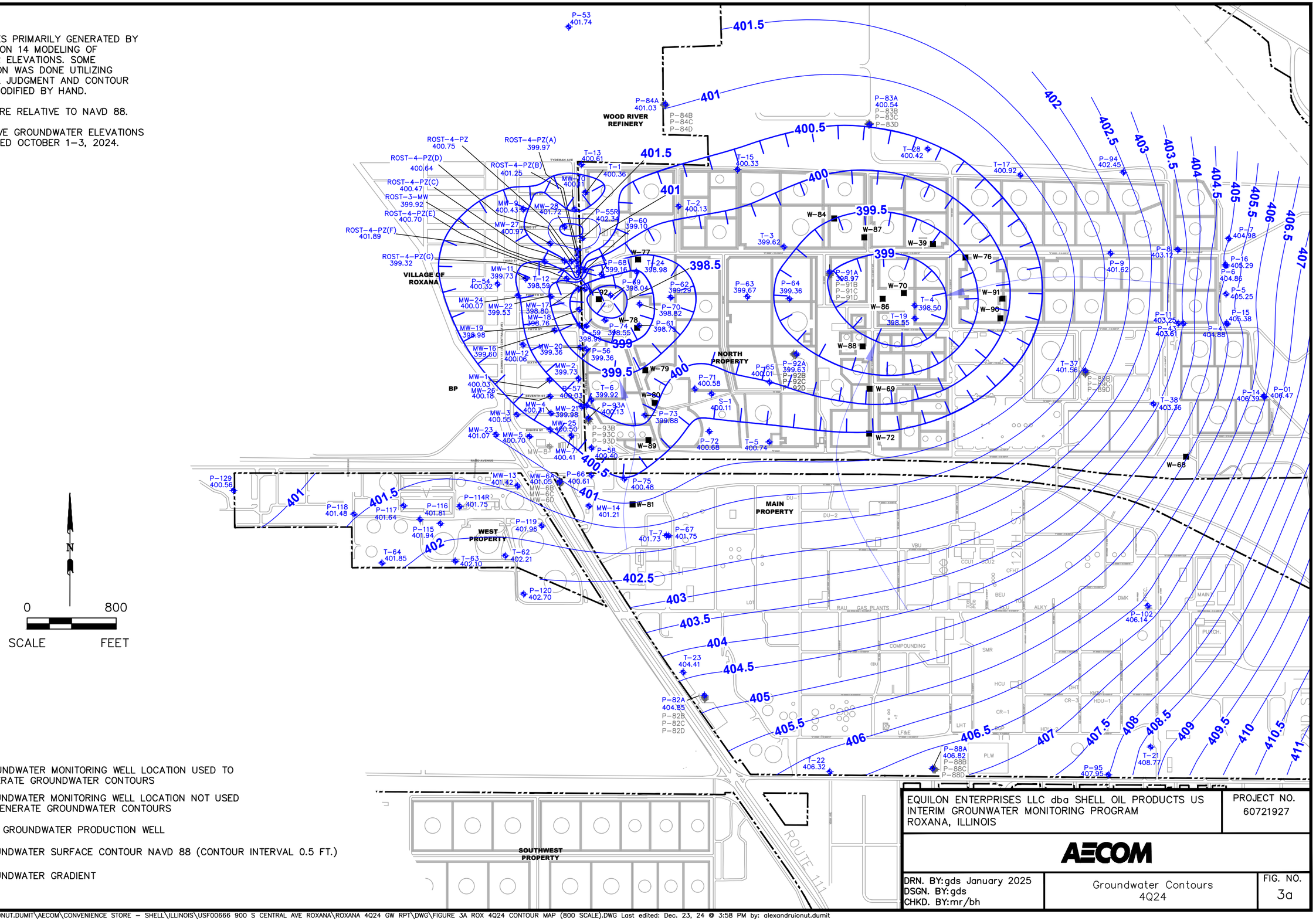
0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds January 2025 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 OCTOBER 1–3, 2024.



LEGEND

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

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60721927
AECOM		
DRN. BY:gds January 2025 DSGN. BY:gds CHKD. BY:mr/bh	Groundwater Contours 4Q24	FIG. NO. 3a

File: C:\USERS\ALEXANDRUIONUT.DUMIT\AECOM\CONVENIENCE STORE – SHELL\ILLINOIS\USF00666 900 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\DWG\FIGURE 3A ROX 4Q24 CONTOUR MAP (800 SCALE).DWG Last edited: Dec. 23, 24 @ 3:58 PM by: alexandruionut.dumit

File: C:\USERS\ALEXANDRUIONUT.DUMIT\AECOM\CONVENIENCE STORE - SHELL\ILLINOIS\USF00666 900 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\DWG\FIGURE 3B GW CONTOURS 4Q24 WF.DWG Last edited: Dec. 23, 24 @ 3:58 PM by: alexandruionut.dumit

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 OCTOBER 1–3, 2024.

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

T-13 400.61
T-1 400.36
MW-9 400.43
PZ-1(101)
PZ-1(85)
MW-10 400.11
T-2 400.13
ROST-4-PZ(A) 399.97
ROST-4-PZ(B) 401.25
MW-28 401.72
MW-27 400.97
P-55R 402.34
ROST-4-PZ(D) 400.64
ROST-4-PZ(C) 400.47
ROST-4-PZ 400.75
ROST-3-MW 399.92
P-60 399.10
ROST-4-PZ(E) 400.70
ROST-4-PZ(F) 401.89
ROST-4-PZ(G) 399.32
P-68 399.16
T-24 398.98
P-54 400.32
MW-11 399.73
MW-17 398.80
T-12 398.59
MW-24 400.07
MW-22 399.53
P-69 398.04
P-62 399.29
P-70 398.82
MW-18 398.76
P-74 398.55
P-61 398.75
MW-16 399.60
MW-19 398.98
P-59 398.99
GP-9-PZ
MW-12 400.06
PZ-2(84)
PZ-2(70.5)
MW-20 399.36
P-56 399.36
MW-2 399.73
MW-1 400.03
T-6 399.92
P-71 400.58
S-1 400.11
MW-26 400.18
MW-4 400.31
MW-21 399.98
P-57 400.03
MW-3 400.55
P-73 399.88
MW-25 400.50
P-93A 400.13
P-93B
P-93C
P-93D
MW-5 400.70
MW-7 400.41
MW-23 401.07
MW-8
P-58 400.40
P-72 400.68
MW-13 401.42
MW-6A 401.05
MW-6B
MW-6C
MW-6D
P-66 400.61
P-75 400.48
MW-14 401.21
P-117 401.64
P-114R 401.75
P-116 401.81
P-115 401.94
P-119 401.96
T-7 401.73
P-67 401.75
T-64 401.85
T-63 402.10
T-62 402.21

W-77 W-92 W-78 W-79 W-80 W-89 W-81

A-32 A-31 A-58 A-28 A-37 A-27 A-35 A-34 A-16 A-22 A-20 A-30 F-76 F-77 F-78 F-73 F-74 F-75

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

0 300
SCALE FEET

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

PROJECT NO. 60721927

AECOM

DRN. BY: gds January 2025
DSGN. BY: gds
CHKD. BY: mr/bh

Groundwater Contours 4Q24– West Fenceline

FIG. NO. 3b

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00686-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4Q24 GW RPT\WORKSPACE\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE) 4Q24.DWG Last edited: Dec. 10, 24 @ 4:53 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 OCTOBER 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
3RD STREET
RAND AVENUE
VILLAGE OF ROXANA
NORTH PROPERTY
WOOD RIVER REFINERY
MAIN PROPERTY
WEST PROPERTY
PUBLIC WORKS YARD
BP
1986 APPROXIMATE BENZENE RELEASE SITE
2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE

P-84A P-84B P-84C P-84D
T-13 T-1 T-2 T-12 T-6 T-7
A-32 A-31 A-58 A-57 A-34 A-28 A-33 A-37 A-27 A-35 A-16 A-30 A-22 A-29
F-50 F-76 F-77 F-78 F-73 F-74 F-75
MW-9 MW-10 ROST-4-PZ(A) MW-28 ROST-4-PZ(B) ROST-4-PZ(D) MW-27 ROST-4-PZ(C) ROST-3-MW ROST-4-PZ ROST-4-PZ(E) ROST-4-PZ(F) MW-11 ROST-4-PZ(G) MW-17 MW-24 MW-22 MW-18 MW-19 MW-16 MW-12 MW-20 MW-2 MW-1 MW-26 MW-21 MW-3 MW-4 MW-25 MW-5 MW-7 MW-23 MW-13 MW-6A MW-6B MW-6C MW-6D MW-14
P-54 P-55R P-56 P-57 P-58 P-59 P-60 P-61 P-62 P-66 P-67 P-68 P-69 P-70 P-71 P-72 P-73 P-74 P-75 P-79 P-80 P-93A P-93B P-93C P-93D P-114R P-115 P-116 P-117 P-119
W-92 R-77 W-77 T-24 1.09 R-78 W-78 W-79 R-80 W-80 R-81 W-81 R-89 W-89 S-1 0.04
0.1 0.29 1.0 0.01 0.17 0.50 0.92* 1.66 0.32

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 January 2025 DSGN. BY:mr CHKD. BY:bh	4Q24 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 OCTOBER 1–3, 2024.

VILLAGE OF ROXANA

NORTH PROPERTY

WEST PROPERTY

MAIN PROPERTY

SOUTHWEST PROPERTY

ILLINOIS TERMINAL RAILROAD

RAND AVE.

MAIN OFFICE ROAD

0 800

SCALE FEET

N

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

PROJECT NO. 60721927

AECOM

DRN. BY: gds January 2025
DSGN. BY: mr
CHKD. BY: bh

4Q24 Thickness of LNAPL

FIG. NO. 4b

File: C:\USERS\LORENTE.AECOM\DOS GIS SERVICES - GIS CAD PROJECTS\DOS AMERICAS\SHELL\ILLINOIS\USP00886-400_S_CENTRAL_AVE-ROXANA-IL\ROXANA 4Q24 GW RPT\WORKSPACES\FIGURE 4B THICKNESS OF LNAPL (REFINERY) 4Q24.DWG Last edited: Dec. 10, 24 @ 8:10 AM by: lorente

File: C:\USERS\ALEXANDRUIONUT.DUMIT\AECOM\CONVENIENCE STORE – SHELL\ILLINOIS\USF00666 900 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\DWG\FIGURE 5 4Q24 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Dec. 23, 24 @ 3:58 PM by: alexandruionut.dumit

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
Naphthalene	0.14
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
2-Methylnaphthalene	0.028
Phenol	0.1

3. MULTIPLE RESULTS (e.g., 0.043 / 0.039) 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 4Q24 DUE TO THE PRESENCE OF LNAPL.

Sample Location	ROST-4-PZ (G)
Sampled 10/16/2024	Result (mg/L)
Benzene	0.0056

Sample Location	P-93A	P-93B	P-93C
Sampled 10/17, 10/17, 10/17/2024	Result (mg/L)	Result (mg/L)	Result (mg/L)
Benzene	190	720	2.9
Phenol	0.13		

Sample Location	MW-25
Sampled 10/18/2024	Result (mg/L)
Benzene	0.043 / 0.039

Sample Location	T-12
Sampled 10/16/2024	Result (mg/L)
Benzene	1.4
2-Methylnaphthalene	0.032

Sample Location	MW-22
Sampled 10/16/2024	Result (mg/L)
Benzene	0.018
Naphthalene	0.16
1,2,4-Trimethylbenzene	0.17
1,3,5-Trimethylbenzene	0.11

Sample Location	P-59
Sampled 10/16/2024	Result (mg/L)
Benzene	0.91
1,2,4-Trimethylbenzene	0.12

Sample Location	P-74
Sampled 10/17/2024	Result (mg/L)
Benzene	1.8 / 1.8

Sample Location	P-57
Sampled 10/17/2024	Result (mg/L)
Benzene	0.066

Sample Location	P-58
Sampled 10/17/2024	Result (mg/L)
Benzene	230
2-Methylnaphthalene	0.036
Phenol	0.25

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

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 January 2025
DSGN. BY:mr
CHKD. BY:bh

4Q24 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

File: C:\USERS\ALEXANDRUIONUT.DUMIT\AECOM\CONVENIENCE STORE – SHELL\ILLINOIS\USF00666 900 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\DWG\FIGURE 6 3Q24 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Dec. 23, 24 @ 3:58 PM by: alexandruionut.dumit

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. 0.043 / 0.039) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R AND P-66 ADJUSTED BASED ON AVAILABLE 4Q24 AND HISTORICAL ANALYTICAL DATA FROM WELLS IN THE AREA.
7. J = THE RESULT IS ESTIMATED.
8. AT WELL CLUSTER LOCATIONS, THE HIGHEST VALUE WAS USED FOR CONTOURING PURPOSES.
9. MW-7 NOT SAMPLED DUE TO OPERATION OF FPWY SEE SYSTEM

BP

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

PZ-1(101) PZ-1(85) MW-9 <0.0005
MW-10 <0.0005
MW-28 0.00025J
MW-27 0.00038J
ROST-4-PZ(A)
ROST-4-PZ(C) 0.0016/ 0.0017
ROST-4-PZ(B)
ROST-3-MW <0.001
ROST-4-PZ(D)
ROST-4-PZ(E) <0.001
ROST-4-PZ(F)
ROST-4-PZ(G) 0.0056
MW-11 <0.0005
MW-17
MW-24 0.00056J
MW-22 0.018
MW-18
MW-19
MW-16 <0.0005
PZ-2(84)
PZ-2(70.5)
MW-12 <0.001
MW-20
MW-01 <0.0005 / <0.0005
MW-2 0.00089J
MW-26 <0.0005
MW-21
MW-3 <0.001
MW-4 0.00064J
MW-25 0.043 / 0.039
MW-23 0.00059J
MW-5 0.00026J / 0.00067J
MW-8
MW-7
MW-13 <0.001
MW-6A <0.001
MW-6B <0.001
MW-6C <0.001
MW-6D <0.001
MW-14 <0.001
P-114R <0.001
P-115
P-54 <0.001
P-55R 0.29
P-60-11
P-60-S
P-60 0.01
P-60-12
P-60-13
P-68 0.17
P-69
P-74 1.8/ 1.8
P-59 0.91
P-70 0.92*
P-61 1.66
P-56 <0.0005
P-57 0.066
P-58 230
P-66 0.32
P-73
P-75
T-12 1.4
T-24 1.09
T-6
P-93A 190
P-93B 720
P-93C 2.9
P-93D 0.00027J
R-77 W-77
R-78 W-78
R-79 W-79
R-80 W-80
R-89 W-89
R-81 W-81
W-92
A-34
A-33
A-28
A-27
A-22
F-76
F-77
F-78
F-73
F-74
F-75
0.1
1.0
0.005
0.05
0.5
5
50
500

0 200 SCALE FEET

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

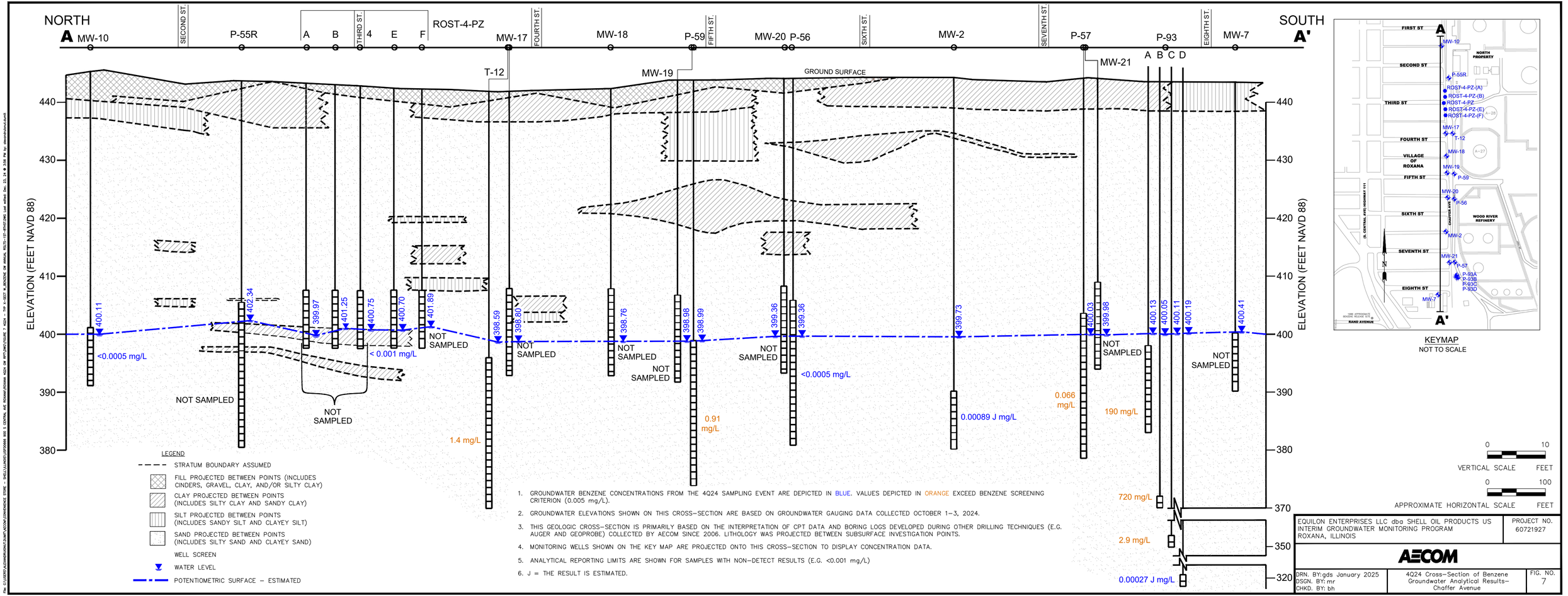
PROJECT NO. 60721927

AECOM

DRN. BY:gds January 2025
DSGN. BY:mr
CHKD. BY:bh

4Q24 Dissolved Phase Benzene Concentrations in Groundwater

FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 4Q24 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 OCTOBER 1–3, 2024.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA AND BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) COLLECTED BY AECOM SINCE 2006. LITHOLOGY WAS PROJECTED BETWEEN SUBSURFACE INVESTIGATION POINTS.
4. MONITORING WELLS SHOWN ON THE KEY MAP ARE PROJECTED ONTO THIS CROSS-SECTION TO DISPLAY CONCENTRATION DATA.
5. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (E.G. <0.001 mg/L)
6. J = THE RESULT IS ESTIMATED.

KEYMAP
NOT TO SCALE

0 10
VERTICAL SCALE FEET

0 100
APPROXIMATE HORIZONTAL SCALE FEET

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INTERIM GROUNDWATER MONITORING PROGRAM
ROXANA, ILLINOIS

PROJECT NO. 60721927

AECOM

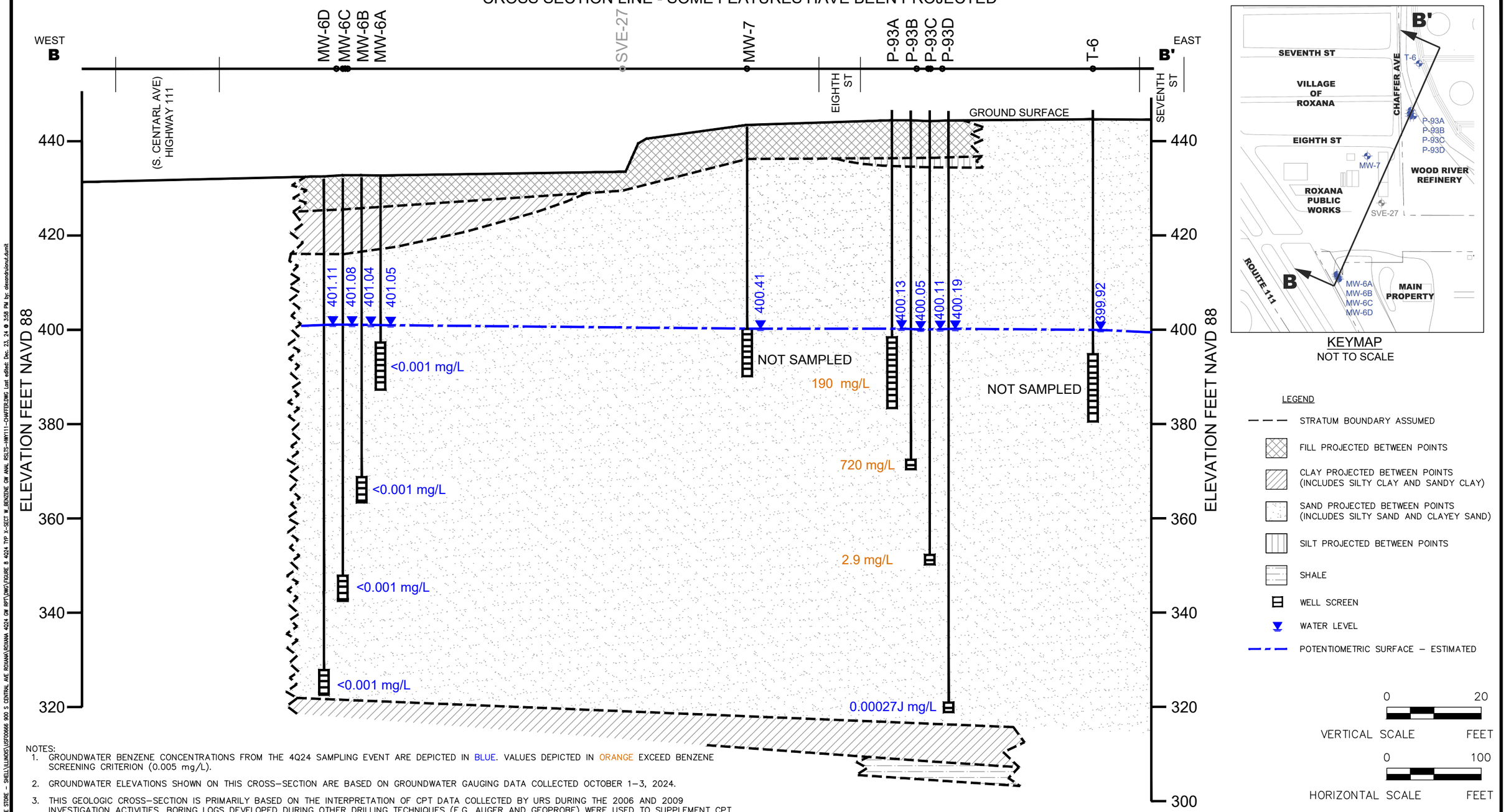
DRN. BY: gds January 2025
DSGN. BY: mr
CHKD. BY: bh

4Q24 Cross-Section of Benzene Groundwater Analytical Results–Chaffer Avenue

FIG. NO. 7

File: C:\USERS\ALEXANDER.DUNAT\ACCDW\COMMENCE STORE - SHELL\ILLINOIS\LIBF0666 800 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\MXD\FIGURE 7 4Q24 - TYP X-SECT W_BENZENE GW ANALYSIS_ROST5-15T-BTEXT.MXD Last edited: Dec. 23, 24 @ 3:56 PM by: alexander.dunat

CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED



KEYMAP
NOT TO SCALE

LEGEND

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

VERTICAL SCALE 0 20 FEET

HORIZONTAL SCALE 0 100 FEET

NOTES:

1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 4Q24 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 OCTOBER 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. J = THE RESULT IS ESTIMATED

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60721927
AECOM	
DRN. BY:gds January 2025 DSGN. BY:mr CHKD. BY:bh	4Q24 Cross–Section of Benzene Groundwater Analytical Results– Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\VLEVANDROUNOT.DAMY\AECOM\COMMENCE STORE - SHELL\ILLINOIS\IS70668 900 S CENTRAL AVE ROXANA\ROXANA 4Q24 GW RPT\DWG\FIGURE 8 4Q24 TYP X-SECT W_BENZENE GW ANAL RSLTS-HWY111-CHAFFER.DWG Last edited: Dec. 23, 24 @ 3:58 PM by: dasandoval.damit

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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-07-24 WEATHER: Clear, 56°F

MONITORING WELL ID: MW-1 SAMPLE ID: MW1-RUX-100724

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.00 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): 42.89 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 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): 16.25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
	STABLE: (over 4 readings)				Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1032	42.93	clear	none	18.2	0.89	1.059 mS/cm uS/cm	6.68	109.25	2.59
300	1033	42.93	↓	↓	18.4	0.83	1.058 mS/cm uS/cm	6.68	106.61	2.71
600	1034	42.93			18.6	0.79	1.062 mS/cm uS/cm	6.68	103.05	2.81
900	1035	↓			18.7	0.78	1.063 mS/cm uS/cm	6.68	98.37	5.10
1200	1036				18.8	0.73	1.065 mS/cm uS/cm	6.68	92.33	5.78
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			

C. McDavid 10-07-24

Start Time: 10:32 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22J019/21O760

Stop Time: 10:36 Average Purge Rate (mL/min): 300 Date Calibrated: 10-07-24

SAMPLING DATA

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

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/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: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDavid, T. Jenkins

DATE: 10-09-24 WEATHER: Clear, 76°F

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX-100924

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 54.87 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 60.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 44.18 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 49.87 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: 149.5 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 16.02 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	1316	44.22	Clear	Strong	21.5	0.86	0.792 mS/cm uS/cm	7.10	-146.85	6.75
300	1317	44.20	↓	↓	21.6	0.76	0.793 mS/cm uS/cm	7.07	-154.33	6.29
600	1318	44.20			21.6	0.70	0.794 mS/cm uS/cm	7.06	-160.04	6.53
900	1319	44.20			21.6	0.66	0.793 mS/cm uS/cm	7.06	-164.91	7.03
1200	1320	↓			21.6	0.62	0.794 mS/cm uS/cm	7.06	-169.17	7.54
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

Checked/Filled 10-09-24

Start Time: 13:16 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22301912107 60

Stop Time: 13:20 Average Purge Rate (mL/min): 300 Date Calibrated: 10-09-24

SAMPLING DATA

Sample Date: 10-09-24 Sample Time: 13:30 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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDavid, T. Jenkins

DATE: 10-10-24 WEATHER: Clear, 80°F

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-101024

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 (WHICHEVER 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

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	1300	29.80	clear	none	21.2	0.82	1.059 mS/cm uS/cm	7.04	-142.3	1.88
300	1301	29.80	↓	↓	21.4	0.77	1.056 mS/cm uS/cm	6.96	-143.57	1.57
600	1302	29.80			21.7	0.73	1.053 mS/cm uS/cm	6.92	-144.59	1.59
900	1303	↓			21.7	0.70	1.056 mS/cm uS/cm	6.91	-145.42	2.13
1200	1304				21.4	0.65	1.057 mS/cm uS/cm	6.91	-146.47	2.88
							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			

CMcDavid 10-10-24

Start Time: 13:00 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22301 9/210760

Stop Time: 13:04 Average Purge Rate (mL/min): 300 Date Calibrated: 10-10-24

SAMPLING DATA

Sample Date: 10-10-24 Sample Time: 13:15 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 [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 4Q24 GW | PROJECT NUMBER: 60721927 - 3.4.1/2/3 | FIELD PERSONNEL: S. McLean, C. McDavid

DATE: 10/18/24 | WEATHER: 46° Clear

MONITORING WELL ID: MW-4 | SAMPLE ID: MW4-ROX-101824 / MW4-ROX-101824-EB

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 50.06 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 55.39 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.26 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 45.06 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.13 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	0848	41.24	clear	moderate	16.56	1.98	1.08 mS/cm uS/cm	6.61	64.09	5.92
900	0854	41.23	↓	↓	18.48	0.52	1.11 mS/cm uS/cm	6.92	-81.96	-3.69
2100	0855	↓			18.49	0.47	↓ mS/cm uS/cm	6.94	-89.84	-4.06
2400	0856				18.57	0.44	1.11 mS/cm uS/cm	6.96	-95.46	-4.13
2700	0857				18.55	0.42	1.11 mS/cm uS/cm	6.97	-100.27	-4.18
3000 SMSm							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			

SMSm 101824

Start Time: 0848 | Elapsed Time (min): 9 | Water Quality Meter ID & SN: YSI ProDSS -- 23335A/441S1

Stop Time: 0857 | Average Purge Rate (mL/min): 300 ml | Date Calibrated: 10/18/2024

SAMPLING DATA

Sample Date: 10/18/24 | Sample Time: 0900 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace? ☑ | Initials: SMSm

COMMENTS:

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

Estimated Total Purge Volume: ~~3,000 SMSm~~ mL 2,700 ml

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C.McDavid, T.Jenkins

DATE: 10-11-24 **WEATHER:** clear, 52°F

MONITORING WELL ID: MW-5 **SAMPLE ID:** MW5-ROX-101124

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	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 44.30 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 29.42 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.97 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.88 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	0925	29.42	clear	moderate	19.4	0.90	1.141	mS/cm uS/cm	6.36	-97.87	5.60
300	0926	29.42	↓	↓	19.4	0.80	1.143	mS/cm uS/cm	6.39	-105.25	6.38
600	0927	29.42			19.5	0.74	1.140	mS/cm uS/cm	6.41	-110.67	6.30
900	0928	↓			19.5	0.70	1.142	mS/cm uS/cm	6.43	-113.84	6.16
1200	0929				19.4	0.67	1.142	mS/cm uS/cm	6.45	-116.54	6.90
								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 10-11-24

Start Time: 09:25 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 22301 9/Z10760

Stop Time: 09:29 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-11-24

SAMPLING DATA

Sample Date: 10-11-24 **Sample Time:** 09:45 **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:** 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 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-09-24 **WEATHER:** clear, 47°F

MONITORING WELL ID: MW-6A **SAMPLE ID:** MW6A-ROX-100924

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): 31.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.85 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.75 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0929	31.48	clear	none	19.7	1.10	0.545 (mS/cm) uS/cm	6.33	6.28	48.06
300	0930	31.48			20.1	0.92	0.556 (mS/cm) uS/cm	6.39	-14.05	43.21
600	0931	31.48			20.2	0.85	0.578 (mS/cm) uS/cm	6.44	-30.18	47.16
900	0932	↓	↓	↓	20.3	0.79	0.590 (mS/cm) uS/cm	6.48	-41.72	45.17
1200	0933				20.4	0.77	0.593 (mS/cm) uS/cm	6.51	-50.13	40.13
1500	0934				20.4	0.75	0.601 (mS/cm) uS/cm	6.54	-56.63	41.06
1800	0935				20.5	0.72	0.607 (mS/cm) uS/cm	6.56	-62.34	38.67
2100	0936				20.8	0.69	0.611 (mS/cm) uS/cm	6.57	-67.57	36.99
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

CMcDavid 10-09-24

Start Time: 09:29 **Elapsed Time (min):** 7 **Water Quality Meter ID & SN:** YSI ProDSS -- 223019/210760

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

SAMPLING DATA

Sample Date: 10-09-24 **Sample Time:** 09:45 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-08-24 **WEATHER:** Clear, 71°F

MONITORING WELL ID: MW-6B **SAMPLE ID:** MW6B-ROX-100824

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 66.55 ~~5.37~~ ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 31.33 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 64.05 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 38.05 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings)	DO (mg/L) (Monitor Temp. +/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1300	31.36	clear	none	21.3	0.92	0.716 mS/cm uS/cm	7.07	-110.21	13.90
300	1301	31.36	↓	↓	21.5	0.87	0.723 mS/cm uS/cm	7.03	-113.71	20.46
600	1302	31.36	↓	↓	21.4	0.82	0.730 mS/cm uS/cm	7.02	-115.99	29.76
900	1303	↓	↓	↓	21.3	0.71	~~0.730~~ 0.751 mS/cm uS/cm	7.00	-120.60	45.03
1200	1304	↓	↓	↓	21.4	0.67	0.760 mS/cm uS/cm	6.99	-123.56	49.13
1500	1305	↓	↓	↓	21.3	0.63	0.767 mS/cm uS/cm	6.99	-125.93	41.23
1800	1306	↓	↓	↓	21.3	0.62	0.768 mS/cm uS/cm	6.99	-126.76	45.35
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

Grundfos 10-08-24

Start Time: 13:00 **Elapsed Time (min):** 6 **Water Quality Meter ID & SN:** YSI ProDSS -- 23019/210760

Stop Time: 13:06 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-08-24

SAMPLING DATA

Sample Date: 10-08-24 **Sample Time:** 13:15 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

Estimated Total Purge Volume: 1900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-08-24 WEATHER: clear, 54°F

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-BAX-100824

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 87.45 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 90.28 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 31.13 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 59.15 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	1126	31.13	clear	none	19.9	1.00	0.720 (mS/cm) uS/cm	6.94	-129.38	26.90
300	1127	31.13	↓	↓	20.0	0.93	0.714 (mS/cm) uS/cm	6.94	-132.85	26.60
600	1128	31.13	↓	↓	19.9	0.87	0.706 (mS/cm) uS/cm	6.95	-135.40	23.39
900	1129	↓	↓	↓	19.9	0.83	0.698 (mS/cm) uS/cm	6.96	-137.34	19.54
1200	1130	↓	↓	↓	20.0	0.80	0.698 (mS/cm) uS/cm	6.95	-138.94	16.81
							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			

CMcDavid 10-08-24

Start Time: 11:26 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 22301912/10760

Stop Time: 11:30 Average Purge Rate (mL/min): 300 Date Calibrated: 10-08-24

SAMPLING DATA

Sample Date: 10-08-24 Sample Time: 11:45 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-09-24 WEATHER: clear, 44°F

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-100924

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): 31.00 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): NE ft		
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 79.05 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0956	31.00	light brown	moderate	19.2	0.66	0.923 mS/cm uS/cm	6.89	-139.82	98.29
300	0957	31.00	↓	↓	19.3	0.64	0.922 mS/cm uS/cm	6.90	-142.31	43.43
600	0958	31.00			19.2	0.62	0.923 mS/cm uS/cm	6.90	-144.15	37.72
900	0959	↓			19.1	0.60	0.923 mS/cm uS/cm	6.91	-145.48	32.47
1200	1000				19.1	0.59	0.924 mS/cm uS/cm	6.91	-146.60	28.83
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 10-09-24

Start Time: 09:56 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 22301912107 60

Stop Time: 10:00 Average Purge Rate (mL/min): 300 Date Calibrated: 10-09-24

SAMPLING DATA

Sample Date: 10-09-24 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: MS/MSD

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

0940 Begin purging without YSI

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: S. McLean, C. McDavid

DATE: 10/18/24 WEATHER: 52° Clear

MONITORING WELL ID: MW-7 SAMPLE ID: ---

INITIAL DATA

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; 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))
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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			

Sample 101824

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

Stop Time: N/A Average Purge Rate (mL/min): N/A 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 PWY SEE op's.

Estimated Total Purge Volume: --- mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-04-24 **WEATHER:** clear, 59°F

MONITORING WELL ID: MW-9 **SAMPLE ID:** MW9-ROX-100424

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.04 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 56.37 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 44.93 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 11.49 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1000	44.98	clear	none	19.0	0.73	0.890 mS/cm uS/cm	6.67	-119.7	0
300	1001	44.97	↓	↓	19.0	0.69	0.898 mS/cm uS/cm	6.67	-121.1	0
600	1002	44.97			19.0	0.67	0.902 mS/cm uS/cm	6.68	-122.2	0.18
900	1003	44.97			19.0	0.65	0.906 mS/cm uS/cm	6.68	-123.4	0.26
1206	1004	↓			19.0	0.63	0.909 mS/cm uS/cm	6.69	-124.5	0.41
							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			

CHANGED TO 10-04-24

Start Time: 10:00 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 23019/210760

Stop Time: 10:09 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-03-24

SAMPLING DATA

Sample Date: 10-04-24 **Sample Time:** 10:15 **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 [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 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-07-24 **WEATHER:** Clear, 69°F

MONITORING WELL ID: MW-10 **SAMPLE ID:** MW10-ROX-100724

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): 54.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 44.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 49.95 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 44.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.81 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	44.98	clear	none	19.3	0.95	1.530 mS/cm uS/cm	6.85	-136.62	20.35
300	1241	44.98	↓	↓	19.4	0.76	1.527 mS/cm uS/cm	6.82	-139.69	18.80
600	1242	44.98			19.4	0.72	1.525 mS/cm uS/cm	6.81	-140.21	18.59
900	1243	↓			19.4	0.68	1.519 mS/cm uS/cm	6.81	-141.70	17.51
1200	1244				19.4	0.66	1.513 mS/cm uS/cm	6.81	-142.59	17.51
							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			

CM out 1200 10-07-24

Start Time: 12:40 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 22301g/210760

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

SAMPLING DATA

Sample Date: 10-07-24 **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: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C.McDavid, T.Jenkins

DATE: 10-04-24 **WEATHER:** clear, 68°F

MONITORING WELL ID: MW-11 **SAMPLE ID:** MW11-ROX-100424

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): 42.70 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 47.35 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.9 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.29 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1134 CM	42.77	clear	none	18.6	0.79	1.404 mS/cm uS/cm	6.60	-44.37	38.84
300	1138 CM	42.77			18.5	0.73	1.404 mS/cm uS/cm	6.60	-45.46	33.70
600	1136 CM	42.75			18.5	0.69	1.405 mS/cm uS/cm	6.60	-47.09	71.33
900	1137 CM	42.75			18.5	0.67	1.405 mS/cm uS/cm	6.60	-49.65	138.10
1200	1138 CM	42.75			18.6	0.63	1.405 mS/cm uS/cm	6.60	-52.53	138.58
1500	1142				18.6	0.63	1.405 mS/cm uS/cm	6.61	-54.58	109.05
1800	1143				18.6	0.60	1.406 mS/cm uS/cm	6.61	-57.24	92.54
2100	1144				18.5	0.58	1.408 mS/cm uS/cm	6.61	-59.37	81.09
2400	1145				18.6	0.57	1.406 mS/cm uS/cm	6.62	-61.18	70.11
2700	1146				18.6	0.57	1.408 mS/cm uS/cm	6.62	-62.76	60.99
3000	1147				18.7	0.56	1.408 mS/cm uS/cm	6.62	-64.23	54.00
3300	1148				18.7	0.55	1.410 mS/cm uS/cm	6.62	-66.37	40.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CMcDavid 10-04-24

Start Time: ~~1134~~ CM 11:37 **Elapsed Time (min):** 11 **Water Quality Meter ID & SN:** YSI ProDSS - 22301912107 60

Stop Time: 11:48 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-03-24

SAMPLING DATA

Sample Date: 10-04-24 **Sample Time:** 12:00 **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:** 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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-11-24 WEATHER: clear, 77°F

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-101124

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): 42.65 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 47.93 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 9.60 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	1225	42.72	clear	none	20.3	0.98	0.928 (mS/cm) uS/cm	6.74	74.60	8.45
300	1226	42.72	↓	↓	20.6	0.90	0.928 (mS/cm) uS/cm	6.70	73.69	7.09
600	1227	42.72	↓	↓	21.0	0.86	0.926 (mS/cm) uS/cm	6.69	72.49	5.71
900	1228	↓	↓	↓	21.1	0.80	0.932 (mS/cm) uS/cm	6.68	71.68	16.66
1200	1229	↓	↓	↓	21.1	0.76	0.935 (mS/cm) uS/cm	6.68	71.57	19.26
							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			

CM 10-11-24

Start Time: 12:25 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 23019/210760

Stop Time: 12:29 Average Purge Rate (mL/min): 300 Date Calibrated: 10-1-24

SAMPLING DATA

Sample Date: 10-11-24 Sample Time: 12:45 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

12:20 purge w/o YST as water came out black

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

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

MONITORING WELL ID: MW-13 **SAMPLE ID:** MW13-ROX-101024

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 35.05 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 29.10 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 32.07 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 24.80 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.5 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 5.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0934	29.13	clear	strong	21.0	0.82	1.200 mS/cm uS/cm	6.26	-73.16	28.37
300	0935	29.13	↓	↓	21.1	0.74	1.205 mS/cm uS/cm	6.29	-80.91	40.33
600	0936	29.13	↓	↓	21.1	0.69	1.206 mS/cm uS/cm	6.31	-86.04	34.21
900	0937	↓	↓	↓	21.1	0.66	1.205 mS/cm uS/cm	6.33	-89.72	27.33
1200	0938	↓	↓	↓	21.2	0.63	1.209 mS/cm uS/cm	6.34	-92.57	22.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Emerson Vial 10-10-24

Start Time: 09:34 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 23B19/21076O

Stop Time: 09:38 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-10-24

SAMPLING DATA

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

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

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

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 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-09-24 **WEATHER:** Clear, 69°F

MONITORING WELL ID: MW-14 **SAMPLE ID:** MW14-ROX-100924

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 33.45 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 38.72 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.42 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 63.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.55 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
		STABLE: (over 4 readings)			Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1121	33.50	clear	moderate	21.5	0.97	1.025 mS/cm uS/cm	6.92	-81.80	5.15
300	1122	33.50			21.7	0.92	1.023 mS/cm uS/cm	6.92	-83.70	5.06
600	1123	33.50			21.9	0.90	1.021 mS/cm uS/cm	6.92	-84.66	5.16
900	1124				22.4	0.89	1.027 mS/cm uS/cm	6.92	-86.09	5.76
1200	1125				22.0	0.73	1.028 mS/cm uS/cm	6.94	-87.61	6.71
1500	1126				22.1	0.65	1.026 mS/cm uS/cm	6.94	-88.92	7.24
1800	1127				22.0	0.61	1.027 mS/cm uS/cm	6.95	-89.94	7.37
2100	1128				22.0	0.60	1.026 mS/cm uS/cm	6.95	-90.83	7.21
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 collected 10-09-24

Start Time: 11:21 **Elapsed Time (min):** 7 **Water Quality Meter ID & SN:** YSI ProDSS -- 22301912107760

Stop Time: 11:28 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-09-24

SAMPLING DATA

Sample Date: 10-09-24 **Sample Time:** 11:95 **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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-04-24 WEATHER: clear, 77°F

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-10M24

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): 44.03 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.99 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): 3.72 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

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	1338	44.10	clear	slight	20.6	0.929	1.013 mS/cm uS/cm	6.77	-121.82	11.05
300	1339	44.08	↓	↓	20.5	0.87	1.020 mS/cm uS/cm	6.77	-123.10	10.24
600	1340	44.08			20.6	0.80	1.023 mS/cm uS/cm	6.77	-124.36	8.45
900	1341	44.09			20.5	0.79	1.024 mS/cm uS/cm	6.77	-124.81	8.26
1200	1342	↓			20.5	0.73	1.026 mS/cm uS/cm	6.77	-125.50	7.01
					~~20.5~~		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			

Collected 10-04-24

Start Time: 13:38 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22301917210760

Stop Time: 13:42 Average Purge Rate (mL/min): 300 Date Calibrated: 10-03-24

SAMPLING DATA

Sample Date: 10-04-24 Sample Time: 13:50 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/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: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-16-24 WEATHER: Clear, 52° F

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-101624

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 48.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 43.03 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): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 5.65 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1232	43.08	grey	moderate	18.8	0.78	1.175 (mS/cm) uS/cm	6.98	-135.60	7.30
300	1233	43.07	↓	↓	19.0	0.66	1.155 (mS/cm) uS/cm	6.97	-136.97	6.27
600	1234	43.07			19.0	0.60	1.163 (mS/cm) uS/cm	6.97	-137.12	7.52
900	1235	43.07			19.1	0.54	1.167 (mS/cm) uS/cm	6.98	-137.79	6.88
1200	1236	↓			19.1	0.50	1.176 (mS/cm) uS/cm	6.98	-138.91	~~6.17~~ 6.17
							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			

CM to Carroll 10-16-24

Start Time: 12:32 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22335A/19151

Stop Time: 12:36 Average Purge Rate (mL/min): 300 Date Calibrated: 10-16-24

SAMPLING DATA

Sample Date: 10-16-24 Sample Time: 12:50 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/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: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-11-24 **WEATHER:** Clear, 64°F

MONITORING WELL ID: MW-23 **SAMPLE ID:** MW23-ROX-101124

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 39.27 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.65 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 34.96 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: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 8.62 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

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	1048	30.68	Clear	mild	20.0	0.97	1.031 (mS/cm) uS/cm	6.74	-77.06	26.73
300	1049	30.68	↓	↓	20.0	0.90	1.036 (mS/cm) uS/cm	6.73	-79.41	27.05
600	1050	30.68			20.1	0.79	1.032 (mS/cm) uS/cm	6.73	-81.35	27.68
900	1051	↓			20.1	0.76	1.031 (mS/cm) uS/cm	6.73	-83.08	27.54
1200	1052				20.2	0.72	1.020 (mS/cm) uS/cm	6.74	-84.62	28.23
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 10-11-24

Start Time: 10:48 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS -- 23019/21060

Stop Time: 10:52 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-11-24

SAMPLING DATA

Sample Date: 10-11-24 **Sample Time:** 11:05 **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace [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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-14-24 WEATHER: clear, 79°F

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-101424

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): 43.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 46.80 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 39.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 6.11 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0910	43.83	clear	none	17.6	1.60	1.544 mS/cm uS/cm	6.55	195.01	7.14
300	0911	43.83	↓	↓	17.9	1.54	1.543 mS/cm uS/cm	6.56	192.85	5.02
600	0912	43.80			17.9	1.49	1.553 mS/cm uS/cm	6.57	190.77	4.50
900	0913	43.80			18.2	1.41	1.554 mS/cm uS/cm	6.58	188.97	4.25
1200	0914	43.80			18.1	1.34	1.556 mS/cm uS/cm	6.59	187.06	4.27
1500	0915	↓			18.0	1.32	1.557 mS/cm uS/cm	6.60	184.95	4.19
							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 10-14-24

Start Time: 09:10 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 22301971210760

Stop Time: 09:15 Average Purge Rate (mL/min): 300 Date Calibrated: 10-14-24

SAMPLING DATA

Sample Date: 10-14-24 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: none

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana GW 4Q24 PROJECT NUMBER: 60721927-3.4/1/2/3 FIELD PERSONNEL: S. McLean, C. McDavid

DATE: 10/18/24 WEATHER: 52°

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX-101824 / MW25-ROX-101824-DUP

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 45.84 ft	
Depth to Water (btoc): 38.33 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.08 ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	
Depth to Top of Screen (btoc): 35.84 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): 7.51 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 ppm
Wellbore PID/FID Reading: 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	0947	38.35	clear	moderate	18.77	2.36	0.96 mS/cm uS/cm	7.09	-91.29	39.06
300	0946	38.35			18.87	1.87	mS/cm uS/cm	7.09	-96.33	41.45
600	0949	38.83			19.22	1.17	mS/cm uS/cm	7.09	-104.02	40.96
900	0950				19.22	0.87	mS/cm uS/cm	7.10	-109.30	38.42
1200	0951				19.39	0.72	mS/cm uS/cm	7.11	-113.25	35.70
1500	0952				19.47	0.62	mS/cm uS/cm	7.11	-116.29	32.17
1800	0953				19.46	0.55	mS/cm uS/cm	7.11	-119.25	30.50
2100	0954				19.45	0.50	mS/cm uS/cm	7.12	-121.83	26.36
2400	0955				19.46	0.46	mS/cm uS/cm	7.12	-123.78	24.07
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

SM Sm 101824

Start Time: 0947
Stop Time: 0955

Elapsed Time (min): 8
Average Purge Rate (mL/min): 300 mL

Water Quality Meter ID & SN: YSI ProDSS -- 223354/44151
Date Calibrated: 10/18/24

SAMPLING DATA

Sample Date: 10/18/24 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace (Y/N): Y Initials: SM Sm

COMMENTS:

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

Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-07-24 WEATHER: clear, 48°F

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-100724

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): 41.15 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 44.77 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): 7.25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0914	41.15	clear	none	18.2	0.99	0.699 (mS/cm) uS/cm	6.55	147.13	11.75
300	0915	41.13	↓	↓	18.3	0.89	0.700 (mS/cm) uS/cm	6.58	146.13	11.07
600	0916	41.13			18.4	0.84	0.699 (mS/cm) uS/cm	6.60	145.46	13.57
900	0917	41.13			18.4	0.80	6.9 0.697 (mS/cm) uS/cm	6.62	144.91	14.64
1200	0918	↓			18.6	0.76	0.698 (mS/cm) uS/cm	6.64	144.39	16.10
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

C McDavid 10-07-24

Start Time: 09:14 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22301912107 60

Stop Time: 09:18 Average Purge Rate (mL/min): 300 Date Calibrated: 10-07-24

SAMPLING DATA

Sample Date: 10-07-24 Sample Time: 09:30 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 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C.McDavid, T. Jenkins

DATE: 10-14-24 **WEATHER:** clear, 56°F

MONITORING WELL ID: MW-27 **SAMPLE ID:** MW27-ROX-101424

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): 42.78 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 46.41 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 39.79 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.26 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	1210	45.75	clear	none	18.4	4.32	0.832 mS/cm uS/cm	6.85	127.63	1.41
300	1211	45.80	↓	↓	18.5	4.39	0.830 mS/cm uS/cm	6.85	125.47	1.13
600	1212	45.82			18.6	4.70	0.832 mS/cm uS/cm	6.85	126.45	3.57
900	1213	45.82			18.5	4.58	0.833 mS/cm uS/cm	6.85	127.28	5.54
1200	1214	45.82			18.3	4.61	0.833 mS/cm uS/cm	6.86	127.96	4.81
1500	1215	↓			18.5	4.68	0.830 mS/cm uS/cm	6.85	128.88	4.33
1800	1216				18.5	4.74	0.832 mS/cm uS/cm	6.85	129.70	4.20
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CM 10-14-24

Start Time: 12:10 **Elapsed Time (min):** 6 **Water Quality Meter ID & SN:** YSI ProDSS -- 23019/210760

Stop Time: 12:16 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-14-24

SAMPLING DATA

Sample Date: 10-14-24 **Sample Time:** 12:30 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

11:50 Begin purging without YSI DO results suspect **Estimated Total Purge Volume:** 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDavid, T. Jenkins

DATE: 10-15-24 **WEATHER:** clear, 49°F

MONITORING WELL ID: MW-28 **SAMPLE ID:** MW28-ROX-101524

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): 41.95 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 42.90 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NF ft			
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ____ ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 1.91 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	0929	42.00	Slightly cloudy	none	18.1	0.85	1.569 mS/cm uS/cm	6.51	-63.70	16.71
300	0930	42.00	↓	↓	18.0	0.71	1.569 mS/cm uS/cm	6.57	-70.28	13.70
600	0931	42.00			18.2	0.62	1.571 mS/cm uS/cm	6.59	-75.16	11.12
900	0932	↓			18.3	0.57	1.570 mS/cm uS/cm	6.61	-79.21	23.16
1200	0933				18.5	0.52	1.574 mS/cm uS/cm	6.62	-82.78	98.20
1500	0934				18.3	0.47	1.575 mS/cm uS/cm	6.64	-85.98	37.09
							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			

UNPUMPED 10-15-24

Start Time: 09:29 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS .. 22335A/A4151

Stop Time: 09:34 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-14-24

SAMPLING DATA

Sample Date: 10-15-24 **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 [X] **Initials:** CM

COMMENTS:

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

0910 Begin purging without YSI **Estimated Total Purge Volume:** 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-14-24 WEATHER: Clear, 49°F

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-101424

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): 42.43 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NF ft		
Depth to Top of Screen (btoc): 38.00 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 47.43 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 20.57 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1030	42.46	clear	none	17.8	6.04	1.190 mS/cm uS/cm	6.71	136.18	8.03
300	1031	42.45			17.7	5.92	1.195 mS/cm uS/cm	6.74	137.69	6.75
600	1032	42.45			17.6	5.71	1.196 mS/cm uS/cm	6.74	138.82	6.92
900	1033	42.45			17.6	5.63	1.198 mS/cm uS/cm	6.74	139.69	6.11
1200	1034				17.4	5.50	1.201 mS/cm uS/cm	6.74	140.28	5.94
1500	1035				17.5	5.34	1.197 mS/cm uS/cm	6.73	140.71	5.85
1800	1036				17.6	5.20	1.199 mS/cm uS/cm	6.73	140.92	5.25
2100	1037				17.5	5.08	1.201 mS/cm uS/cm	6.73	141.03	4.77
2400	1038				17.5	5.01	1.202 mS/cm uS/cm	6.73	141.07	4.05
2700	1039				17.6	4.93	1.204 mS/cm uS/cm	6.73	141.26	3.98
3000	1040				17.7	4.84	1.205 mS/cm uS/cm	6.72	141.43	3.15
3300	1041				17.9	4.77	1.206 mS/cm uS/cm	6.72	141.52	2.82
3600	1042				17.9	4.72	1.210 mS/cm uS/cm	6.72	141.56	2.15
3900	1043				17.8	4.67	1.212 mS/cm uS/cm	6.72	141.70	1.92
							mS/cm uS/cm			
			CM 10-14-24				mS/cm uS/cm			

Start Time: 10:30 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 22301912/10760

Stop Time: 10:43 Average Purge Rate (mL/min): 300 Date Calibrated: 10-14-24

SAMPLING DATA

Sample Date: 10-14-24 Sample Time: 10:55 Lab Analysis: VOC, SVOC, PAH

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

DO results suspect

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/17/2024 WEATHER: 66° Clear

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

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 50.68 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 42.11 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0 ppm	
Depth to LNAPL/DNAPL (btoc): 41.76 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 (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 115.2 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 8.57 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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))
							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			

Sampled on 10/17/24

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

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

SAMPLING DATA

Sample Date: N/A Sample Time: N/A Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☐ Initials: N/A

COMMENTS:

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

Estimated Total Purge Volume: N/A mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/15/2024 WEATHER: 59° Cloudy

MONITORING WELL ID: P56 SAMPLE ID: (M) GP56-ROX-10152024

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): 47.04 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 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): 52.04 ft btoc	Wellbore PID/FID Reading: 2.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 18.78 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

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. mS/cm	Spec. Cond. uS/cm	pH	ORP (mV)	Turb (NTU)
0	1245	47.06	None Cloudy	None MD	18.85	7.4	1.00		7.39	-142.23	33.45
300	1246	47.06			18.90	6.5	1.00		7.37	-151.65	34.87
600	1247	47.06			18.75	4.1	1.00		7.36	-172.42	34.45
900	1248	47.06			18.79	3.7	0.99		7.36	-175.69	35.59
1200	1249	47.06			18.96	3.05	0.99		7.36	-181.97	36.66
1500	1250				18.93	2.62	0.99		7.36	-186.35	35.15
1800	1251				18.99	2.32	0.99		7.35	-190.59	34.38
2100	1252				18.96	2.08	0.99		7.35	-193.85	31.45
2400	1253				19.01	1.89	0.99		7.35	-196.69	30.41
2700	1254				19.94	1.74	0.99		7.35	-198.84	29.01
3000	1255				18.82	1.62	0.99		7.34	-200.05	26.41
3300	1256				18.74	1.53	0.99		7.34	-201.20	25.36
3600	1257				18.81	1.45	0.99		7.34	-202.33	23.68
3900	1258				18.93	1.37	0.99		7.34	-203.58	22.37
4200	1259				18.71	1.32	0.99		7.34	-204.46	22.37
4500	1300				18.85	1.27	0.99		7.34	-205.41	21.30

Start Time: 1245 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS -- 21077/223011

Stop Time: 1300 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/24

SAMPLING DATA

Sample Date: 10/15/24 Sample Time: 1305 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials:

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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 10-17-24 WEATHER: clear, 36°F

MONITORING WELL ID: P-57 SAMPLE ID: P57-RGX-101724

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): 47.31 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 50.75 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NR ft		
Depth to Top of Screen (btoc): 44.19 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 6.88 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	0927	47.93	clear	mild	18.8	0.50	1.079 (mS/cm) uS/cm	6.78	-107.27	0
300	0928	47.90	↓	↓	18.7	0.49	1.078 (mS/cm) uS/cm	6.78	-109.98	0
600	0929	47.90			18.8	0.46	1.077 (mS/cm) uS/cm	6.78	-112.51	3.0
900	0930	47.89			18.9	0.44	1.074 (mS/cm) uS/cm	6.78	-114.87	0
1200	0931	47.83			18.9	0.42	1.073 (mS/cm) uS/cm	6.78	-116.83	0
							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 10-17-24

Start Time: 09:27 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 23364 | 4415

Stop Time: 09:31 Average Purge Rate (mL/min): 300 Date Calibrated: 10-16-24

SAMPLING DATA

Sample Date: 10-17-24 Sample Time: 09:45 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 [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 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 10-17-24 WEATHER: clear, 60°F

MONITORING WELL ID: P-58 SAMPLE ID: P58-ROX-101724

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 65.21 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 44.90 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 40.21 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 49.80 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 20.71 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1250	45.02	clear	strong	25.0	0.61	1.529 (mS/cm) uS/cm	6.73	-125.59	8.23
300	1251	45.00	↓	↓	25.0	0.57	1.530 (mS/cm) uS/cm	6.73	-126.50	7.64
600	1252	45.00			24.9	0.43	1.536 (mS/cm) uS/cm	6.73	-131.74	9.25
900	1253	45.00			25.0	0.37	1.540 (mS/cm) uS/cm	6.72	-133.82	41.34
1200	1254	↓			25.0	0.32	1.541 (mS/cm) uS/cm	6.72	-135.54	116.06
1500	1255				25.0	0.31	1.545 (mS/cm) uS/cm	6.72	-137.09	19.75
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

CALIBRATED 10-17-24

Start Time: 12:50 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 23354/99151

Stop Time: 12:55 Average Purge Rate (mL/min): 300 Date Calibrated: 10-16-24

SAMPLING DATA

Sample Date: 10-17-24 Sample Time: 13:10 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW | PROJECT NUMBER: 60721927 - 3.4.1/2/3 | FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/16/2024 | WEATHER: 56° Clear

MONITORING WELL ID: P-59 | SAMPLE ID: P59-WRR-101624 / P59-ROX-101624

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): 48.20 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	Ambient PID/FID Reading: ___ ppm	
Depth to LNAPL/DNAPL (btoc): — 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): 53.20 ft btoc	Wellbore PID/FID Reading: ___ ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 24.71 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ___ ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
0	1222	48.21	clear	slight	20.41	8.56	1.58	mS/cm uS/cm	7.03	-120.41	13.42
5100	1239	48.20	↓	↓	22.07	1.08	1.57	mS/cm uS/cm	6.84	-149.16	-2.18
5400	1240	48.20			22.16	1.05	1.57	mS/cm uS/cm	6.84	-149.62	-2.45
5700	1241	48.21			22.15	1.04	1.56	mS/cm uS/cm	6.84	-149.80	-2.53
6000	1242	↓			22.09	1.02	1.56	mS/cm uS/cm	6.84	-150.07	-2.70
								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			

SMcLean 10/16/24

Start Time: 1222 | Elapsed Time (min): ~~10/16/24~~ 20 | Water Quality Meter ID & SN: YSI ProDSS -- 22301I/210771

Stop Time: 1242 | Average Purge Rate (mL/min): 300 ml | Date Calibrated: 10/16/24

SAMPLING DATA

Sample Date: 10/16/24 | Sample Time: 1245 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: SMcLean

COMMENTS:

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

Estimated Total Purge Volume: 6000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDonald, T. Jenkins

DATE: 10-09-24 WEATHER: Clear, 70°F

MONITORING WELL ID: P-66 SAMPLE ID: ---

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: --- ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 59.72 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 36.73 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): 36.33 ft			
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): --- ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 22.99 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			
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							mS/cm uS/cm			
							mS/cm uS/cm			

C.McDonald 10-09-24

	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 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** T. Jones, S. Mclean

DATE: 10/17/24 **WEATHER:** Sunny / clear 56°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): 46.47 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): 46.27 ft		
Depth to Top of Screen (btoc): 43.76 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 265.3 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 22.29 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
							mS/cm uS/cm			
							mS/cm uS/cm			
							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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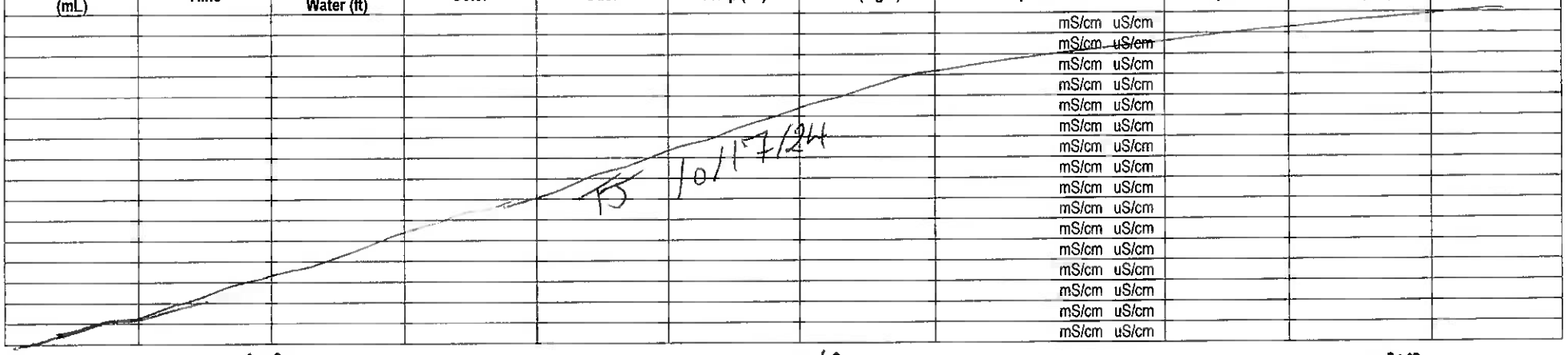

Start Time: N/A **Elapsed Time (min):** N/A **Water Quality Meter ID & SN:** YSI ProDSS -- N/A

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

SAMPLING DATA

Sample Date: N/A **Sample Time:** N/A **Lab Analysis:** VOC, SVOC, PAH

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

VOA Vials, No Headspace ☐ Initials: N/A

COMMENTS:

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

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDavid, T.Jenkins

DATE: 10-17-24 WEATHER: Clear, 51°F

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-101724

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): 44.45 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 (WHIEVER IS DEEPER): 49.45 ft btoc	Wellbore PID/FID Reading: 78.2 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 24.38 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	(CM) ~~11:13~~ 1125	44.63	clear	v.strong	19.8	0.78	0.497 (mS/cm) uS/cm	6.20	-37.98	8.31
300	(CM) ~~11:14~~ 1126	44.63	↓	↓	20.0	0.66	0.491 (mS/cm) uS/cm	6.20	-39.84	8.87
600	(CM) ~~11:15~~ 1127	44.63	↓	↓	20.0	0.59	0.495 (mS/cm) uS/cm	6.20	-41.57	8.39
900	(CM) ~~11:16~~ 1128	↓	↓	↓	20.0	0.53	0.499 (mS/cm) uS/cm	6.20	-43.13	9.31
1200	(CM) ~~11:17~~ 1129	↓	↓	↓	20.0	0.49	0.501 (mS/cm) uS/cm	6.20	-44.54	8.70
							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			

Encountered 10-17-24

Start Time: (CM) ~~11:13~~ 11:25 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 22335A/4415

Stop Time: 11:29 Average Purge Rate (mL/min): 300 Date Calibrated: 10-16-24

SAMPLING DATA

Sample Date: 10-17-24 Sample Time: 11:45 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: CM

COMMENTS:

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

11:13 Tubing detached from pump; restart

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW | PROJECT NUMBER: 60721927 - 3.4.1/2/3 | FIELD PERSONNEL: S. Mclean, T. Jones

DATE: 10/17/2024 | WEATHER: 42° Clear

MONITORING WELL ID: P-93A | SAMPLE ID: P93A-WRR-101724 / P93A-ROX-101724

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): 45.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 49.23 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 (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 7.69 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% | 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	1010	45.54	clear	slight	18.70	3.48	1.21 mS/cm uS/cm	6.80	-123.55	2.36
3000	1020	45.60			19.48	3.32	1.22 mS/cm uS/cm	6.81	-140.13	4.41
3300	1021				19.68	3.38	1.21 mS/cm uS/cm	6.81	-141.02	4.11
3600	1022				19.54	3.32	1.22 mS/cm uS/cm	6.81	-142.13	5.27
3900	1023				19.57	3.09	1.22 mS/cm uS/cm	6.81	-142.49	5.40
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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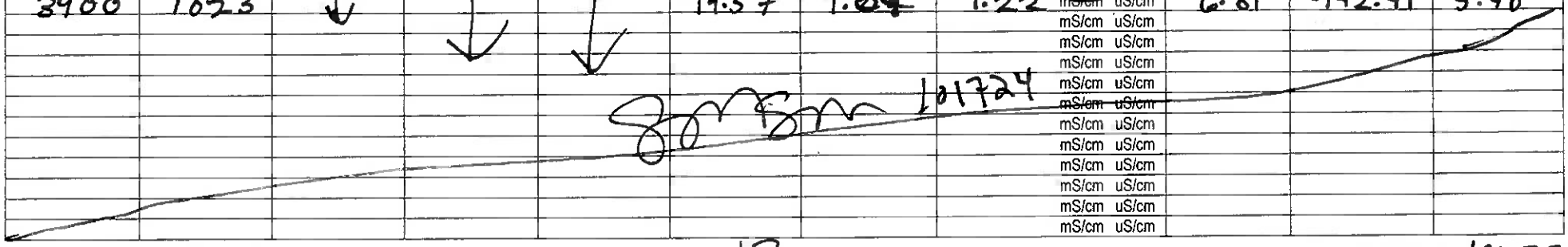

Start Time: 1010 | Elapsed Time (min): 13 | Water Quality Meter ID & SN: YSI ProDSS -- 22301 / 21077

Stop Time: 1023 | Average Purge Rate (mL/min): 300 ml | Date Calibrated: 10/17/2024

SAMPLING DATA

Sample Date: 10/17/24 | Sample Time: 1025 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace (Y) Initials:

COMMENTS:

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

Estimated Total Purge Volume: 3,900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/17/2024 WEATHER: 42° Clear

MONITORING WELL ID: P-93B SAMPLE ID: P93B-WRR-101724 / P93B-ROX-101724

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): 46.74 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0 ppm	
Depth to LNAPL/DNAPL (btoc): — ft		Wellbore PID/FID Reading: 563 ppm	
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		
Screen Length: 2 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc —		
Water Column Height (not including NAPL): 30.04 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 75.78 ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1130	46.74	Clear	Slight	18.99	6.56	0.98 mS/cm uS/cm	6.86	-131.54	30.57
2900	1143	46.73	↓	↓	19.23	0.92	mS/cm uS/cm	6.88	-145.94	104.06
4200	1144	↓			19.23	0.89	mS/cm uS/cm	6.88	-145.79	116.57
4500	1145				19.24	0.85	mS/cm uS/cm	6.88	-145.44	129.54
4800	1146				19.24	0.82	mS/cm uS/cm	6.87	-145.25	130.30
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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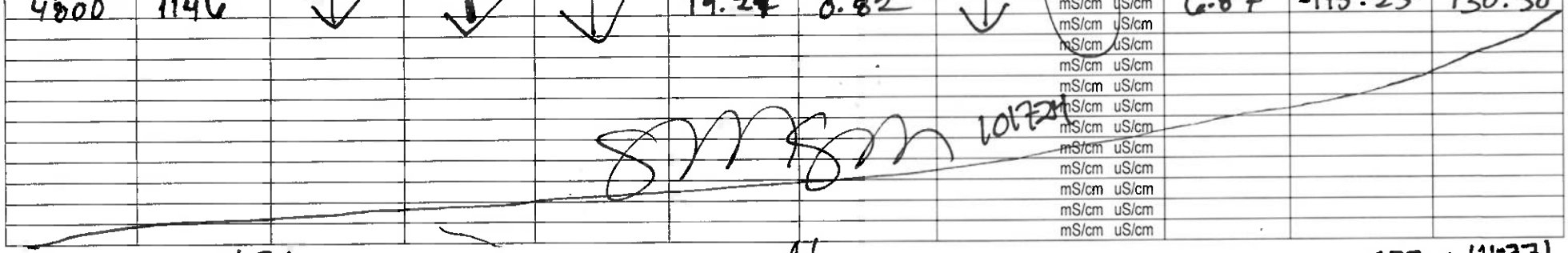

Start Time: 1130 Elapsed Time (min): 16 Water Quality Meter ID & SN: YSI ProDSS -- 22301I / 21077I

Stop Time: 1146 Average Purge Rate (mL/min): 300 mL Date Calibrated: 10/17/24

SAMPLING DATA

Sample Date: 10/17/24 Sample Time: 1150 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials:

COMMENTS:

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

Estimated Total Purge Volume: 4,800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW | PROJECT NUMBER: 60721927 - 3.4.1/2/3 | FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/17/2024 | WEATHER: 42° Clear

MONITORING WELL ID: P-93C | SAMPLE ID: P93C-WRR-101724 / P93C-ROX-101724

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): 46.61 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
Depth to LNAPL/DNAPL (btoc): ——— ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ——— ft btoc
Depth to Top of Screen (btoc): 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): 51.27 ft	

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0 ppm
Wellbore PID/FID Reading: 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	0902	46.61	clear	slight	16.44	8.28	0.87 mS/cm uS/cm	6.77	-14.87	13.82
5500	0920	↓	↓	↓	17.79	1.18	0.99 mS/cm uS/cm	7.01	-148.41	3.86
5700	0921				17.86	1.14	0.99 mS/cm uS/cm	7.01	-149.59	4.13
6000	0922				17.83	1.13	0.99 mS/cm uS/cm	7.01	-150.14	4.16
6300	0923				17.87	1.09	0.99 mS/cm uS/cm	7.01	-150.74	4.47
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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SM 600 101724

Start Time: 0902 | Elapsed Time (min): 21 | Water Quality Meter ID & SN: YSI ProDSS -- 22301I / 21077I

Stop Time: 0923 | Average Purge Rate (mL/min): 300 ml | Date Calibrated: 10/17/24

SAMPLING DATA

Sample Date: 10/17/24 | Sample Time: 0925 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: SM

COMMENTS:

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

Estimated Total Purge Volume: 6,300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 FIELD PERSONNEL: S.McLean, T.Jones

DATE: 10/15/24 WEATHER: 59° cloudy

MONITORING WELL ID: P-93D SAMPLE ID: P93D-BOX-101524

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 127.91 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 46.85 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		Wellbore PID/FID Reading: 0.0 ppm
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	
Screen Length: 2 ft		
Water Column Height (not including NAPL): 81.06 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): 125.91 ft btoc	

PURGE DATA

Pump Type: ~~Stainless Steel Submersible Pump~~ dedicated well wizard

	STABLE:		+/-0.2 mg/L or	+/-5% or			Monitor Turb
	(over 4 readings)	Monitor Temp.	+/-10%	+/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	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	1053	46.85	clear	NONE	17.34	6.98	1.14 mS/cm uS/cm	7.02	-42.94	3.38
300	1054				17.57	4.96	1.13 mS/cm uS/cm	7.11	-82.78	3.48
600	1055				17.66	4.43	1.13 mS/cm uS/cm	7.13	-89.60	3.41
900	1056				17.76	3.84	1.13 mS/cm uS/cm	7.15	-97.20	3.71
1200	1057				17.92	3.38	1.13 mS/cm uS/cm	7.16	-102.47	3.45
1500	1058				18.03	2.92	1.13 mS/cm uS/cm	7.17	-104.59	3.40
1800	1059				18.10	2.79	1.13 mS/cm uS/cm	7.17	-107.19	3.66
2100	1100				18.10	2.61	1.13 mS/cm uS/cm	7.17	-108.27	3.98
2400	1105				18.28	2.01	1.13 mS/cm uS/cm	7.18	-111.74	4.89
3900	1106				18.31	1.94	1.13 mS/cm uS/cm	7.18	-112.50	5.81
4200	1107				18.33	1.90	1.13 mS/cm uS/cm	7.17	-111.22	6.04
4500	1108				18.34	1.89	1.13 mS/cm uS/cm	7.17	-112.48	6.97
4800	1109				18.31	1.80	1.14 mS/cm uS/cm	7.17	-111.61	5.43
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

SMcLean 101524

Start Time: 1053 Elapsed Time (min): 16 Water Quality Meter ID & SN: YSI ProDSS -- 21D771/223011

Stop Time: 1109 Average Purge Rate (mL/min): 300 Date Calibrated: 10/15/24

SAMPLING DATA

Sample Date: 10/15/24 Sample Time: 1111 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: SMcLean

COMMENTS:

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

Total Purge Volume: 4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C. McDavid, T. Jenkins

DATE: 10-10-24 WEATHER: Clear, 58°F

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-101024

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 33.31 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 27.98 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 30.64 ft btoc	Ambient PID/FID Reading: 0.0 ppm
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	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 5.33 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1042	28.13	Clear	Strong	22.4	0.74	1.253 (mS/cm) uS/cm	6.56	-141.97	17.98
300	1043	28.13	↓	↓	22.6	0.70	1.247 (mS/cm) uS/cm	6.56	-143.15	16.50
600	1044	28.13	↓	↓	22.6	0.64	1.247 (mS/cm) uS/cm	6.57	-144.55	15.80
900	1045	↓	↓	↓	22.6	0.60	1.246 (mS/cm) uS/cm	6.58	-145.77	13.79
1200	1046	↓	↓	↓	22.7	0.57	1.243 (mS/cm) uS/cm	6.58	-146.83	12.09
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

CMcDavid 10-10-24

Start Time: 10:42 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 22301912/0760

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

SAMPLING DATA

Sample Date: 10-10-24 Sample Time: 11:00 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: 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 4Q24 GW | PROJECT NUMBER: 60721927 - 3.4.1/2/3 | FIELD PERSONNEL: C.McDaniel, T. Jenkins

DATE: 10-15-24 | WEATHER: partly cloudy, 70°F

MONITORING WELL ID: ROST-3-MW | SAMPLE ID: ROST3MW-ROX-101524

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): 42.78 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 45.42 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): 5.29 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	1050	42.92	clear	moderate	17.1	0.68	1.402 (mS/cm) uS/cm	6.79	-110.39	23.93
300	1051	42.90	↓	↓	17.2	0.59	1.402 (mS/cm) uS/cm	6.79	-112.64	26.11
600	1052	42.90			17.2	0.54	1.401 (mS/cm) uS/cm	6.79	-114.96	24.35
900	1053	42.90			17.0	0.50	1.400 (mS/cm) uS/cm	6.80	-115.83	22.31
1200	1054	↓	↓	↓	17.2	0.47	1.397 (mS/cm) uS/cm	6.80	-117.91	22.02
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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CM 10-15-24

Start Time: 10:50 | Elapsed Time (min): 4 | Water Quality Meter ID & SN: YSI ProDSS -- 22335944151

Stop Time: 10:54 | Average Purge Rate (mL/min): 300 | Date Calibrated: 10-14-24

SAMPLING DATA

Sample Date: 10-15-24 | Sample Time: 11:10 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: C.McDaniel, T. Jenkins

DATE: 10-16-24 WEATHER: partly cloudy, 33°F

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-101624

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 42.68 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): ~~42.68~~ ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.94 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): 2.52 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	0921	43.10	grey	v. strong	17.3	1.02	1.555 (mS/cm) uS/cm	6.80	-99.60	15.92
300	0922	43.08	↓	↓	17.3	0.84	1.552 (mS/cm) uS/cm	6.87	-110.91	13.73
600	0923	43.08	↓	↓	17.4	0.71	1.549 (mS/cm) uS/cm	6.93	-119.98	13.33
900	0924	43.08	↓	↓	17.5	0.63	1.548 (mS/cm) uS/cm	6.98	-126.45	11.78
1200	0925	↓	↓	↓	17.5	0.56	1.546 (mS/cm) uS/cm	7.01	-131.60	14.66
1500	0926	↓	↓	↓	17.7	0.51	1.545 (mS/cm) uS/cm	7.02	-135.11	10.92
1800	0927	↓	↓	↓	17.5	0.48	1.544 (mS/cm) uS/cm	7.03	-138.06	13.97
							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			

CM 10-16-24

Start Time: 09:21 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 22354/19151

Stop Time: 09:27 Average Purge Rate (mL/min): 300 Date Calibrated: 10-16-24

SAMPLING DATA

Sample Date: 10-16-24 Sample Time: 09:45 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: CM

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C.McDonald, T. Jenkins

DATE: 10-15-24 **WEATHER:** clear, 54°F

MONITORING WELL ID: ROST-4-PZ(E) **SAMPLE ID:** ROST4PZE-ROX-101524

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): 41.33 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.16 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): 3.67 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1252	42.05	clear	strong	19.5	2.90	1.726 mS/cm uS/cm	6.92	40.36	6.37
300	1253	42.62	↓	↓	19.4	2.83	1.725 mS/cm uS/cm	6.93	36.19	65.82
600	1254	42.02			19.3	2.73	1.719 mS/cm uS/cm	6.94	34.01	115.02
900	1255	41.96			19.3	2.67	1.730 mS/cm uS/cm	6.94	33.70	63.85
1200	1256	41.96			19.3	2.58	1.733 mS/cm uS/cm	6.94	33.38	41.00
1500	1257	41.96			19.3	2.53	1.733 mS/cm uS/cm	6.95	32.77	38.09
1800	1258	↓			19.4	2.45	1.731 mS/cm uS/cm	6.95	31.47	25.62
2100	1259				19.3	2.42	1.731 mS/cm uS/cm	6.95	30.00	38.13
							mS/cm uS/cm			
							mS/cm uS/cm			
							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 10-15-24

Start Time: 12:52 **Elapsed Time (min):** 7 **Water Quality Meter ID & SN:** YSI ProDSS -- 223354/44151

Stop Time: 12:59 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-14-24

SAMPLING DATA

Sample Date: 10-15-24 **Sample Time:** 13:15 **Lab Analysis:** VOC, SVOC, PAH

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

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

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 4Q24 GW **PROJECT NUMBER:** 60721927 - 3.4.1/2/3 **FIELD PERSONNEL:** C. McDaniel, T. Jenkins

DATE: 10-16-24 **WEATHER:** Clear, 46°F

MONITORING WELL ID: ROST-4-PZ(G) **SAMPLE ID:** ROST4PZG-ROX-101624

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): 43.07 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.80 ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE 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): 1.46 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1109	43.13	cloudy	mild	20.6	0.79	1.340 (mS/cm) uS/cm	7.17	-158.88	6.38
300	1110	43.13	↓	↓	20.3	0.60	1.340 (mS/cm) uS/cm	7.17	-160.07	5.20
600	1111	43.13	↓	↓	20.2	0.56	1.338 (mS/cm) uS/cm	7.17	-160.31	7.06
900	1112	↓	↓	↓	20.1	0.50	1.339 (mS/cm) uS/cm	7.16	-160.61	29.73
1200	1113	↓	↓	↓	20.1	0.45	1.341 (mS/cm) uS/cm	7.16	-161.30	37.86
1500	1114	↓	↓	↓	20.2	0.42	1.343 (mS/cm) uS/cm	7.16	-161.84	25.65
							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			

Emptied 10/16/24

Start Time: 11:09 **Elapsed Time (min):** 5 **Water Quality Meter ID & SN:** YSI ProDSS -- 22335A/19151

Stop Time: 11:14 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 10-16-24

SAMPLING DATA

Sample Date: 10-16-24 **Sample Time:** 11:30 **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 4024 GW PROJECT NUMBER: 60721927 - 3.4.1/2/3 FIELD PERSONNEL: S. McLean, T. Jones

DATE: 10/16/2024 WEATHER: 56° Clear

MONITORING WELL ID: T-12 SAMPLE ID: T12-WRR-101624 / T12-ROX-101624

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): 46.53 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0 ppm
Depth to LNAPL/DNAPL (btoc): — 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: 9.1 ppm
Screen Length: 26 ft		
Water Column Height (not including NAPL): 26.30 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	46.55	clear	slight	17.07	5.75	1.34 mS/cm uS/cm	6.79	-103.25	-4.50
9000	0940				18.53	1.14	1.38 mS/cm uS/cm	6.85	-137.22	-3.55
9300	0941				18.53	1.10	1.38 mS/cm uS/cm	6.85	-137.22	-3.72
9600	0942				18.50	1.09	1.38 mS/cm uS/cm	6.85	-137.32	-3.92
9900	0943				18.29	1.07	1.38 mS/cm uS/cm	6.85	-137.28	-3.86
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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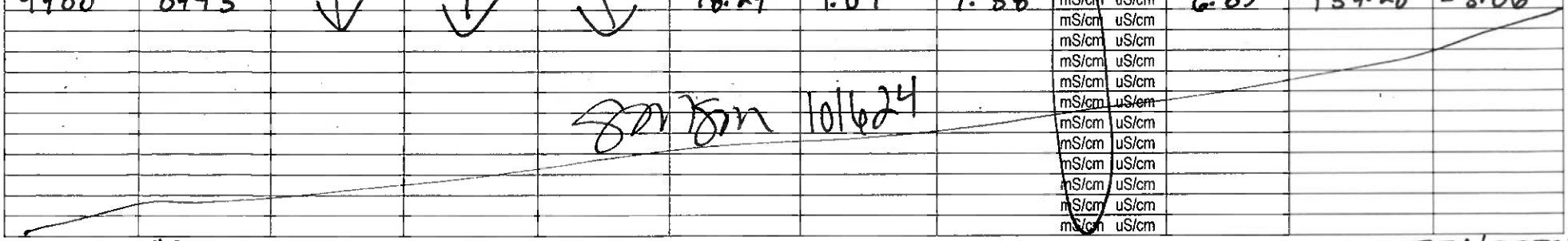

Start Time: 0910 Elapsed Time (min): 33 Water Quality Meter ID & SN: YSI ProDSS -- 210771/22B011

Stop Time: 0943 Average Purge Rate (mL/min): 300 ml Date Calibrated: 10/16/24

SAMPLING DATA

Sample Date: 10/16/24 Sample Time: 0945 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): ~~9,900~~ 300ml QA/QCSamples: N/A

VOA Vials, No Headspace ☑ Initials:

COMMENTS:

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

Estimated Total Purge Volume: 9,900 mL

Appendix C

Data Review/Validation Forms and Laboratory Analytical Reports

Laboratory Report Reviewed: 400-263758-1-Rev.1

Site Name: Roxana

Prepared By and Date: Adelina Gita 11/26/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/04/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.		X		

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW11-ROX-100424 MS/MSD	VOCs	Acrylonitrile	**58**/**66**	12	67-140/20
MW11-ROX-100424 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0**/**0**	NC	52-136/20
MW11-ROX-100424 MS/MSD	VOCs	Hexachlorobutadiene	71/96	**30**	51-150/20
MW11-ROX-100424 MS/MSD	VOCs	1,2,3-Trichlorobenzene	81/100	**21**	51-145/20
MW11-ROX-100424 MS/MSD	SVOCs	Aniline	**29**/44	**41**	50-150/40
MW11-ROX-100424 MS/MSD	SVOCs	1,4-Dioxane	**33**/**36**	11	50-150/40
MW11-ROX-100424 MS/MSD	SVOCs	Hexachlorocyclopentadiene	**216**/**236**	10	50-150/40
MW11-ROX-100424 MS/MSD	SVOCs	Hexachloroethane	**49**/55	12	50-150/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**		**Quality Condition**			**Comments**
			Pass	**Fail[1]**	**N/A**	
MW11-ROX-100424 MS/MSD	SVOCs	N-Nitrosodimethylamine		**36/40**	13	50-150/40
MW11-ROX-100424 MS/MSD	SVOCs	Pyridine		**13/19**	**43**	50-150/40
MW11-ROX-100424 MS/MSD	PAHs	1-Methylnaphthalene		52/86	**51**	50-150/40
MW11-ROX-100424 MS/MSD	PAHs	2-Methylnaphthalene		**43**/74	**56**	50-150/40
MW11-ROX-100424 MS/MSD	VOCs by 8011	1,2-Dibromoethane		83/68	**21**	39-150/20

Analytical data that required qualification based on MS/MSD data are referenced 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Method 8260D (VOCs)
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. 2-Chloroethyl vinyl ether in sample MW11-ROX-100424 was qualified as estimated (UJ).

Acrylonitrile in sample MW11-ROX-100424 was qualified due to LCS/LCSD recoveries outside of evaluation criteria. No further qualification is required.

Method 8270E (SVOCs)
Aniline, 1,4-dioxane, hexachloroethane, and n-nitrosodimethylamine in sample MW11-ROX-100424 were qualified as estimated (UJ).

Pyridine in sample MW11-ROX-100424 was qualified due to LCS/LCSD recoveries outside of evaluation criteria. No further qualification is required.

Method 8270E (PAHs)
2-Methylnaphthalene in sample MW11-ROX-100424 was qualified as estimated (UJ).

Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 500-790942/2-A	VOCs	Acrylonitrile	**62**	NA	67-140
LCS 500-791044/5	VOCs	2-Chloroethyl vinyl ether	**172**	NA	52-136
LCS 400-687584/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**224/230**	2	10-124/40
LCS 400-687584/2-A/3-A	SVOCs	Pyridine	**11/8**	33	10-82/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Method 8260D (VOCs)
Acrylonitrile in samples MW11-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 was qualified as estimated (UJ).

Method 8270E (SVOCs)
Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270.

Pyridine in sample MW11-ROX-100424 was qualified as estimated (UJ).

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MW9-ROX-100424-EB	VOCs	Methylene Chloride	9.4 µg/L
TB-ROX-100424-8260	VOCs	Naphthalene	0.69 µg/L
MW9-ROX-100424-EB	SVOCs	Phenol	48 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Method 8260D (VOCs)
Methylene chloride in sample MW9-ROX-100424 was qualified as non-detect (U) at the reported sample concentration.

Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MB 500-791044/8	VOCs	Naphthalene	0.709 µg/L
MB 500-791267/8	VOCs	Methylene Chloride	8.95 µg/L

MB 500-791267/8	VOCs	Naphthalene	0.453 µg/L
MB 500-791267/8	VOCs	1,2,4-Trichlorobenzene	0.370 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. Trip blanks and equipment blanks are quality control samples that do not require qualification.

Method 8260D (VOCs)
Methylene chloride in samples MW11-ROX-100424 and MW16-ROX-100424 was qualified as non-detect (U) at the reported sample concentration.

Methylene chloride in sample MW9-ROX-100424 was previously qualified due to equipment blank contamination. No further qualification is required.

Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	specified frequency per method, and ion relative abundances were within acceptance limits.				
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Methos 8260D (VOCs) The initial continuing calibration verification (ICV) for vinyl acetate was outside evaluation criteria, biased low. The associated results for samples MW9-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 were qualified as estimated (UJ). The continuing calibration verification (CCV) for acetone, acrolein, acrylonitrile, bromoform, 2-butanone (MEK), hexachlorobutadiene, 2-hexanone, 4-methyl-2-pentanone (MIBK), naphthalene and vinyl acetate were outside evaluation criteria, biased low. The associated results for samples MW9-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 were qualified as estimated (UJ). Vinyl acetate in samples MW9-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 was previously qualified due to ICV recovery outside evaluation criteria; no further qualification is required. Acrylonitrile in samples MW9-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 was previously qualified due to LCS/LCSD recovery outside evaluation criteria; no further qualification is required. **Method 8270E (SVOCs)** The continuing calibration verification (CCV) for 3-nitroaniline was outside evaluation criteria, biased low. The associated results for samples MW9-ROX-100424, MW11-ROX-100424, and MW16-ROX-100424 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.				
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/25/2024 1:43:07 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-263758-1

Reviewed 11/26/2024
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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Authorization

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Authorized for release by
Leah Klingensmith, Senior Project Manager
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(615)301-5038

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Job Narrative
400-263758-1

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 10/5/2024 8:23 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 0.2°C and 1.2°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) analyzed in batch 500-791044 was outside the method criteria for the following analyte(s): Bromoform, Bromomethane, 2-Chloroethyl vinyl ether, Ethyl methacrylate, Naphthalene and Trichlorofluoromethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. 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 500-791044 recovered outside control limits for the following analytes: 2-Chloroethyl vinyl ether. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: The method blank for analytical batch 500-791044 contained Naphthalene 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 8260D: The continuing calibration verification (CCV) analyzed in batch 500-791267 was outside the method criteria for the following analyte(s): Acetone, Acrolein, Acrylonitrile, Bromoform, 2-Butanone (MEK), Hexachlorobutadiene, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Naphthalene and Vinyl acetate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: Methylene chloride was detected in the following items: MW9-ROX-100424-EB (400-263758-3), MW9-ROX-100424 (400-263758-4), MW11-ROX-100424 (400-263758-5) and MW16-ROX-100424 (400-263758-6). Methylene chloride is a known lab contaminant; therefore all low level detects for this compound could be suspected as lab contamination.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 500-791267 had 0 percent receovery for 2-Chloroethyl vinyl ether. Client used acid preserved samples, and the compound is known to degrade in the presence of acid.MW11-ROX-100424 (400-263758-5[MS]) and MW11-ROX-100424 (400-263758-5[MSD])

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 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Job ID: 400-263758-1 (Continued) Eurofins Pensacola

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-687921 recovered outside acceptance criteria, low biased, for 3-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-687921 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol, Di-n-butyl phthalate, Hexachlorobenzene and Hexachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration curve analyzed in batch 400-687921 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-687584 and analytical batch 400-687921 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 400-687584 and analytical batch 400-687921 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 initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E_QQQ: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-687128 and analytical batch 400-687273 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_QQQ: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-687128 and analytical batch 400-687273 was outside control limits. Sample matrix interference is suspected.

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 matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 400-687416 and analytical batch 400-687442 was outside control limits. Sample matrix interference is suspected.

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-263758-1	TB-ROX-100424-8260	Water	10/04/24 12:00	10/05/24 08:23
400-263758-2	TB-ROX-100424-8011	Water	10/04/24 12:00	10/05/24 08:23
400-263758-3	MW9-ROX-100424-EB	Water	10/04/24 08:30	10/05/24 08:23
400-263758-4	MW9-ROX-100424	Water	10/04/24 10:15	10/05/24 08:23
400-263758-5	MW11-ROX-100424	Water	10/04/24 12:00	10/05/24 08:23
400-263758-6	MW16-ROX-100424	Water	10/04/24 13:50	10/05/24 08:23

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: TB-ROX-100424-8260 — Lab Sample ID: 400-263758-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	0.69	J B	1.0	0.44	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-100424-8011 — Lab Sample ID: 400-263758-2

No Detections.

Client Sample ID: MW9-ROX-100424-EB — Lab Sample ID: 400-263758-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	9.4	B	5.0	3.6	ug/L	1		8260D	Total/NA
Phenol	48		9.6	4.0	ug/L	1		8270E	Total/NA

Client Sample ID: MW9-ROX-100424 — Lab Sample ID: 400-263758-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	~~11~~	~~B~~ U	11 ~~5.0~~	3.6	ug/L	1		8260D	Total/NA

Client Sample ID: MW11-ROX-100424 — Lab Sample ID: 400-263758-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	~~10~~	~~B~~ U	10 ~~5.0~~	3.6	ug/L	1		8260D	Total/NA

Client Sample ID: MW16-ROX-100424 — Lab Sample ID: 400-263758-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	~~9.8~~	~~B~~ U	9.8 ~~5.0~~	3.6	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: TB-ROX-100424-8260
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/17/24 13:06	1
Acrolein	ND		100	35	ug/L			10/17/24 13:06	1
Acrylonitrile	ND		20	6.0	ug/L			10/17/24 13:06	1
Benzene	ND		0.50	0.18	ug/L			10/17/24 13:06	1
Bromobenzene	ND		1.0	0.60	ug/L			10/17/24 13:06	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/17/24 13:06	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/17/24 13:06	1
Bromoform	ND		1.0	0.96	ug/L			10/17/24 13:06	1
Bromomethane	ND		3.0	1.8	ug/L			10/17/24 13:06	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/17/24 13:06	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/17/24 13:06	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/17/24 13:06	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/17/24 13:06	1
Chloroethane	ND		5.0	0.47	ug/L			10/17/24 13:06	1
2-Chloroethyl vinyl ether	ND	*+	2.0	1.6	ug/L			10/17/24 13:06	1
Chloroform	ND		2.0	0.92	ug/L			10/17/24 13:06	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/17/24 13:06	1
Chloromethane	ND		5.0	0.79	ug/L			10/17/24 13:06	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/17/24 13:06	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/17/24 13:06	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/17/24 13:06	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/17/24 13:06	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/17/24 13:06	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/17/24 13:06	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/17/24 13:06	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/17/24 13:06	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/17/24 13:06	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/17/24 13:06	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/17/24 13:06	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/17/24 13:06	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/17/24 13:06	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/17/24 13:06	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/17/24 13:06	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/17/24 13:06	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/17/24 13:06	1
2-Hexanone	ND		5.0	2.2	ug/L			10/17/24 13:06	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/17/24 13:06	1
Methylene bromide	ND		1.0	0.58	ug/L			10/17/24 13:06	1
Methylene Chloride	ND		5.0	3.6	ug/L			10/17/24 13:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/17/24 13:06	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/17/24 13:06	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/17/24 13:06	1
Naphthalene	**0.69**	**J B**	1.0	0.44	ug/L			10/17/24 13:06	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/17/24 13:06	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/17/24 13:06	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/17/24 13:06	1
o-Xylene	ND		0.50	0.21	ug/L			10/17/24 13:06	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/17/24 13:06	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/17/24 13:06	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: TB-ROX-100424-8260
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-1
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	0.27	ug/L			10/17/24 13:06	1
Styrene	ND		1.0	0.31	ug/L			10/17/24 13:06	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/17/24 13:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/17/24 13:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/17/24 13:06	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/17/24 13:06	1
Toluene	ND		0.50	0.21	ug/L			10/17/24 13:06	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/17/24 13:06	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/17/24 13:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/17/24 13:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/17/24 13:06	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/17/24 13:06	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/17/24 13:06	1
Trichloroethene	ND		0.50	0.15	ug/L			10/17/24 13:06	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/17/24 13:06	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/17/24 13:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/17/24 13:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/17/24 13:06	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/17/24 13:06	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/17/24 13:06	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/17/24 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*		*10/17/24 13:06*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*10/17/24 13:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*87*		*75 - 126*		*10/17/24 13:06*	*1*
Toluene-d8 (Surr)	*85*		*75 - 120*		*10/17/24 13:06*	*1*

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-100424-8011
Lab Sample ID: 400-263758-2
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 08:23

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		10/10/24 09:56	10/10/24 15:21	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/10/24 09:56	10/10/24 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*10/10/24 09:56*	*10/10/24 15:21*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW9-ROX-100424-EB
Date Collected: 10/04/24 08:30
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/18/24 13:03	1
Acrolein	ND		100	35	ug/L			10/18/24 13:03	1
Acrylonitrile	ND	*-	20	6.0	ug/L			10/18/24 13:03	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 13:03	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 13:03	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 13:03	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 13:03	1
Bromoform	ND		1.0	0.96	ug/L			10/18/24 13:03	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 13:03	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/18/24 13:03	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 13:03	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 13:03	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 13:03	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 13:03	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 13:03	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 13:03	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 13:03	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 13:03	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 13:03	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 13:03	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 13:03	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 13:03	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 13:03	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 13:03	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 13:03	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 13:03	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 13:03	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 13:03	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 13:03	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 13:03	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 13:03	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 13:03	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 13:03	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 13:03	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/18/24 13:03	1
2-Hexanone	ND		5.0	2.2	ug/L			10/18/24 13:03	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 13:03	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 13:03	1
Methylene Chloride	**9.4**	**B**	5.0	3.6	ug/L			10/18/24 13:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/18/24 13:03	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 13:03	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 13:03	1
Naphthalene	ND		1.0	0.44	ug/L			10/18/24 13:03	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 13:03	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 13:03	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 13:03	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 13:03	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 13:03	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 13:03	1

Client Sample ID: MW9-ROX-100424-EB
Date Collected: 10/04/24 08:30
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-3
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	0.27	ug/L			10/18/24 13:03	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 13:03	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 13:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 13:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 13:03	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 13:03	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 13:03	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 13:03	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 13:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 13:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 13:03	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 13:03	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 13:03	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 13:03	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 13:03	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 13:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 13:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 13:03	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/18/24 13:03	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 13:03	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 13:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*72 - 124*		*10/18/24 13:03*	*1*
Dibromofluoromethane	*93*		*75 - 120*		*10/18/24 13:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*10/18/24 13:03*	*1*
Toluene-d8 (Surr)	*108*		*75 - 120*		*10/18/24 13:03*	*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		10/11/24 11:30	10/15/24 15:47	1
Benzenethiol	ND		9.6	9.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
Benzoic acid	ND		29	23	ug/L		10/11/24 11:30	10/15/24 15:47	1
Benzyl alcohol	ND		9.6	7.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
Bis(2-chloroethyl)ether	ND		9.6	3.7	ug/L		10/11/24 11:30	10/15/24 15:47	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		10/11/24 11:30	10/15/24 15:47	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Bromophenyl phenyl ether	ND		9.6	8.2	ug/L		10/11/24 11:30	10/15/24 15:47	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Chloroaniline	ND		9.6	4.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		10/11/24 11:30	10/15/24 15:47	1
2-Chloronaphthalene	ND		9.6	3.6	ug/L		10/11/24 11:30	10/15/24 15:47	1
2-Chlorophenol	ND		9.6	3.9	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Chlorophenyl phenyl ether	ND		9.6	3.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		10/11/24 11:30	10/15/24 15:47	1
Dibenzofuran	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 15:47	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		10/11/24 11:30	10/15/24 15:47	1
Diethyl phthalate	ND		9.6	4.2	ug/L		10/11/24 11:30	10/15/24 15:47	1

Client Sample ID: MW9-ROX-100424-EB
Date Collected: 10/04/24 08:30
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,6-Dinitrotoluene	ND		9.6	3.7	ug/L		10/11/24 11:30	10/15/24 15:47	1
Di-n-octyl phthalate	ND		9.6	5.7	ug/L		10/11/24 11:30	10/15/24 15:47	1
1,4-Dioxane	ND		9.6	4.1	ug/L		10/11/24 11:30	10/15/24 15:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		10/11/24 11:30	10/15/24 15:47	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		10/11/24 11:30	10/15/24 15:47	1
Hexachlorocyclopentadiene	ND		19	4.3	ug/L		10/11/24 11:30	10/15/24 15:47	1
Hexachloroethane	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
Indene	ND		9.6	3.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
Isophorone	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
2-Methylphenol	ND		9.6	3.1	ug/L		10/11/24 11:30	10/15/24 15:47	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
2-Nitroaniline	ND		9.6	4.8	ug/L		10/11/24 11:30	10/15/24 15:47	1
3-Nitroaniline	ND		9.6	4.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Nitroaniline	ND		9.6	3.9	ug/L		10/11/24 11:30	10/15/24 15:47	1
Nitrobenzene	ND		9.6	4.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
2-Nitrophenol	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
4-Nitrophenol	ND		9.6	3.2	ug/L		10/11/24 11:30	10/15/24 15:47	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		10/11/24 11:30	10/15/24 15:47	1
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		10/11/24 11:30	10/15/24 15:47	1
N-Nitrosodiphenylamine	ND		9.6	3.5	ug/L		10/11/24 11:30	10/15/24 15:47	1
Pentachlorophenol	ND		19	11	ug/L		10/11/24 11:30	10/15/24 15:47	1
Phenol	**48**		9.6	4.0	ug/L		10/11/24 11:30	10/15/24 15:47	1
Pyridine	ND		9.6	9.6	ug/L		10/11/24 11:30	10/15/24 15:47	1
Quinoline	ND		9.6	2.3	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 15:47	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/11/24 11:30	10/15/24 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/11/24 11:30*	*10/15/24 15:47*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/11/24 11:30*	*10/15/24 15:47*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*10/11/24 11:30*	*10/15/24 15:47*	*1*
Phenol-d5	*33*		*10 - 129*	*10/11/24 11:30*	*10/15/24 15:47*	*1*
Terphenyl-d14	*75*		*13 - 150*	*10/11/24 11:30*	*10/15/24 15:47*	*1*
2,4,6-Tribromophenol	*87*		*10 - 150*	*10/11/24 11:30*	*10/15/24 15:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/08/24 14:24	10/09/24 13:52	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/08/24 14:24	10/09/24 13:52	1
Anthracene	ND		0.20	0.073	ug/L		10/08/24 14:24	10/09/24 13:52	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/08/24 14:24	10/09/24 13:52	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/08/24 14:24	10/09/24 13:52	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/08/24 14:24	10/09/24 13:52	1

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW9-ROX-100424-EB
Lab Sample ID: 400-263758-3
Date Collected: 10/04/24 08:30
Matrix: Water
Date Received: 10/05/24 08:23

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/08/24 14:24	10/09/24 13:52	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/08/24 14:24	10/09/24 13:52	1
Chrysene	ND		0.20	0.039	ug/L		10/08/24 14:24	10/09/24 13:52	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/08/24 14:24	10/09/24 13:52	1
Fluoranthene	ND		0.20	0.032	ug/L		10/08/24 14:24	10/09/24 13:52	1
Fluorene	ND		0.20	0.086	ug/L		10/08/24 14:24	10/09/24 13:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/08/24 14:24	10/09/24 13:52	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/08/24 14:24	10/09/24 13:52	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/08/24 14:24	10/09/24 13:52	1
Phenanthrene	ND		0.20	0.044	ug/L		10/08/24 14:24	10/09/24 13:52	1
Pyrene	ND		0.20	0.040	ug/L		10/08/24 14:24	10/09/24 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:52*	*1*
Nitrobenzene-d5	*137*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:52*	*1*
Terphenyl-d14	*119*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:52*	*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		0.030	0.017	ug/L		10/10/24 09:56	10/10/24 15:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/10/24 09:56	10/10/24 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*10/10/24 09:56*	*10/10/24 15:42*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW9-ROX-100424
Date Collected: 10/04/24 10:15
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	10	4.3	ug/L			10/18/24 13:28	1
Acrolein	ND	UJ	100	35	ug/L			10/18/24 13:28	1
Acrylonitrile	ND	*- UJ	20	6.0	ug/L			10/18/24 13:28	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 13:28	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 13:28	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 13:28	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 13:28	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/18/24 13:28	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 13:28	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/18/24 13:28	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 13:28	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 13:28	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 13:28	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 13:28	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 13:28	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 13:28	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 13:28	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 13:28	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 13:28	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 13:28	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 13:28	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 13:28	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 13:28	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 13:28	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 13:28	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 13:28	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 13:28	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 13:28	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 13:28	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 13:28	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 13:28	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 13:28	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 13:28	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 13:28	1
Hexachlorobutadiene	ND	UJ	1.0	0.54	ug/L			10/18/24 13:28	1
2-Hexanone	ND	UJ	5.0	2.2	ug/L			10/18/24 13:28	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 13:28	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 13:28	1
Methylene Chloride	11	~~B~~ U	~~11~~ 5.0	3.6	ug/L			10/18/24 13:28	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/18/24 13:28	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 13:28	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 13:28	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/18/24 13:28	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 13:28	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 13:28	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 13:28	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 13:28	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 13:28	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 13:28	1

Client Sample ID: MW9-ROX-100424
Date Collected: 10/04/24 10:15
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-4
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	0.27	ug/L			10/18/24 13:28	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 13:28	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 13:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 13:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 13:28	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 13:28	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 13:28	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 13:28	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 13:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 13:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 13:28	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 13:28	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 13:28	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 13:28	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 13:28	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 13:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 13:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 13:28	1
Vinyl acetate	ND	UJ	2.0	0.78	ug/L			10/18/24 13:28	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 13:28	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*72 - 124*		*10/18/24 13:28*	*1*
Dibromofluoromethane	*96*		*75 - 120*		*10/18/24 13:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*10/18/24 13:28*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*10/18/24 13:28*	*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		10/11/24 11:30	10/15/24 16:10	1
Benzenethiol	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 16:10	1
Benzoic acid	ND		30	24	ug/L		10/11/24 11:30	10/15/24 16:10	1
Benzyl alcohol	ND		10	7.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 16:10	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 16:10	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Chloroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 16:10	1
2-Chlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/11/24 11:30	10/15/24 16:10	1
Dibenzofuran	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 16:10	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
Diethyl phthalate	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 16:10	1

Client Sample ID: MW9-ROX-100424
Date Collected: 10/04/24 10:15
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 16:10	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/11/24 11:30	10/15/24 16:10	1
1,4-Dioxane	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
Hexachlorocyclopentadiene	ND	*+	20	4.5	ug/L		10/11/24 11:30	10/15/24 16:10	1
Hexachloroethane	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
Indene	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
Isophorone	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
2-Methylphenol	ND		10	3.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
2-Nitroaniline	ND		10	5.0	ug/L		10/11/24 11:30	10/15/24 16:10	1
3-Nitroaniline	ND	UJ	10	4.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Nitroaniline	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 16:10	1
Nitrobenzene	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
2-Nitrophenol	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 16:10	1
4-Nitrophenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 16:10	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/11/24 11:30	10/15/24 16:10	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 16:10	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 16:10	1
Phenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 16:10	1
Pyridine	ND	*- UJ	10	10	ug/L		10/11/24 11:30	10/15/24 16:10	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 16:10	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/11/24 11:30	10/15/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*10/11/24 11:30*	*10/15/24 16:10*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/11/24 11:30*	*10/15/24 16:10*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/11/24 11:30*	*10/15/24 16:10*	*1*
Phenol-d5	*36*		*10 - 129*	*10/11/24 11:30*	*10/15/24 16:10*	*1*
Terphenyl-d14	*73*		*13 - 150*	*10/11/24 11:30*	*10/15/24 16:10*	*1*
2,4,6-Tribromophenol	*80*		*10 - 150*	*10/11/24 11:30*	*10/15/24 16:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.080	ug/L		10/08/24 14:24	10/09/24 14:23	1
Acenaphthylene	ND		0.19	0.044	ug/L		10/08/24 14:24	10/09/24 14:23	1
Anthracene	ND		0.19	0.068	ug/L		10/08/24 14:24	10/09/24 14:23	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:23	1
Benzo[a]pyrene	ND		0.19	0.042	ug/L		10/08/24 14:24	10/09/24 14:23	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/08/24 14:24	10/09/24 14:23	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW9-ROX-100424
Date Collected: 10/04/24 10:15
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.049	ug/L		10/08/24 14:24	10/09/24 14:23	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:23	1
Chrysene	ND		0.19	0.037	ug/L		10/08/24 14:24	10/09/24 14:23	1
Dibenz(a,h)anthracene	ND		0.19	0.041	ug/L		10/08/24 14:24	10/09/24 14:23	1
Fluoranthene	ND		0.19	0.030	ug/L		10/08/24 14:24	10/09/24 14:23	1
Fluorene	ND		0.19	0.082	ug/L		10/08/24 14:24	10/09/24 14:23	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.030	ug/L		10/08/24 14:24	10/09/24 14:23	1
1-Methylnaphthalene	ND		0.19	0.062	ug/L		10/08/24 14:24	10/09/24 14:23	1
2-Methylnaphthalene	ND		0.19	0.072	ug/L		10/08/24 14:24	10/09/24 14:23	1
Phenanthrene	ND		0.19	0.041	ug/L		10/08/24 14:24	10/09/24 14:23	1
Pyrene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:23*	*1*
Nitrobenzene-d5	*147*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:23*	*1*
Terphenyl-d14	*102*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:23*	*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		0.032	0.018	ug/L		10/10/24 09:56	10/10/24 16:03	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/10/24 09:56	10/10/24 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*10/10/24 09:56*	*10/10/24 16:03*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW11-ROX-100424
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	10	4.3	ug/L			10/18/24 14:17	1
Acrolein	ND	UJ	100	35	ug/L			10/18/24 14:17	1
Acrylonitrile	ND	F1 *- UJ	20	6.0	ug/L			10/18/24 14:17	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 14:17	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 14:17	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 14:17	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 14:17	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/18/24 14:17	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 14:17	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/18/24 14:17	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 14:17	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 14:17	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 14:17	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 14:17	1
2-Chloroethyl vinyl ether	ND	F1 UJ	2.0	1.6	ug/L			10/18/24 14:17	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 14:17	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 14:17	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 14:17	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 14:17	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 14:17	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 14:17	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 14:17	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 14:17	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 14:17	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 14:17	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 14:17	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 14:17	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 14:17	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 14:17	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 14:17	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 14:17	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 14:17	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 14:17	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 14:17	1
Hexachlorobutadiene	ND	F2 UJ	1.0	0.54	ug/L			10/18/24 14:17	1
2-Hexanone	ND	UJ	5.0	2.2	ug/L			10/18/24 14:17	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 14:17	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 14:17	1
Methylene Chloride	**10**	**B** U	10 ~~5.0~~	3.6	ug/L			10/18/24 14:17	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/18/24 14:17	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 14:17	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 14:17	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/18/24 14:17	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 14:17	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 14:17	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 14:17	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 14:17	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 14:17	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 14:17	1

Client Sample ID: MW11-ROX-100424
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-5
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	0.27	ug/L			10/18/24 14:17	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 14:17	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 14:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 14:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 14:17	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 14:17	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 14:17	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 14:17	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 14:17	1
1,2,3-Trichlorobenzene	ND	F2	1.0	0.35	ug/L			10/18/24 14:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 14:17	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 14:17	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 14:17	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 14:17	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 14:17	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 14:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 14:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 14:17	1
Vinyl acetate	ND	UJ	2.0	0.78	ug/L			10/18/24 14:17	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 14:17	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 14:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*10/18/24 14:17*	*1*
Dibromofluoromethane	*98*		*75 - 120*		*10/18/24 14:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*		*10/18/24 14:17*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*10/18/24 14:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F2 F1 UJ	10	8.9	ug/L		10/11/24 11:30	10/15/24 15:25	1
Benzenethiol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 15:25	1
Benzoic acid	ND		31	24	ug/L		10/11/24 11:30	10/15/24 15:25	1
Benzyl alcohol	ND		10	7.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 15:25	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Chloroaniline	ND	F1	10	4.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
2-Chloronaphthalene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 15:25	1
2-Chlorophenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		10/11/24 11:30	10/15/24 15:25	1
Dibenzofuran	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 15:25	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
Diethyl phthalate	ND		10	4.5	ug/L		10/11/24 11:30	10/15/24 15:25	1

Client Sample ID: MW11-ROX-100424
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
Dimethyl phthalate	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 15:25	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		10/11/24 11:30	10/15/24 15:25	1
1,4-Dioxane	ND	F1 UJ	10	4.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
Hexachlorobenzene	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 15:25	1
Hexachlorocyclopentadiene	ND	*+ F1	20	4.6	ug/L		10/11/24 11:30	10/15/24 15:25	1
Hexachloroethane	ND	F1 UJ	10	5.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
Indene	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
Isophorone	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
2-Methylphenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
2-Nitroaniline	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 15:25	1
3-Nitroaniline	ND	UJ	10	4.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Nitroaniline	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 15:25	1
Nitrobenzene	ND		10	4.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
2-Nitrophenol	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 15:25	1
4-Nitrophenol	ND		10	3.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
N-Nitrosodimethylamine	ND	F1 UJ	10	2.2	ug/L		10/11/24 11:30	10/15/24 15:25	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/11/24 11:30	10/15/24 15:25	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 15:25	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 15:25	1
Phenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 15:25	1
Pyridine	ND	F2 *- F1 UJ	10	10	ug/L		10/11/24 11:30	10/15/24 15:25	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 15:25	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*21 - 114*	*10/11/24 11:30*	*10/15/24 15:25*	*1*
2-Fluorophenol	*41*		*10 - 105*	*10/11/24 11:30*	*10/15/24 15:25*	*1*
Nitrobenzene-d5	*48*		*16 - 127*	*10/11/24 11:30*	*10/15/24 15:25*	*1*
Phenol-d5	*31*		*10 - 129*	*10/11/24 11:30*	*10/15/24 15:25*	*1*
Terphenyl-d14	*65*		*13 - 150*	*10/11/24 11:30*	*10/15/24 15:25*	*1*
2,4,6-Tribromophenol	*69*		*10 - 150*	*10/11/24 11:30*	*10/15/24 15:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.080	ug/L		10/08/24 14:24	10/09/24 13:22	1
Acenaphthylene	ND		0.19	0.044	ug/L		10/08/24 14:24	10/09/24 13:22	1
Anthracene	ND		0.19	0.068	ug/L		10/08/24 14:24	10/09/24 13:22	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 13:22	1
Benzo[a]pyrene	ND		0.19	0.042	ug/L		10/08/24 14:24	10/09/24 13:22	1
Benzo[b]fluoranthene	ND		0.19	0.039	ug/L		10/08/24 14:24	10/09/24 13:22	1

Client Sample ID: MW11-ROX-100424
Date Collected: 10/04/24 12:00
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.049	ug/L		10/08/24 14:24	10/09/24 13:22	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 13:22	1
Chrysene	ND		0.19	0.037	ug/L		10/08/24 14:24	10/09/24 13:22	1
Dibenz(a,h)anthracene	ND		0.19	0.041	ug/L		10/08/24 14:24	10/09/24 13:22	1
Fluoranthene	ND		0.19	0.030	ug/L		10/08/24 14:24	10/09/24 13:22	1
Fluorene	ND		0.19	0.082	ug/L		10/08/24 14:24	10/09/24 13:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.030	ug/L		10/08/24 14:24	10/09/24 13:22	1
1-Methylnaphthalene	ND	F2	0.19	0.062	ug/L		10/08/24 14:24	10/09/24 13:22	1
2-Methylnaphthalene	ND	F1 F2 UJ	0.19	0.072	ug/L		10/08/24 14:24	10/09/24 13:22	1
Phenanthrene	ND		0.19	0.041	ug/L		10/08/24 14:24	10/09/24 13:22	1
Pyrene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*111*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:22*	*1*
Nitrobenzene-d5	*147*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:22*	*1*
Terphenyl-d14	*103*		*50 - 150*	*10/08/24 14:24*	*10/09/24 13:22*	*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		0.033	0.019	ug/L		10/10/24 09:56	10/10/24 16:25	1
1,2-Dibromoethane	ND	F2	0.022	0.016	ug/L		10/10/24 09:56	10/10/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*10/10/24 09:56*	*10/10/24 16:25*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW16-ROX-100424
Date Collected: 10/04/24 13:50
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	10	4.3	ug/L			10/18/24 14:42	1
Acrolein	ND	UJ	100	35	ug/L			10/18/24 14:42	1
Acrylonitrile	ND	*- UJ	20	6.0	ug/L			10/18/24 14:42	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 14:42	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 14:42	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 14:42	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 14:42	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/18/24 14:42	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 14:42	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/18/24 14:42	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 14:42	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 14:42	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 14:42	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 14:42	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 14:42	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 14:42	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 14:42	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 14:42	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 14:42	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 14:42	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 14:42	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 14:42	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 14:42	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 14:42	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 14:42	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 14:42	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 14:42	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 14:42	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 14:42	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 14:42	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 14:42	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 14:42	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 14:42	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 14:42	1
Hexachlorobutadiene	ND	UJ	1.0	0.54	ug/L			10/18/24 14:42	1
2-Hexanone	ND	UJ	5.0	2.2	ug/L			10/18/24 14:42	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 14:42	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 14:42	1
Methylene Chloride	**9.8**	**B** U	~~5.0~~ 9.8	3.6	ug/L			10/18/24 14:42	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/18/24 14:42	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 14:42	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 14:42	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/18/24 14:42	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 14:42	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 14:42	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 14:42	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 14:42	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 14:42	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 14:42	1

Client Sample ID: MW16-ROX-100424
Date Collected: 10/04/24 13:50
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-6
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	0.27	ug/L			10/18/24 14:42	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 14:42	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 14:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 14:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 14:42	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 14:42	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 14:42	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 14:42	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 14:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 14:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 14:42	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 14:42	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 14:42	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 14:42	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 14:42	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 14:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 14:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 14:42	1
Vinyl acetate	ND	UJ	2.0	0.78	ug/L			10/18/24 14:42	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 14:42	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*10/18/24 14:42*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*10/18/24 14:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*		*10/18/24 14:42*	*1*
Toluene-d8 (Surr)	*108*		*75 - 120*		*10/18/24 14:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.9	ug/L		10/11/24 11:30	10/15/24 16:32	1
Benzenethiol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 16:32	1
Benzoic acid	ND		31	24	ug/L		10/11/24 11:30	10/15/24 16:32	1
Benzyl alcohol	ND		10	7.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 16:32	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
Bis(2-ethylhexyl) phthalate	ND		10	9.1	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Bromophenyl phenyl ether	ND		10	8.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Chloroaniline	ND		10	4.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
2-Chloronaphthalene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 16:32	1
2-Chlorophenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Chlorophenyl phenyl ether	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
Dibenz[a,h]acridine	ND		10	2.9	ug/L		10/11/24 11:30	10/15/24 16:32	1
Dibenzofuran	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 16:32	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
Diethyl phthalate	ND		10	4.5	ug/L		10/11/24 11:30	10/15/24 16:32	1

Client Sample ID: MW16-ROX-100424
Date Collected: 10/04/24 13:50
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
Dimethyl phthalate	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,4-Dinitrophenol	ND		31	4.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 16:32	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		10/11/24 11:30	10/15/24 16:32	1
1,4-Dioxane	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
Hexachlorobenzene	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 16:32	1
Hexachlorocyclopentadiene	ND	*+	20	4.6	ug/L		10/11/24 11:30	10/15/24 16:32	1
Hexachloroethane	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
Indene	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
Isophorone	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
2-Methylphenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
2-Nitroaniline	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 16:32	1
3-Nitroaniline	ND	UJ	10	4.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Nitroaniline	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 16:32	1
Nitrobenzene	ND		10	4.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
2-Nitrophenol	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 16:32	1
4-Nitrophenol	ND		10	3.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/11/24 11:30	10/15/24 16:32	1
N-Nitrosodi-n-propylamine	ND		10	2.6	ug/L		10/11/24 11:30	10/15/24 16:32	1
N-Nitrosodiphenylamine	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 16:32	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 16:32	1
Phenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 16:32	1
Pyridine	ND	*- UJ	10	10	ug/L		10/11/24 11:30	10/15/24 16:32	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 16:32	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*10/11/24 11:30*	*10/15/24 16:32*	*1*
2-Fluorophenol	*51*		*10 - 105*	*10/11/24 11:30*	*10/15/24 16:32*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*10/11/24 11:30*	*10/15/24 16:32*	*1*
Phenol-d5	*38*		*10 - 129*	*10/11/24 11:30*	*10/15/24 16:32*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/11/24 11:30*	*10/15/24 16:32*	*1*
2,4,6-Tribromophenol	*81*		*10 - 150*	*10/11/24 11:30*	*10/15/24 16:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.081	ug/L		10/08/24 14:24	10/09/24 14:53	1
Acenaphthylene	ND		0.19	0.045	ug/L		10/08/24 14:24	10/09/24 14:53	1
Anthracene	ND		0.19	0.070	ug/L		10/08/24 14:24	10/09/24 14:53	1
Benzo[a]anthracene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:53	1
Benzo[a]pyrene	ND		0.19	0.043	ug/L		10/08/24 14:24	10/09/24 14:53	1
Benzo[b]fluoranthene	ND		0.19	0.040	ug/L		10/08/24 14:24	10/09/24 14:53	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Client Sample ID: MW16-ROX-100424
Date Collected: 10/04/24 13:50
Date Received: 10/05/24 08:23

Lab Sample ID: 400-263758-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.050	ug/L		10/08/24 14:24	10/09/24 14:53	1
Benzo[k]fluoranthene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:53	1
Chrysene	ND		0.19	0.037	ug/L		10/08/24 14:24	10/09/24 14:53	1
Dibenz(a,h)anthracene	ND		0.19	0.042	ug/L		10/08/24 14:24	10/09/24 14:53	1
Fluoranthene	ND		0.19	0.031	ug/L		10/08/24 14:24	10/09/24 14:53	1
Fluorene	ND		0.19	0.083	ug/L		10/08/24 14:24	10/09/24 14:53	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/08/24 14:24	10/09/24 14:53	1
1-Methylnaphthalene	ND		0.19	0.063	ug/L		10/08/24 14:24	10/09/24 14:53	1
2-Methylnaphthalene	ND		0.19	0.074	ug/L		10/08/24 14:24	10/09/24 14:53	1
Phenanthrene	ND		0.19	0.042	ug/L		10/08/24 14:24	10/09/24 14:53	1
Pyrene	ND		0.19	0.038	ug/L		10/08/24 14:24	10/09/24 14:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:53*	*1*
Nitrobenzene-d5	*143*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:53*	*1*
Terphenyl-d14	*96*		*50 - 150*	*10/08/24 14:24*	*10/09/24 14:53*	*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		0.033	0.018	ug/L		10/10/24 09:56	10/10/24 17:28	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/10/24 09:56	10/10/24 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*10/10/24 09:56*	*10/10/24 17:28*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
400-263758-1	TB-ROX-100424-8260	83	95	87	85
400-263758-3	MW9-ROX-100424-EB	88	93	97	108
400-263758-4	MW9-ROX-100424	85	96	97	106
400-263758-5	MW11-ROX-100424	84	98	97	107
400-263758-5 MS	MW11-ROX-100424	82	97	96	106
400-263758-5 MSD	MW11-ROX-100424	81	95	96	107
400-263758-6	MW16-ROX-100424	87	95	96	108
LCS 500-790942/2-A	Lab Control Sample	78	99	97	107
LCS 500-791044/5	Lab Control Sample	83	89	80	86
MB 500-791044/8	Method Blank	86	97	86	85
MB 500-791267/8	Method Blank	89	95	96	106

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
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)
400-263758-3	MW9-ROX-100424-EB	63	44	56	33	75	87
400-263758-4	MW9-ROX-100424	62	48	58	36	73	80
400-263758-5	MW11-ROX-100424	48	41	48	31	65	69
400-263758-5 MS	MW11-ROX-100424	67	51	63	43	69	93
400-263758-5 MSD	MW11-ROX-100424	71	58	68	47	71	95
400-263758-6	MW16-ROX-100424	68	51	64	38	78	81
LCS 400-687584/2-A	Lab Control Sample	68	54	64	44	72	95
LCS 400-687584/4-A	Lab Control Sample	60	50	62	38	76	82
LCSD 400-687584/3-A	Lab Control Sample Dup	67	54	65	44	70	95
LCSD 400-687584/5-A	Lab Control Sample Dup	63	50	59	38	74	79
MB 400-687584/1-A	Method Blank	63	49	65	35	78	83

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-263758-3	MW9-ROX-100424-EB	97	137	119

Surrogate Summary

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-263758-4	MW9-ROX-100424	106	147	102
400-263758-5	MW11-ROX-100424	111	147	103
400-263758-5 MS	MW11-ROX-100424	98	143	98
400-263758-5 MSD	MW11-ROX-100424	110	145	101
400-263758-6	MW16-ROX-100424	105	143	96
LCS 400-687128/2-A	Lab Control Sample	98	130	110
LCSD 400-687128/3-A	Lab Control Sample Dup	101	143	112
MB 400-687128/1-A	Method Blank	102	138	110

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-263758-2	TB-ROX-100424-8011	71
400-263758-3	MW9-ROX-100424-EB	88
400-263758-4	MW9-ROX-100424	74
400-263758-5	MW11-ROX-100424	85
400-263758-5 MS	MW11-ROX-100424	52
400-263758-5 MSD	MW11-ROX-100424	52
400-263758-6	MW16-ROX-100424	72
LCS 400-687416/2-A	Lab Control Sample	112
LCSD 400-687416/3-A	Lab Control Sample Dup	124
MB 400-687416/1-A	Method Blank	110

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263758-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	SW846	EET PEN
5030B	Purge and Trap	SW846	EET CHI
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 CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Lab Chronicle

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-100424-8260
Lab Sample ID: 400-263758-1
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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	791044	10/17/24 13:06	W1T	EET CHI

Client Sample ID: TB-ROX-100424-8011
Lab Sample ID: 400-263758-2
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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			32.4 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 15:21	KR	EET PEN

Client Sample ID: MW9-ROX-100424-EB
Lab Sample ID: 400-263758-3
Date Collected: 10/04/24 08:30
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 13:03	PMF	EET CHI
Total/NA	Prep	3511			30.2 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1			687273	10/09/24 13:52	DS	EET PEN
Total/NA	Prep	3510C			261 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 15:47	VC1	EET PEN
Total/NA	Prep	8011			34.8 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 15:42	KR	EET PEN

Client Sample ID: MW9-ROX-100424
Lab Sample ID: 400-263758-4
Date Collected: 10/04/24 10:15
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 13:28	PMF	EET CHI
Total/NA	Prep	3511			32 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1			687273	10/09/24 14:23	DS	EET PEN
Total/NA	Prep	3510C			249.2 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 16:10	VC1	EET PEN
Total/NA	Prep	8011			32.8 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 16:03	KR	EET PEN

Client Sample ID: MW11-ROX-100424
Lab Sample ID: 400-263758-5
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 14:17	PMF	EET CHI
Total/NA	Prep	3511			32 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1	0 mL	1.0 mL	687273	10/09/24 13:22	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW11-ROX-100424
Lab Sample ID: 400-263758-5
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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			245.6 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 15:25	VC1	EET PEN
Total/NA	Prep	8011			32 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 16:25	KR	EET PEN

Client Sample ID: MW16-ROX-100424
Lab Sample ID: 400-263758-6
Date Collected: 10/04/24 13:50
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 14:42	PMF	EET CHI
Total/NA	Prep	3511			31.4 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1			687273	10/09/24 14:53	DS	EET PEN
Total/NA	Prep	3510C			245 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 16:32	VC1	EET PEN
Total/NA	Prep	8011			32.2 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 17:28	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687128/1-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	3511			30 mL	2 mL	687128	10/08/24 11:55	BKL	EET PEN
Total/NA	Analysis	8270E		1			687191	10/08/24 17:28	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687416/1-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:18	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687584/1-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 11:40	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 500-791044/8
Date Collected: N/A
Matrix: Water
Date Received: 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	791044	10/17/24 12:14	W1T	EET CHI

Client Sample ID: Method Blank
Lab Sample ID: MB 500-791267/8
Date Collected: N/A
Matrix: Water
Date Received: 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	791267	10/18/24 10:59	PMF	EET CHI

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687128/2-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	3511			30 mL	2 mL	687128	10/08/24 11:55	BKL	EET PEN
Total/NA	Analysis	8270E		1			687191	10/08/24 17:58	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687416/2-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:39	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/2-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:03	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/4-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:48	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 500-790942/2-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	Leach	1311			1.0 g	500 mL	790942	10/16/24 15:37	PA	EET CHI
							Completed:	10/17/24 09:37 [1]		
Total/NA	Analysis	8260D		20	5 mL	5 mL	791267	10/18/24 11:48	PMF	EET CHI

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 500-791044/5
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	791044	10/17/24 10:57	W1T	EET CHI

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687128/3-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	3511			30 mL	2 mL	687128	10/08/24 11:55	BKL	EET PEN
Total/NA	Analysis	8270E		1			687191	10/08/24 18:29	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687416/3-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 15:00	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/3-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:25	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/5-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 13:10	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263758-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW11-ROX-100424
Lab Sample ID: 400-263758-5 MS
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 15:32	PMF	EET CHI
Total/NA	Prep	3511			31.2 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1			687273	10/09/24 12:22	DS	EET PEN
Total/NA	Prep	3510C			255.8 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 14:40	VC1	EET PEN
Total/NA	Prep	8011			31.6 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 16:46	KR	EET PEN

Client Sample ID: MW11-ROX-100424
Lab Sample ID: 400-263758-5 MSD
Date Collected: 10/04/24 12:00
Matrix: Water
Date Received: 10/05/24 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	791267	10/18/24 15:57	PMF	EET CHI
Total/NA	Prep	3511			30.3 mL	2 mL	687128	10/08/24 14:24	BKL	EET PEN
Total/NA	Analysis	8270E		1			687273	10/09/24 12:52	DS	EET PEN
Total/NA	Prep	3510C			253.4 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 15:02	VC1	EET PEN
Total/NA	Prep	8011			32 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 17:07	KR	EET PEN

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

GC/MS VOA

Leach Batch: 790942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-790942/2-A	Lab Control Sample	Total/NA	Water	1311	

Analysis Batch: 791044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-1	TB-ROX-100424-8260	Total/NA	Water	8260D	
MB 500-791044/8	Method Blank	Total/NA	Water	8260D	
LCS 500-791044/5	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 791267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	8260D	
400-263758-4	MW9-ROX-100424	Total/NA	Water	8260D	
400-263758-5	MW11-ROX-100424	Total/NA	Water	8260D	
400-263758-6	MW16-ROX-100424	Total/NA	Water	8260D	
MB 500-791267/8	Method Blank	Total/NA	Water	8260D	
LCS 500-790942/2-A	Lab Control Sample	Total/NA	Water	8260D	790942
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	8260D	
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 687128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	3511	
400-263758-4	MW9-ROX-100424	Total/NA	Water	3511	
400-263758-5	MW11-ROX-100424	Total/NA	Water	3511	
400-263758-6	MW16-ROX-100424	Total/NA	Water	3511	
MB 400-687128/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-687128/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-687128/3-A	Lab Control Sample Dup	Total/NA	Water	3511	
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	3511	
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	3511	

Analysis Batch: 687191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-687128/1-A	Method Blank	Total/NA	Water	8270E	687128
LCS 400-687128/2-A	Lab Control Sample	Total/NA	Water	8270E	687128
LCSD 400-687128/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	687128

Analysis Batch: 687273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	8270E	687128
400-263758-4	MW9-ROX-100424	Total/NA	Water	8270E	687128
400-263758-5	MW11-ROX-100424	Total/NA	Water	8270E	687128
400-263758-6	MW16-ROX-100424	Total/NA	Water	8270E	687128
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	8270E	687128
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	8270E	687128

Prep Batch: 687584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 687584 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-4	MW9-ROX-100424	Total/NA	Water	3510C	
400-263758-5	MW11-ROX-100424	Total/NA	Water	3510C	
400-263758-6	MW16-ROX-100424	Total/NA	Water	3510C	
MB 400-687584/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	3510C	
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	3510C	

Analysis Batch: 687921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	8270E	687584
400-263758-4	MW9-ROX-100424	Total/NA	Water	8270E	687584
400-263758-5	MW11-ROX-100424	Total/NA	Water	8270E	687584
400-263758-6	MW16-ROX-100424	Total/NA	Water	8270E	687584
MB 400-687584/1-A	Method Blank	Total/NA	Water	8270E	687584
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	8270E	687584
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	8270E	687584

GC Semi VOA

Prep Batch: 687416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-2	TB-ROX-100424-8011	Total/NA	Water	8011	
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	8011	
400-263758-4	MW9-ROX-100424	Total/NA	Water	8011	
400-263758-5	MW11-ROX-100424	Total/NA	Water	8011	
400-263758-6	MW16-ROX-100424	Total/NA	Water	8011	
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	8011	
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	8011	

Analysis Batch: 687442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-2	TB-ROX-100424-8011	Total/NA	Water	8011	687416
400-263758-3	MW9-ROX-100424-EB	Total/NA	Water	8011	687416
400-263758-4	MW9-ROX-100424	Total/NA	Water	8011	687416
400-263758-5	MW11-ROX-100424	Total/NA	Water	8011	687416
400-263758-6	MW16-ROX-100424	Total/NA	Water	8011	687416
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	687416
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	687416
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	687416
400-263758-5 MS	MW11-ROX-100424	Total/NA	Water	8011	687416

GC Semi VOA (Continued)

Analysis Batch: 687442 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263758-5 MSD	MW11-ROX-100424	Total/NA	Water	8011	687416

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

Lab Sample ID: MB 500-791044/8
Matrix: Water
Analysis Batch: 791044

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/17/24 12:14	1
Acrolein	ND		100	35	ug/L			10/17/24 12:14	1
Acrylonitrile	ND		20	6.0	ug/L			10/17/24 12:14	1
Benzene	ND		0.50	0.18	ug/L			10/17/24 12:14	1
Bromobenzene	ND		1.0	0.60	ug/L			10/17/24 12:14	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/17/24 12:14	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/17/24 12:14	1
Bromoform	ND		1.0	0.96	ug/L			10/17/24 12:14	1
Bromomethane	ND		3.0	1.8	ug/L			10/17/24 12:14	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/17/24 12:14	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/17/24 12:14	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/17/24 12:14	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/17/24 12:14	1
Chloroethane	ND		5.0	0.47	ug/L			10/17/24 12:14	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/17/24 12:14	1
Chloroform	ND		2.0	0.92	ug/L			10/17/24 12:14	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/17/24 12:14	1
Chloromethane	ND		5.0	0.79	ug/L			10/17/24 12:14	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/17/24 12:14	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/17/24 12:14	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/17/24 12:14	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/17/24 12:14	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/17/24 12:14	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/17/24 12:14	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/17/24 12:14	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/17/24 12:14	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/17/24 12:14	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/17/24 12:14	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/17/24 12:14	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/17/24 12:14	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/17/24 12:14	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/17/24 12:14	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/17/24 12:14	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/17/24 12:14	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/17/24 12:14	1
2-Hexanone	ND		5.0	2.2	ug/L			10/17/24 12:14	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/17/24 12:14	1
Methylene bromide	ND		1.0	0.58	ug/L			10/17/24 12:14	1
Methylene Chloride	ND		5.0	3.6	ug/L			10/17/24 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/17/24 12:14	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/17/24 12:14	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/17/24 12:14	1
Naphthalene	0.709	J	1.0	0.44	ug/L			10/17/24 12:14	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/17/24 12:14	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/17/24 12:14	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/17/24 12:14	1
o-Xylene	ND		0.50	0.21	ug/L			10/17/24 12:14	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/17/24 12:14	1

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

Lab Sample ID: MB 500-791044/8
Matrix: Water
Analysis Batch: 791044

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	0.29	ug/L			10/17/24 12:14	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			10/17/24 12:14	1
Styrene	ND		1.0	0.31	ug/L			10/17/24 12:14	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/17/24 12:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/17/24 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/17/24 12:14	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/17/24 12:14	1
Toluene	ND		0.50	0.21	ug/L			10/17/24 12:14	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/17/24 12:14	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/17/24 12:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/17/24 12:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/17/24 12:14	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/17/24 12:14	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/17/24 12:14	1
Trichloroethene	ND		0.50	0.15	ug/L			10/17/24 12:14	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/17/24 12:14	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/17/24 12:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/17/24 12:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/17/24 12:14	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/17/24 12:14	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/17/24 12:14	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/17/24 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*		*10/17/24 12:14*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*10/17/24 12:14*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*10/17/24 12:14*	*1*
Toluene-d8 (Surr)	*85*		*75 - 120*		*10/17/24 12:14*	*1*

Lab Sample ID: LCS 500-791044/5
Matrix: Water
Analysis Batch: 791044

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	50.0	51.3		ug/L		103	40 - 143
Acrolein	2000	1720		ug/L		86	40 - 150
Acrylonitrile	500	450		ug/L		90	67 - 140
Benzene	50.0	56.4		ug/L		113	70 - 120
Bromobenzene	50.0	42.7		ug/L		85	70 - 122
Bromochloromethane	50.0	50.5		ug/L		101	65 - 122
Bromodichloromethane	50.0	51.5		ug/L		103	69 - 120
Bromoform	50.0	36.6		ug/L		73	56 - 132
Bromomethane	50.0	66.7		ug/L		133	40 - 152
2-Butanone (MEK)	50.0	51.0		ug/L		102	46 - 144
Carbon disulfide	50.0	53.7		ug/L		107	66 - 120
Carbon tetrachloride	50.0	52.3		ug/L		105	59 - 133
Chlorobenzene	50.0	45.5		ug/L		91	70 - 120
Chloroethane	50.0	50.2		ug/L		100	48 - 136

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

Lab Sample ID: LCS 500-791044/5
Matrix: Water
Analysis Batch: 791044

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloroethyl vinyl ether	50.0	85.8	*+	ug/L		172	52 - 136
Chloroform	50.0	51.7		ug/L		103	70 - 120
Chloromethane	50.0	52.6		ug/L		105	56 - 152
cis-1,2-Dichloroethene	50.0	50.4		ug/L		101	70 - 125
cis-1,3-Dichloropropene	50.0	42.3		ug/L		85	64 - 127
Dibromochloromethane	50.0	41.0		ug/L		82	68 - 125
1,2-Dichlorobenzene	50.0	43.6		ug/L		87	70 - 125
1,3-Dichlorobenzene	50.0	43.6		ug/L		87	70 - 125
1,4-Dichlorobenzene	50.0	44.2		ug/L		88	70 - 120
Dichlorodifluoromethane	50.0	50.6		ug/L		101	40 - 159
1,1-Dichloroethane	50.0	50.7		ug/L		101	70 - 125
1,2-Dichloroethane	50.0	49.7		ug/L		99	68 - 127
1,1-Dichloroethene	50.0	53.7		ug/L		107	67 - 122
1,2-Dichloropropane	50.0	47.7		ug/L		95	67 - 130
1,3-Dichloropropane	50.0	47.2		ug/L		94	62 - 136
2,2-Dichloropropane	50.0	45.7		ug/L		91	58 - 139
1,1-Dichloropropene	50.0	50.4		ug/L		101	70 - 121
Ethylbenzene	50.0	44.2		ug/L		88	70 - 123
Ethyl methacrylate	50.0	38.4		ug/L		77	63 - 129
Hexachlorobutadiene	50.0	43.0		ug/L		86	51 - 150
2-Hexanone	50.0	47.7		ug/L		95	54 - 146
Isopropylbenzene	50.0	40.5		ug/L		81	70 - 126
Methylene bromide	50.0	51.6		ug/L		103	70 - 120
Methylene Chloride	50.0	48.4		ug/L		97	69 - 125
4-Methyl-2-pentanone (MIBK)	50.0	42.5		ug/L		85	55 - 139
Methyl tert-butyl ether	50.0	42.7		ug/L		85	55 - 123
m-Xylene & p-Xylene	50.0	46.4		ug/L		93	70 - 125
Naphthalene	50.0	36.8		ug/L		74	53 - 144
n-Butylbenzene	50.0	45.5		ug/L		91	68 - 125
N-Propylbenzene	50.0	43.1		ug/L		86	69 - 127
o-Chlorotoluene	50.0	42.5		ug/L		85	70 - 125
o-Xylene	50.0	45.6		ug/L		91	70 - 120
p-Chlorotoluene	50.0	44.2		ug/L		88	68 - 124
p-Isopropyltoluene	50.0	40.6		ug/L		81	70 - 125
sec-Butylbenzene	50.0	45.5		ug/L		91	70 - 123
Styrene	50.0	43.7		ug/L		87	70 - 120
tert-Butylbenzene	50.0	42.7		ug/L		85	70 - 121
1,1,1,2-Tetrachloroethane	50.0	45.7		ug/L		91	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.5		ug/L		87	62 - 140
Tetrachloroethene	50.0	42.9		ug/L		86	70 - 128
Toluene	50.0	44.7		ug/L		89	70 - 125
trans-1,2-Dichloroethene	50.0	53.0		ug/L		106	70 - 125
trans-1,3-Dichloropropene	50.0	39.9		ug/L		80	62 - 128
1,2,3-Trichlorobenzene	50.0	42.5		ug/L		85	51 - 145
1,2,4-Trichlorobenzene	50.0	43.2		ug/L		86	57 - 137
1,1,1-Trichloroethane	50.0	51.0		ug/L		102	70 - 125
1,1,2-Trichloroethane	50.0	40.3		ug/L		81	71 - 130
Trichloroethene	50.0	53.9		ug/L		108	70 - 125
Trichlorofluoromethane	50.0	59.3		ug/L		119	55 - 128

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

Lab Sample ID: LCS 500-791044/5
Matrix: Water
Analysis Batch: 791044

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	39.3		ug/L		79	50 - 133
1,2,4-Trimethylbenzene	50.0	44.5		ug/L		89	70 - 123
1,3,5-Trimethylbenzene	50.0	44.4		ug/L		89	70 - 123
Vinyl acetate	50.0	52.7		ug/L		105	43 - 133
Vinyl chloride	50.0	51.2		ug/L		102	64 - 126
Xylenes, Total	100	92.0		ug/L		92	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*72 - 124*
Dibromofluoromethane	*89*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 126*
Toluene-d8 (Surr)	*86*		*75 - 120*

Lab Sample ID: MB 500-791267/8
Matrix: Water
Analysis Batch: 791267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/18/24 10:59	1
Acrolein	ND		100	35	ug/L			10/18/24 10:59	1
Acrylonitrile	ND		20	6.0	ug/L			10/18/24 10:59	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 10:59	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 10:59	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 10:59	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 10:59	1
Bromoform	ND		1.0	0.96	ug/L			10/18/24 10:59	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 10:59	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/18/24 10:59	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 10:59	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 10:59	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 10:59	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 10:59	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 10:59	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 10:59	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 10:59	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 10:59	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 10:59	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 10:59	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 10:59	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 10:59	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 10:59	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 10:59	1

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

Lab Sample ID: MB 500-791267/8
Matrix: Water
Analysis Batch: 791267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 10:59	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 10:59	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 10:59	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 10:59	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/18/24 10:59	1
2-Hexanone	ND		5.0	2.2	ug/L			10/18/24 10:59	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 10:59	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 10:59	1
Methylene Chloride	8.95		5.0	3.6	ug/L			10/18/24 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/18/24 10:59	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 10:59	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 10:59	1
Naphthalene	0.453	J	1.0	0.44	ug/L			10/18/24 10:59	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 10:59	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 10:59	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 10:59	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 10:59	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 10:59	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 10:59	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			10/18/24 10:59	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 10:59	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 10:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 10:59	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 10:59	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 10:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 10:59	1
1,2,4-Trichlorobenzene	0.370	J	1.0	0.31	ug/L			10/18/24 10:59	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 10:59	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 10:59	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 10:59	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 10:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 10:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 10:59	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/18/24 10:59	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 10:59	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*10/18/24 10:59*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*10/18/24 10:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*		*10/18/24 10:59*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*10/18/24 10:59*	*1*

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

Lab Sample ID: LCS 500-790942/2-A
Matrix: Water
Analysis Batch: 791267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	1000	563		ug/L		56	40 - 143
Acrylonitrile	10000	6170	*-	ug/L		62	67 - 140
Benzene	1000	872		ug/L		87	70 - 120
Bromobenzene	1000	861		ug/L		86	70 - 122
Bromochloromethane	1000	903		ug/L		90	65 - 122
Bromodichloromethane	1000	846		ug/L		85	69 - 120
Bromoform	1000	686		ug/L		69	56 - 132
Bromomethane	1000	1200		ug/L		120	40 - 152
2-Butanone (MEK)	1000	562		ug/L		56	46 - 144
Carbon disulfide	1000	909		ug/L		91	66 - 120
Carbon tetrachloride	1000	988		ug/L		99	59 - 133
Chlorobenzene	1000	967		ug/L		97	70 - 120
Chloroethane	1000	1040		ug/L		104	48 - 136
2-Chloroethyl vinyl ether	1000	731		ug/L		73	52 - 136
Chloroform	1000	798		ug/L		80	70 - 120
Chloromethane	1000	1060		ug/L		106	56 - 152
cis-1,2-Dichloroethene	1000	890		ug/L		89	70 - 125
cis-1,3-Dichloropropene	1000	866		ug/L		87	64 - 127
Dibromochloromethane	1000	831		ug/L		83	68 - 125
1,2-Dichlorobenzene	1000	926		ug/L		93	70 - 125
1,3-Dichlorobenzene	1000	903		ug/L		90	70 - 125
1,4-Dichlorobenzene	1000	897		ug/L		90	70 - 120
Dichlorodifluoromethane	1000	926		ug/L		93	40 - 159
1,1-Dichloroethane	1000	860		ug/L		86	70 - 125
1,2-Dichloroethane	1000	885		ug/L		88	68 - 127
1,1-Dichloroethene	1000	970		ug/L		97	67 - 122
1,2-Dichloropropane	1000	842		ug/L		84	67 - 130
1,3-Dichloropropane	1000	873		ug/L		87	62 - 136
2,2-Dichloropropane	1000	1030		ug/L		103	58 - 139
1,1-Dichloropropene	1000	928		ug/L		93	70 - 121
Ethylbenzene	1000	926		ug/L		93	70 - 123
Ethyl methacrylate	1000	770		ug/L		77	63 - 129
Hexachlorobutadiene	1000	808		ug/L		81	51 - 150
2-Hexanone	1000	631		ug/L		63	54 - 146
Isopropylbenzene	1000	839		ug/L		84	70 - 126
Methylene bromide	1000	830		ug/L		83	70 - 120
Methylene Chloride	1000	1040		ug/L		104	69 - 125
4-Methyl-2-pentanone (MIBK)	1000	615		ug/L		62	55 - 139
Methyl tert-butyl ether	1000	870		ug/L		87	55 - 123
m-Xylene & p-Xylene	1000	884		ug/L		88	70 - 125
Naphthalene	1000	635		ug/L		63	53 - 144
n-Butylbenzene	1000	967		ug/L		97	68 - 125
N-Propylbenzene	1000	884		ug/L		88	69 - 127
o-Chlorotoluene	1000	818		ug/L		82	70 - 125
o-Xylene	1000	893		ug/L		89	70 - 120
p-Chlorotoluene	1000	849		ug/L		85	68 - 124
p-Isopropyltoluene	1000	958		ug/L		96	70 - 125
sec-Butylbenzene	1000	932		ug/L		93	70 - 123

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

Lab Sample ID: LCS 500-790942/2-A
Matrix: Water
Analysis Batch: 791267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Styrene	1000	942		ug/L		94	70 - 120
tert-Butylbenzene	1000	922		ug/L		92	70 - 121
1,1,1,2-Tetrachloroethane	1000	935		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	1000	699		ug/L		70	62 - 140
Tetrachloroethene	1000	1020		ug/L		102	70 - 128
Toluene	1000	919		ug/L		92	70 - 125
trans-1,2-Dichloroethene	1000	946		ug/L		95	70 - 125
trans-1,3-Dichloropropene	1000	831		ug/L		83	62 - 128
1,2,3-Trichlorobenzene	1000	796		ug/L		80	51 - 145
1,2,4-Trichlorobenzene	1000	820		ug/L		82	57 - 137
1,1,1-Trichloroethane	1000	973		ug/L		97	70 - 125
1,1,2-Trichloroethane	1000	789		ug/L		79	71 - 130
Trichloroethene	1000	929		ug/L		93	70 - 125
Trichlorofluoromethane	1000	952		ug/L		95	55 - 128
1,2,3-Trichloropropane	1000	705		ug/L		71	50 - 133
1,2,4-Trimethylbenzene	1000	875		ug/L		88	70 - 123
1,3,5-Trimethylbenzene	1000	906		ug/L		91	70 - 123
Vinyl acetate	1000	580		ug/L		58	43 - 133
Vinyl chloride	1000	1190		ug/L		119	64 - 126
Xylenes, Total	2000	1780		ug/L		89	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*72 - 124*
Dibromofluoromethane	*99*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*
Toluene-d8 (Surr)	*107*		*75 - 120*

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 791267

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND		50.0	25.5		ug/L		51	40 - 143
Acrolein	ND		2000	986		ug/L		49	40 - 150
Acrylonitrile	ND	F1 *-	500	290	F1	ug/L		58	67 - 140
Benzene	ND		50.0	42.6		ug/L		85	70 - 120
Bromobenzene	ND		50.0	44.0		ug/L		88	70 - 122
Bromochloromethane	ND		50.0	43.0		ug/L		86	65 - 122
Bromodichloromethane	ND		50.0	41.5		ug/L		83	69 - 120
Bromoform	ND		50.0	33.0		ug/L		66	56 - 132
Bromomethane	ND		50.0	55.1		ug/L		110	40 - 152
2-Butanone (MEK)	ND		50.0	27.4		ug/L		55	46 - 144
Carbon disulfide	ND		50.0	42.2		ug/L		84	66 - 120
Carbon tetrachloride	ND		50.0	47.2		ug/L		94	59 - 133
Chlorobenzene	ND		50.0	47.8		ug/L		96	70 - 120
Chloroethane	ND		50.0	48.9		ug/L		98	48 - 136
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	52 - 136
Chloroform	ND		50.0	38.2		ug/L		76	70 - 120

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

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 791267

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloromethane	ND		50.0	47.9		ug/L		96	56 - 152
cis-1,2-Dichloroethene	ND		50.0	42.4		ug/L		85	70 - 125
cis-1,3-Dichloropropene	ND		50.0	43.1		ug/L		86	64 - 127
Dibromochloromethane	ND		50.0	39.7		ug/L		79	68 - 125
1,2-Dichlorobenzene	ND		50.0	47.0		ug/L		94	70 - 125
1,3-Dichlorobenzene	ND		50.0	45.7		ug/L		91	70 - 125
1,4-Dichlorobenzene	ND		50.0	45.6		ug/L		91	70 - 120
Dichlorodifluoromethane	ND		50.0	42.0		ug/L		84	40 - 159
1,1-Dichloroethane	ND		50.0	42.0		ug/L		84	70 - 125
1,2-Dichloroethane	ND		50.0	43.8		ug/L		88	68 - 127
1,1-Dichloroethene	ND		50.0	45.7		ug/L		91	67 - 122
1,2-Dichloropropane	ND		50.0	42.3		ug/L		85	67 - 130
1,3-Dichloropropane	ND		50.0	43.5		ug/L		87	62 - 136
2,2-Dichloropropane	ND		50.0	46.0		ug/L		92	58 - 139
1,1-Dichloropropene	ND		50.0	46.1		ug/L		92	70 - 121
Ethylbenzene	ND		50.0	46.1		ug/L		92	70 - 123
Ethyl methacrylate	ND		50.0	38.0		ug/L		76	63 - 129
Hexachlorobutadiene	ND	F2	50.0	35.6		ug/L		71	51 - 150
2-Hexanone	ND		50.0	27.9		ug/L		56	54 - 146
Isopropylbenzene	ND		50.0	42.7		ug/L		85	70 - 126
Methylene bromide	ND		50.0	40.5		ug/L		81	70 - 120
Methylene Chloride	10	B	50.0	49.4		ug/L		78	69 - 125
4-Methyl-2-pentanone (MIBK)	ND		50.0	29.4		ug/L		59	55 - 139
Methyl tert-butyl ether	ND		50.0	41.3		ug/L		83	55 - 123
m-Xylene & p-Xylene	ND		50.0	43.7		ug/L		87	70 - 125
Naphthalene	ND		50.0	34.0		ug/L		68	53 - 144
n-Butylbenzene	ND		50.0	47.8		ug/L		96	68 - 125
N-Propylbenzene	ND		50.0	45.0		ug/L		90	69 - 127
o-Chlorotoluene	ND		50.0	41.9		ug/L		84	70 - 125
o-Xylene	ND		50.0	43.9		ug/L		88	70 - 120
p-Chlorotoluene	ND		50.0	43.0		ug/L		86	68 - 124
p-Isopropyltoluene	ND		50.0	48.2		ug/L		96	70 - 125
sec-Butylbenzene	ND		50.0	46.7		ug/L		93	70 - 123
Styrene	ND		50.0	46.7		ug/L		93	70 - 120
tert-Butylbenzene	ND		50.0	47.2		ug/L		94	70 - 121
1,1,1,2-Tetrachloroethane	ND		50.0	45.7		ug/L		91	70 - 125
1,1,2,2-Tetrachloroethane	ND		50.0	35.9		ug/L		72	62 - 140
Tetrachloroethene	ND		50.0	50.2		ug/L		100	70 - 128
Toluene	ND		50.0	45.6		ug/L		91	70 - 125
trans-1,2-Dichloroethene	ND		50.0	45.0		ug/L		90	70 - 125
trans-1,3-Dichloropropene	ND		50.0	40.7		ug/L		81	62 - 128
1,2,3-Trichlorobenzene	ND	F2	50.0	40.4		ug/L		81	51 - 145
1,2,4-Trichlorobenzene	ND		50.0	41.1		ug/L		82	57 - 137
1,1,1-Trichloroethane	ND		50.0	46.6		ug/L		93	70 - 125
1,1,2-Trichloroethane	ND		50.0	40.2		ug/L		80	71 - 130
Trichloroethene	ND		50.0	46.2		ug/L		92	70 - 125
Trichlorofluoromethane	ND		50.0	42.7		ug/L		85	55 - 128
1,2,3-Trichloropropane	ND		50.0	36.0		ug/L		72	50 - 133
1,2,4-Trimethylbenzene	ND		50.0	44.3		ug/L		89	70 - 123

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

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 791267

Client Sample ID: MW11-ROX-100424
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	46.1		ug/L		92	70 - 123
Vinyl acetate	ND		50.0	29.0		ug/L		58	43 - 133
Vinyl chloride	ND		50.0	53.6		ug/L		107	64 - 126
Xylenes, Total	ND		100	87.5		ug/L		88	70 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*
Dibromofluoromethane	*97*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*
Toluene-d8 (Surr)	*106*		*75 - 120*

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 791267

Client Sample ID: MW11-ROX-100424
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		50.0	27.5		ug/L		55	40 - 143	8	20
Acrolein	ND		2000	1160		ug/L		58	40 - 150	16	20
Acrylonitrile	ND	F1 *-	500	329	F1	ug/L		66	67 - 140	12	20
Benzene	ND		50.0	47.2		ug/L		94	70 - 120	10	20
Bromobenzene	ND		50.0	52.1		ug/L		104	70 - 122	17	20
Bromochloromethane	ND		50.0	47.7		ug/L		95	65 - 122	10	20
Bromodichloromethane	ND		50.0	46.5		ug/L		93	69 - 120	11	20
Bromoform	ND		50.0	38.9		ug/L		78	56 - 132	16	20
Bromomethane	ND		50.0	52.3		ug/L		105	40 - 152	5	20
2-Butanone (MEK)	ND		50.0	28.5		ug/L		57	46 - 144	4	20
Carbon disulfide	ND		50.0	46.9		ug/L		94	66 - 120	11	20
Carbon tetrachloride	ND		50.0	52.1		ug/L		104	59 - 133	10	20
Chlorobenzene	ND		50.0	53.7		ug/L		107	70 - 120	12	20
Chloroethane	ND		50.0	48.1		ug/L		96	48 - 136	2	20
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	52 - 136	NC	20
Chloroform	ND		50.0	42.5		ug/L		85	70 - 120	11	20
Chloromethane	ND		50.0	50.6		ug/L		101	56 - 152	5	20
cis-1,2-Dichloroethene	ND		50.0	47.1		ug/L		94	70 - 125	10	20
cis-1,3-Dichloropropene	ND		50.0	49.0		ug/L		98	64 - 127	13	20
Dibromochloromethane	ND		50.0	46.2		ug/L		92	68 - 125	15	20
1,2-Dichlorobenzene	ND		50.0	54.4		ug/L		109	70 - 125	15	20
1,3-Dichlorobenzene	ND		50.0	53.3		ug/L		107	70 - 125	15	20
1,4-Dichlorobenzene	ND		50.0	52.8		ug/L		106	70 - 120	14	20
Dichlorodifluoromethane	ND		50.0	43.4		ug/L		87	40 - 159	3	20
1,1-Dichloroethane	ND		50.0	46.3		ug/L		93	70 - 125	10	20
1,2-Dichloroethane	ND		50.0	49.5		ug/L		99	68 - 127	12	20
1,1-Dichloroethene	ND		50.0	50.0		ug/L		100	67 - 122	9	20
1,2-Dichloropropane	ND		50.0	47.3		ug/L		95	67 - 130	11	20
1,3-Dichloropropane	ND		50.0	49.2		ug/L		98	62 - 136	12	20
2,2-Dichloropropane	ND		50.0	51.8		ug/L		104	58 - 139	12	20
1,1-Dichloropropene	ND		50.0	51.0		ug/L		102	70 - 121	10	20
Ethylbenzene	ND		50.0	51.9		ug/L		104	70 - 123	12	20

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

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 791267

Client Sample ID: MW11-ROX-100424
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	44.2		ug/L		88	63 - 129	15	20
Hexachlorobutadiene	ND	F2	50.0	48.2	F2	ug/L		96	51 - 150	30	20
2-Hexanone	ND		50.0	31.7		ug/L		63	54 - 146	13	20
Isopropylbenzene	ND		50.0	49.5		ug/L		99	70 - 126	15	20
Methylene bromide	ND		50.0	45.6		ug/L		91	70 - 120	12	20
Methylene Chloride	10	B	50.0	53.7		ug/L		87	69 - 125	8	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	32.4		ug/L		65	55 - 139	10	20
Methyl tert-butyl ether	ND		50.0	46.2		ug/L		92	55 - 123	11	20
m-Xylene & p-Xylene	ND		50.0	49.1		ug/L		98	70 - 125	12	20
Naphthalene	ND		50.0	41.3		ug/L		83	53 - 144	19	20
n-Butylbenzene	ND		50.0	56.2		ug/L		112	68 - 125	16	20
N-Propylbenzene	ND		50.0	52.7		ug/L		105	69 - 127	16	20
o-Chlorotoluene	ND		50.0	48.3		ug/L		97	70 - 125	14	20
o-Xylene	ND		50.0	49.0		ug/L		98	70 - 120	11	20
p-Chlorotoluene	ND		50.0	50.1		ug/L		100	68 - 124	15	20
p-Isopropyltoluene	ND		50.0	57.1		ug/L		114	70 - 125	17	20
sec-Butylbenzene	ND		50.0	55.7		ug/L		111	70 - 123	17	20
Styrene	ND		50.0	52.8		ug/L		106	70 - 120	12	20
tert-Butylbenzene	ND		50.0	55.5		ug/L		111	70 - 121	16	20
1,1,1,2-Tetrachloroethane	ND		50.0	50.7		ug/L		101	70 - 125	10	20
1,1,2,2-Tetrachloroethane	ND		50.0	42.2		ug/L		84	62 - 140	16	20
Tetrachloroethene	ND		50.0	56.5		ug/L		113	70 - 128	12	20
Toluene	ND		50.0	50.9		ug/L		102	70 - 125	11	20
trans-1,2-Dichloroethene	ND		50.0	49.2		ug/L		98	70 - 125	9	20
trans-1,3-Dichloropropene	ND		50.0	46.3		ug/L		93	62 - 128	13	20
1,2,3-Trichlorobenzene	ND	F2	50.0	49.8	F2	ug/L		100	51 - 145	21	20
1,2,4-Trichlorobenzene	ND		50.0	49.1		ug/L		98	57 - 137	18	20
1,1,1-Trichloroethane	ND		50.0	51.6		ug/L		103	70 - 125	10	20
1,1,2-Trichloroethane	ND		50.0	45.3		ug/L		91	71 - 130	12	20
Trichloroethene	ND		50.0	52.3		ug/L		105	70 - 125	12	20
Trichlorofluoromethane	ND		50.0	45.7		ug/L		91	55 - 128	7	20
1,2,3-Trichloropropane	ND		50.0	42.9		ug/L		86	50 - 133	18	20
1,2,4-Trimethylbenzene	ND		50.0	51.6		ug/L		103	70 - 123	15	20
1,3,5-Trimethylbenzene	ND		50.0	53.1		ug/L		106	70 - 123	14	20
Vinyl acetate	ND		50.0	31.4		ug/L		63	43 - 133	8	20
Vinyl chloride	ND		50.0	55.6		ug/L		111	64 - 126	4	20
Xylenes, Total	ND		100	98.1		ug/L		98	70 - 125	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*
Dibromofluoromethane	*95*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*
Toluene-d8 (Surr)	*107*		*75 - 120*

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzenethiol	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzoic acid	ND		30	24	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzyl alcohol	ND		10	7.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenzofuran	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Diethyl phthalate	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,4-Dioxane	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachloroethane	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Indene	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Isophorone	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Methylphenol	ND		10	3.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitroaniline	ND		10	5.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3-Nitroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitroaniline	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
Nitrobenzene	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitrophenol	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitrophenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 11:40	1
Phenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/11/24 11:30	10/15/24 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Nitrobenzene-d5	*65*		*16 - 127*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Phenol-d5	*35*		*10 - 129*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	35.0		ug/L		29	10 - 127
Benzoic acid	493	257		ug/L		52	19 - 126
Benzyl alcohol	120	71.7		ug/L		60	17 - 109
Bis(2-chloroethoxy)methane	120	72.5		ug/L		60	24 - 125
Bis(2-chloroethyl)ether	120	66.1		ug/L		55	10 - 121
bis (2-chloroisopropyl) ether	120	69.0		ug/L		58	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.9		ug/L		77	16 - 150
4-Bromophenyl phenyl ether	120	88.4		ug/L		74	17 - 150
Butyl benzyl phthalate	120	89.8		ug/L		75	21 - 150
4-Chloroaniline	120	62.9		ug/L		52	10 - 124
4-Chloro-3-methylphenol	120	95.6		ug/L		80	37 - 131
2-Chloronaphthalene	120	84.2		ug/L		70	24 - 132
2-Chlorophenol	120	78.9		ug/L		66	27 - 124
4-Chlorophenyl phenyl ether	120	91.8		ug/L		76	27 - 147
Dibenz[a,h]acridine	59.9	64.9		ug/L		108	40 - 140
Dibenzofuran	120	87.5		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	128		ug/L		80	10 - 150
2,4-Dichlorophenol	120	86.0		ug/L		72	33 - 132
Diethyl phthalate	120	99.7		ug/L		83	37 - 145
2,4-Dimethylphenol	120	151		ug/L		126	38 - 132
Dimethyl phthalate	120	96.2		ug/L		80	32 - 137
Di-n-butyl phthalate	120	102		ug/L		85	27 - 150
4,6-Dinitro-ortho-cresol	240	246		ug/L		103	14 - 150
2,4-Dinitrophenol	240	323		ug/L		135	15 - 150
2,4-Dinitrotoluene	120	97.8		ug/L		82	35 - 136
2,6-Dinitrotoluene	120	94.0		ug/L		78	29 - 140
Di-n-octyl phthalate	120	93.5		ug/L		78	26 - 150
1,4-Dioxane	120	39.7		ug/L		33	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	80.6		ug/L		67	23 - 138
Hexachlorobenzene	120	95.0		ug/L		79	10 - 150

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

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	269	*+	ug/L		224	10 - 124
Hexachloroethane	120	56.8		ug/L		47	10 - 127
Indene	120	87.7		ug/L		73	18 - 150
Isophorone	120	79.3		ug/L		66	28 - 127
2-Methylphenol	120	81.7		ug/L		68	34 - 124
3 & 4 Methylphenol	120	76.6		ug/L		64	32 - 122
2-Nitroaniline	120	81.7		ug/L		68	24 - 139
3-Nitroaniline	120	63.3		ug/L		53	10 - 128
4-Nitroaniline	120	84.9		ug/L		71	28 - 118
Nitrobenzene	120	66.3		ug/L		55	29 - 120
2-Nitrophenol	120	81.9		ug/L		68	25 - 148
4-Nitrophenol	240	172		ug/L		72	12 - 129
N-Nitrosodimethylamine	120	43.9		ug/L		37	10 - 115
N-Nitrosodi-n-propylamine	120	75.4		ug/L		63	24 - 142
N-Nitrosodiphenylamine	119	83.1		ug/L		70	29 - 138
Pentachlorophenol	240	211		ug/L		88	19 - 150
Phenol	120	52.7		ug/L		44	11 - 95
Pyridine	240	27.1		ug/L		11	10 - 82
Quinoline	59.9	40.8		ug/L		68	10 - 141
2,4,5-Trichlorophenol	120	93.4		ug/L		78	30 - 144
2,4,6-Trichlorophenol	120	91.3		ug/L		76	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*64*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCS 400-687584/4-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	96.0		ug/L		80	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

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

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	31.4		ug/L		26	10 - 127	11	40
Benzoic acid	493	275		ug/L		56	19 - 126	7	40
Benzyl alcohol	120	72.5		ug/L		60	17 - 109	1	40
Bis(2-chloroethoxy)methane	120	72.1		ug/L		60	24 - 125	1	40
Bis(2-chloroethyl)ether	120	60.5		ug/L		50	10 - 121	9	40
bis (2-chloroisopropyl) ether	120	68.5		ug/L		57	14 - 123	1	40
Bis(2-ethylhexyl) phthalate	120	88.5		ug/L		74	16 - 150	4	40
4-Bromophenyl phenyl ether	120	87.2		ug/L		73	17 - 150	1	40
Butyl benzyl phthalate	120	89.2		ug/L		74	21 - 150	1	40
4-Chloroaniline	120	60.6		ug/L		50	10 - 124	4	40
4-Chloro-3-methylphenol	120	94.8		ug/L		79	37 - 131	1	40
2-Chloronaphthalene	120	83.2		ug/L		69	24 - 132	1	40
2-Chlorophenol	120	79.4		ug/L		66	27 - 124	1	40
4-Chlorophenyl phenyl ether	120	89.6		ug/L		75	27 - 147	2	40
Dibenz[a,h]acridine	59.9	63.4		ug/L		106	40 - 140	2	40
Dibenzofuran	120	87.0		ug/L		73	30 - 135	1	40
3,3'-Dichlorobenzidine	160	123		ug/L		77	10 - 150	4	40
2,4-Dichlorophenol	120	87.2		ug/L		73	33 - 132	1	40
Diethyl phthalate	120	96.9		ug/L		81	37 - 145	3	40
2,4-Dimethylphenol	120	148		ug/L		123	38 - 132	2	40
Dimethyl phthalate	120	93.4		ug/L		78	32 - 137	3	40
Di-n-butyl phthalate	120	97.6		ug/L		81	27 - 150	4	40
4,6-Dinitro-ortho-cresol	240	243		ug/L		101	14 - 150	1	40
2,4-Dinitrophenol	240	333		ug/L		139	15 - 150	3	40
2,4-Dinitrotoluene	120	96.1		ug/L		80	35 - 136	2	40
2,6-Dinitrotoluene	120	91.4		ug/L		76	29 - 140	3	40
Di-n-octyl phthalate	120	89.3		ug/L		74	26 - 150	5	40
1,4-Dioxane	120	42.6		ug/L		36	10 - 87	7	40
1,2-Diphenylhydrazine (as Azobenzene)	120	79.7		ug/L		66	23 - 138	1	40
Hexachlorobenzene	120	93.5		ug/L		78	10 - 150	2	40
Hexachlorocyclopentadiene	120	275	*+	ug/L		230	10 - 124	2	40
Hexachloroethane	120	57.0		ug/L		48	10 - 127	0	40
Indene	120	86.4		ug/L		72	18 - 150	1	40
Isophorone	120	77.2		ug/L		64	28 - 127	3	40
2-Methylphenol	120	81.1		ug/L		68	34 - 124	1	40
3 & 4 Methylphenol	120	77.5		ug/L		65	32 - 122	1	40
2-Nitroaniline	120	81.1		ug/L		68	24 - 139	1	40
3-Nitroaniline	120	63.2		ug/L		53	10 - 128	0	40
4-Nitroaniline	120	83.1		ug/L		69	28 - 118	2	40
Nitrobenzene	120	66.6		ug/L		56	29 - 120	0	40
2-Nitrophenol	120	83.8		ug/L		70	25 - 148	2	40
4-Nitrophenol	240	171		ug/L		71	12 - 129	1	40
N-Nitrosodimethylamine	120	46.6		ug/L		39	10 - 115	6	40
N-Nitrosodi-n-propylamine	120	77.3		ug/L		64	24 - 142	2	40
N-Nitrosodiphenylamine	119	83.2		ug/L		70	29 - 138	0	40
Pentachlorophenol	240	209		ug/L		87	19 - 150	1	40
Phenol	120	51.6		ug/L		43	11 - 95	2	40
Pyridine	240	19.5	*-	ug/L		8	10 - 82	33	40

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

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			59.9	33.2		ug/L		55	10 - 141	21	40
2,4,5-Trichlorophenol			120	92.3		ug/L		77	30 - 144	1	40
2,4,6-Trichlorophenol			120	89.8		ug/L		75	27 - 147	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*70*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCSD 400-687584/5-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	88.1		ug/L		73	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 687921

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND	F2 F1	117	34.3	F1	ug/L		29	50 - 150
Benzoic acid	ND		481	286		ug/L		59	50 - 150
Benzyl alcohol	ND		117	68.1		ug/L		58	50 - 150
Bis(2-chloroethoxy)methane	ND		117	68.7		ug/L		59	50 - 150
Bis(2-chloroethyl)ether	ND		117	62.2		ug/L		53	50 - 150
bis (2-chloroisopropyl) ether	ND		117	64.0		ug/L		55	50 - 150
Bis(2-ethylhexyl) phthalate	ND		117	86.4		ug/L		74	50 - 150
4-Bromophenyl phenyl ether	ND		117	84.4		ug/L		72	50 - 150
Butyl benzyl phthalate	ND		117	85.7		ug/L		73	50 - 150
4-Chloroaniline	ND	F1	117	58.2		ug/L		50	50 - 150
4-Chloro-3-methylphenol	ND		117	90.2		ug/L		77	50 - 150
2-Chloronaphthalene	ND		117	78.3		ug/L		67	50 - 150
2-Chlorophenol	ND		117	73.7		ug/L		63	50 - 150
4-Chlorophenyl phenyl ether	ND		117	86.0		ug/L		73	50 - 150
Dibenz[a,h]acridine	ND		58.5	60.1		ug/L		103	50 - 150
Dibenzofuran	ND		117	83.1		ug/L		71	50 - 150

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

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 687921

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
3,3'-Dichlorobenzidine	ND		156	113		ug/L		72	50 - 150
2,4-Dichlorophenol	ND		117	81.5		ug/L		69	50 - 150
Diethyl phthalate	ND		117	92.2		ug/L		79	50 - 150
2,4-Dimethylphenol	ND		117	142		ug/L		121	50 - 150
Dimethyl phthalate	ND		117	89.4		ug/L		76	50 - 150
Di-n-butyl phthalate	ND		117	94.8		ug/L		81	50 - 150
4,6-Dinitro-ortho-cresol	ND		235	225		ug/L		96	50 - 150
2,4-Dinitrophenol	ND		235	293		ug/L		125	50 - 150
2,4-Dinitrotoluene	ND		117	91.0		ug/L		78	50 - 150
2,6-Dinitrotoluene	ND		117	86.1		ug/L		73	50 - 150
Di-n-octyl phthalate	ND		117	87.4		ug/L		75	50 - 150
1,4-Dioxane	ND	F1	117	38.5	F1	ug/L		33	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		117	75.4		ug/L		64	50 - 150
Hexachlorobenzene	ND		117	88.3		ug/L		75	50 - 150
Hexachlorocyclopentadiene	ND	*+ F1	117	253	F1	ug/L		216	50 - 150
Hexachloroethane	ND	F1	117	57.9	F1	ug/L		49	50 - 150
Indene	ND		117	81.9		ug/L		70	50 - 150
Isophorone	ND		117	74.0		ug/L		63	50 - 150
2-Methylphenol	ND		117	77.1		ug/L		66	50 - 150
3 & 4 Methylphenol	ND		117	73.6		ug/L		63	50 - 150
2-Nitroaniline	ND		117	75.0		ug/L		64	50 - 150
3-Nitroaniline	ND		117	58.3		ug/L		50	50 - 150
4-Nitroaniline	ND		117	73.8		ug/L		63	50 - 150
Nitrobenzene	ND		117	63.1		ug/L		54	50 - 150
2-Nitrophenol	ND		117	77.8		ug/L		66	50 - 150
4-Nitrophenol	ND		235	157		ug/L		67	50 - 150
N-Nitrosodimethylamine	ND	F1	117	41.9	F1	ug/L		36	50 - 150
N-Nitrosodi-n-propylamine	ND		117	71.5		ug/L		61	50 - 150
N-Nitrosodiphenylamine	ND		116	78.6		ug/L		68	50 - 150
Pentachlorophenol	ND		235	193		ug/L		82	50 - 150
Phenol	ND		117	75.7		ug/L		65	50 - 150
Pyridine	ND	F2 *- F1	235	29.7	F1	ug/L		13	50 - 150
Quinoline	ND		58.5	45.1		ug/L		77	50 - 150
2,4,5-Trichlorophenol	ND		117	87.2		ug/L		74	50 - 150
2,4,6-Trichlorophenol	ND		117	84.7		ug/L		72	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*51*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*43*		*10 - 129*
Terphenyl-d14	*69*		*13 - 150*
2,4,6-Tribromophenol	*93*		*10 - 150*

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

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 687921

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F2 F1	118	52.3	F1 F2	ug/L		44	50 - 150	41	40
Benzoic acid	ND		486	285		ug/L		59	50 - 150	0	40
Benzyl alcohol	ND		118	75.2		ug/L		64	50 - 150	10	40
Bis(2-chloroethoxy)methane	ND		118	73.8		ug/L		62	50 - 150	7	40
Bis(2-chloroethyl)ether	ND		118	67.3		ug/L		57	50 - 150	8	40
bis (2-chloroisopropyl) ether	ND		118	70.8		ug/L		60	50 - 150	10	40
Bis(2-ethylhexyl) phthalate	ND		118	88.3		ug/L		75	50 - 150	2	40
4-Bromophenyl phenyl ether	ND		118	87.8		ug/L		74	50 - 150	4	40
Butyl benzyl phthalate	ND		118	88.6		ug/L		75	50 - 150	3	40
4-Chloroaniline	ND	F1	118	64.3		ug/L		54	50 - 150	10	40
4-Chloro-3-methylphenol	ND		118	91.9		ug/L		78	50 - 150	2	40
2-Chloronaphthalene	ND		118	83.9		ug/L		71	50 - 150	7	40
2-Chlorophenol	ND		118	81.8		ug/L		69	50 - 150	10	40
4-Chlorophenyl phenyl ether	ND		118	90.1		ug/L		76	50 - 150	5	40
Dibenz[a,h]acridine	ND		59.0	64.5		ug/L		109	50 - 150	7	40
Dibenzofuran	ND		118	86.8		ug/L		73	50 - 150	4	40
3,3'-Dichlorobenzidine	ND		158	120		ug/L		76	50 - 150	6	40
2,4-Dichlorophenol	ND		118	86.9		ug/L		73	50 - 150	6	40
Diethyl phthalate	ND		118	95.8		ug/L		81	50 - 150	4	40
2,4-Dimethylphenol	ND		118	151		ug/L		127	50 - 150	6	40
Dimethyl phthalate	ND		118	93.1		ug/L		79	50 - 150	4	40
Di-n-butyl phthalate	ND		118	96.2		ug/L		81	50 - 150	1	40
4,6-Dinitro-ortho-cresol	ND		237	237		ug/L		100	50 - 150	5	40
2,4-Dinitrophenol	ND		237	317		ug/L		134	50 - 150	8	40
2,4-Dinitrotoluene	ND		118	95.0		ug/L		80	50 - 150	4	40
2,6-Dinitrotoluene	ND		118	92.1		ug/L		78	50 - 150	7	40
Di-n-octyl phthalate	ND		118	89.2		ug/L		75	50 - 150	2	40
1,4-Dioxane	ND	F1	118	42.8	F1	ug/L		36	50 - 150	11	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		118	80.8		ug/L		68	50 - 150	7	40
Hexachlorobenzene	ND		118	92.2		ug/L		78	50 - 150	4	40
Hexachlorocyclopentadiene	ND	*+ F1	118	279	F1	ug/L		236	50 - 150	10	40
Hexachloroethane	ND	F1	118	65.6		ug/L		55	50 - 150	12	40
Indene	ND		118	92.2		ug/L		78	50 - 150	12	40
Isophorone	ND		118	77.8		ug/L		66	50 - 150	5	40
2-Methylphenol	ND		118	83.6		ug/L		71	50 - 150	8	40
3 & 4 Methylphenol	ND		118	79.3		ug/L		67	50 - 150	8	40
2-Nitroaniline	ND		118	81.6		ug/L		69	50 - 150	8	40
3-Nitroaniline	ND		118	62.8		ug/L		53	50 - 150	7	40
4-Nitroaniline	ND		118	78.8		ug/L		67	50 - 150	6	40
Nitrobenzene	ND		118	69.8		ug/L		59	50 - 150	10	40
2-Nitrophenol	ND		118	84.9		ug/L		72	50 - 150	9	40
4-Nitrophenol	ND		237	166		ug/L		70	50 - 150	6	40
N-Nitrosodimethylamine	ND	F1	118	47.5	F1	ug/L		40	50 - 150	13	40
N-Nitrosodi-n-propylamine	ND		118	77.8		ug/L		66	50 - 150	8	40
N-Nitrosodiphenylamine	ND		117	83.3		ug/L		71	50 - 150	6	40
Pentachlorophenol	ND		237	203		ug/L		86	50 - 150	5	40
Phenol	ND		118	59.2		ug/L		50	50 - 150	24	40
Pyridine	ND	F2 *- F1	237	46.1	F1 F2	ug/L		19	50 - 150	43	40

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

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 687921

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline	ND		59.0	49.4		ug/L		84	50 - 150	9	40
2,4,5-Trichlorophenol	ND		118	91.5		ug/L		77	50 - 150	5	40
2,4,6-Trichlorophenol	ND		118	89.0		ug/L		75	50 - 150	5	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*71*		*21 - 114*
2-Fluorophenol	*58*		*10 - 105*
Nitrobenzene-d5	*68*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*71*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

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

Lab Sample ID: MB 400-687128/1-A
Matrix: Water
Analysis Batch: 687191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687128

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/08/24 11:55	10/08/24 17:28	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/08/24 11:55	10/08/24 17:28	1
Anthracene	ND		0.20	0.073	ug/L		10/08/24 11:55	10/08/24 17:28	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/08/24 11:55	10/08/24 17:28	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/08/24 11:55	10/08/24 17:28	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/08/24 11:55	10/08/24 17:28	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/08/24 11:55	10/08/24 17:28	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/08/24 11:55	10/08/24 17:28	1
Chrysene	ND		0.20	0.039	ug/L		10/08/24 11:55	10/08/24 17:28	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/08/24 11:55	10/08/24 17:28	1
Fluoranthene	ND		0.20	0.032	ug/L		10/08/24 11:55	10/08/24 17:28	1
Fluorene	ND		0.20	0.087	ug/L		10/08/24 11:55	10/08/24 17:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/08/24 11:55	10/08/24 17:28	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/08/24 11:55	10/08/24 17:28	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/08/24 11:55	10/08/24 17:28	1
Phenanthrene	ND		0.20	0.044	ug/L		10/08/24 11:55	10/08/24 17:28	1
Pyrene	ND		0.20	0.040	ug/L		10/08/24 11:55	10/08/24 17:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*102*		*50 - 150*	*10/08/24 11:55*	*10/08/24 17:28*	*1*
Nitrobenzene-d5	*138*		*50 - 150*	*10/08/24 11:55*	*10/08/24 17:28*	*1*
Terphenyl-d14	*110*		*50 - 150*	*10/08/24 11:55*	*10/08/24 17:28*	*1*

Lab Sample ID: LCS 400-687128/2-A
Matrix: Water
Analysis Batch: 687191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.33	2.76		ug/L		83	50 - 150

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

Lab Sample ID: LCS 400-687128/2-A
Matrix: Water
Analysis Batch: 687191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687128

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthylene			3.33	2.93		ug/L		88	50 - 150		
Anthracene			3.33	2.82		ug/L		84	50 - 150		
Benzo[a]anthracene			3.33	3.39		ug/L		102	50 - 150		
Benzo[a]pyrene			3.33	3.14		ug/L		94	50 - 150		
Benzo[b]fluoranthene			3.33	3.16		ug/L		95	50 - 150		
Benzo[g,h,i]perylene			3.33	2.84		ug/L		85	50 - 150		
Benzo[k]fluoranthene			3.33	2.97		ug/L		89	50 - 150		
Chrysene			3.33	2.99		ug/L		90	50 - 150		
Dibenz(a,h)anthracene			3.33	2.74		ug/L		82	50 - 150		
Fluoranthene			3.33	2.95		ug/L		88	50 - 150		
Fluorene			3.33	2.90		ug/L		87	50 - 150		
Indeno[1,2,3-cd]pyrene			3.33	2.84		ug/L		85	50 - 150		
1-Methylnaphthalene			3.33	2.43		ug/L		73	50 - 150		
2-Methylnaphthalene			3.33	2.09		ug/L		63	50 - 150		
Phenanthrene			3.33	2.81		ug/L		84	50 - 150		
Pyrene			3.33	2.83		ug/L		85	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*50 - 150*
Nitrobenzene-d5	*130*		*50 - 150*
Terphenyl-d14	*110*		*50 - 150*

Lab Sample ID: LCSD 400-687128/3-A
Matrix: Water
Analysis Batch: 687191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687128

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			3.33	2.91		ug/L		87	50 - 150	5	40
Acenaphthylene			3.33	3.07		ug/L		92	50 - 150	5	40
Anthracene			3.33	3.07		ug/L		92	50 - 150	9	40
Benzo[a]anthracene			3.33	3.68		ug/L		110	50 - 150	8	40
Benzo[a]pyrene			3.33	3.27		ug/L		98	50 - 150	4	40
Benzo[b]fluoranthene			3.33	3.22		ug/L		97	50 - 150	2	40
Benzo[g,h,i]perylene			3.33	3.02		ug/L		91	50 - 150	6	40
Benzo[k]fluoranthene			3.33	3.39		ug/L		102	50 - 150	13	40
Chrysene			3.33	3.25		ug/L		98	50 - 150	8	40
Dibenz(a,h)anthracene			3.33	2.95		ug/L		89	50 - 150	7	40
Fluoranthene			3.33	3.30		ug/L		99	50 - 150	11	40
Fluorene			3.33	3.06		ug/L		92	50 - 150	6	40
Indeno[1,2,3-cd]pyrene			3.33	2.89		ug/L		87	50 - 150	2	40
1-Methylnaphthalene			3.33	2.69		ug/L		81	50 - 150	10	40
2-Methylnaphthalene			3.33	2.37		ug/L		71	50 - 150	13	40
Phenanthrene			3.33	3.02		ug/L		91	50 - 150	7	40
Pyrene			3.33	3.16		ug/L		95	50 - 150	11	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*101*		*50 - 150*
Nitrobenzene-d5	*143*		*50 - 150*

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

Lab Sample ID: LCSD 400-687128/3-A
Matrix: Water
Analysis Batch: 687191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687128

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*112*		*50 - 150*

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 687273

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		3.21	2.53		ug/L		79	50 - 150
Acenaphthylene	ND		3.21	2.68		ug/L		84	50 - 150
Anthracene	ND		3.21	2.81		ug/L		88	50 - 150
Benzo[a]anthracene	ND		3.21	2.84		ug/L		89	50 - 150
Benzo[a]pyrene	ND		3.21	2.73		ug/L		85	50 - 150
Benzo[b]fluoranthene	ND		3.21	2.81		ug/L		88	50 - 150
Benzo[g,h,i]perylene	ND		3.21	2.85		ug/L		89	50 - 150
Benzo[k]fluoranthene	ND		3.21	2.85		ug/L		89	50 - 150
Chrysene	ND		3.21	2.74		ug/L		86	50 - 150
Dibenz(a,h)anthracene	ND		3.21	2.75		ug/L		86	50 - 150
Fluoranthene	ND		3.21	2.88		ug/L		90	50 - 150
Fluorene	ND		3.21	2.79		ug/L		87	50 - 150
Indeno[1,2,3-cd]pyrene	ND		3.21	3.01		ug/L		94	50 - 150
1-Methylnaphthalene	ND	F2	3.21	1.68		ug/L		52	50 - 150
2-Methylnaphthalene	ND	F1 F2	3.21	1.38	F1	ug/L		43	50 - 150
Phenanthrene	ND		3.21	2.84		ug/L		89	50 - 150
Pyrene	ND		3.21	2.84		ug/L		88	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*50 - 150*
Nitrobenzene-d5	*143*		*50 - 150*
Terphenyl-d14	*98*		*50 - 150*

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 687273

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		3.30	3.06		ug/L		93	50 - 150	19	40
Acenaphthylene	ND		3.30	3.22		ug/L		98	50 - 150	18	40
Anthracene	ND		3.30	3.14		ug/L		95	50 - 150	11	40
Benzo[a]anthracene	ND		3.30	3.12		ug/L		94	50 - 150	9	40
Benzo[a]pyrene	ND		3.30	2.92		ug/L		89	50 - 150	7	40
Benzo[b]fluoranthene	ND		3.30	3.05		ug/L		93	50 - 150	8	40
Benzo[g,h,i]perylene	ND		3.30	3.07		ug/L		93	50 - 150	7	40
Benzo[k]fluoranthene	ND		3.30	3.10		ug/L		94	50 - 150	8	40
Chrysene	ND		3.30	3.03		ug/L		92	50 - 150	10	40
Dibenz(a,h)anthracene	ND		3.30	2.96		ug/L		90	50 - 150	7	40
Fluoranthene	ND		3.30	3.10		ug/L		94	50 - 150	8	40
Fluorene	ND		3.30	3.11		ug/L		94	50 - 150	11	40
Indeno[1,2,3-cd]pyrene	ND		3.30	3.17		ug/L		96	50 - 150	5	40

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

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 687273

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1-Methylnaphthalene	ND	F2	3.30	2.83	F2	ug/L		86	50 - 150	51	40
2-Methylnaphthalene	ND	F1 F2	3.30	2.45	F2	ug/L		74	50 - 150	56	40
Phenanthrene	ND		3.30	3.14		ug/L		95	50 - 150	10	40
Pyrene	ND		3.30	3.10		ug/L		94	50 - 150	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*110*		*50 - 150*
Nitrobenzene-d5	*145*		*50 - 150*
Terphenyl-d14	*101*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-687416/1-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687416

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		10/10/24 09:56	10/10/24 14:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/10/24 09:56	10/10/24 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*10/10/24 09:56*	*10/10/24 14:18*	*1*

Lab Sample ID: LCS 400-687416/2-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687416

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		100	60 - 140		
1,2-Dibromoethane			0.100	0.118		ug/L		118	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*51 - 149*

Lab Sample ID: LCSD 400-687416/3-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687416

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0987		ug/L		98	60 - 140	2	30
1,2-Dibromoethane			0.100	0.103		ug/L		103	60 - 140	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*124*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-263758-5 MS
Matrix: Water
Analysis Batch: 687442

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.111	0.0935		ug/L		84	10 - 150		
1,2-Dibromoethane	ND	F2	0.111	0.0924		ug/L		83	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*52*		*51 - 149*

Lab Sample ID: 400-263758-5 MSD
Matrix: Water
Analysis Batch: 687442

Client Sample ID: MW11-ROX-100424
Prep Type: Total/NA
Prep Batch: 687416

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		0.110	0.0853		ug/L		77	10 - 150	9	20
1,2-Dibromoethane	ND	F2	0.110	0.0751	F2	ug/L		68	39 - 150	21	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*52*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/4/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 1.2 0.2 IR8

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-100424-8260	10/4/2024	0000	Water	2					2	X			
	TB-ROX-100424-8011	10/4/2024	0000	Water	2					2		X		
	MW9-ROX-100424-EB	10/4/2024	0830	Water	6			4		10	X	X	X	X
	MW9-ROX-100424	10/4/2024	1015	Water	6			4		10	X	X	X	X
	MW11-ROX-100424	10/4/2024	1200	Water	6			4		10	X	X	X	X
	MW11-ROX-100424-MS	10/4/2024	1200	Water	6			4		10	X	X	X	X
	MW11-ROX-100424-MSD	10/4/2024	1200	Water	6			4		10	X	X	X	X
	MW16-ROX-100424	10/4/2024	1350	Water	6			4		10	X	X	X	X

400-263758 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0546 9975, 7252 0546 9986	10/4/2024	1600
		10/5/24	8:23

CUSTODY SEALS: 2527821, 2527820, 2527823, 2527822

Version: 19Sept24

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10/25/2024

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone 850-474 1001 Fax 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Klingensmith, Leah	Carrier Tracking No(s)	COC No: 400 361385 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Leah Klingensmith@et eurofinsus com	State of Origin: Illinois	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - Illinois		Job #: 400 263758 1
Address: 2417 Bond Street, ,	Due Date Requested: 10/17/2024			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708-534 5200(Tel) 708-534-5211(Fax)	PO #			
Email	WO #			
Project Name: ROXANA QUARTERLY GW	Project #: 40006124			
Site	SSOW#			

400-263758 COC

Analysis Requested

Preservation Codes:

Other.

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D/5030B (MOD) 8260B VOCs (Chl)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TB ROX-100424-8260 (400-263758-1)	10/4/24	12:00 Central	G	Water			X	2	
MW9-ROX-100423 EB (400 263758-3)	10/4/24	08:30 Central	G	Water			X	3	
MW9 ROX 100423 (400-263758-4)	10/4/24	10 15 Central	G	Water			X	3	
MW11-ROX-100423 (400-263758-5)	10/4/24	12:00 Central	G	Water			X	3	
MW11-ROX-100423 (400-263758-5MS)	10/4/24	12:00 Central	G	Water			X	3	
MW11-ROX-100423 (400 263758-5MSD)	10/4/24	12:00 Central	G	Water			X	3	
MW16-ROX-100423 (400-263758-6)	10/4/24	13 50 Central	G	Water			X	3	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment.

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	10/7/24 1120	ET	[signature]	10/8/24 0935	ET
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks.
		4.4 → 4.1

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-263758-1

Login Number: 263758
List Number: 1
Creator: Beecher (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	0.2°C, 1.2°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-263758-1

Login Number: 263758
List Number: 2
Creator: Scott, Sherri L

List Source: Eurofins Chicago
List Creation: 10/08/24 11:45 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	4.1
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.	True	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-263758-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	01-09-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	05-31-25
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory Report Reviewed: 400-263862-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andreia Vladimirescu, 11/26/24

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/04/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.	X			
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 500-790942/2-A	VOCs	Acrylonitrile	**62**	NA	67-140
LCS 500-791548/4	VOCs	Acrolein	**217**	NA	40-150
LCS/LCSD 400-687584/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**224/230**	2	10-124/40
LCS/LCSD 400-687584/2-A/3-A	SVOCs	Pyridine	11/**8**	**33**	10-82/40
LCS/LCSD 400-687852/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**186/155**	18	10-124/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Trip blanks are quality control samples that do not require qualification.

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Method 8260D (VOCs) Acrylonitrile in samples MW26-ROX-100724 and MW1-ROX-100724 was qualified as estimated (UJ). **Method 8270E (SVOCs)** Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples MW26-ROX-100724 and MW1-ROX-100724 was qualified as estimated (UJ).					
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
TB-ROX-100724-8260	VOCs	Methylene Chloride	12 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Method 8260D (VOCs)
Methylene chloride in samples MW26-ROX-100724 and MW1-ROX-100724 was qualified as non-detect (U) at the reported sample concentration.

Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MB 500-791267/8	VOCs	Methylene Chloride	8.95 µg/L
MB 500-791267/8	VOCs	Naphthalene	0.453 µg/L
MB 500-791267/8	VOCs	1,2,4-Trichlorobenzene	0.370 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. Trip blanks are quality control samples that do not require qualification.

Method 8260D (VOCs)
Methylene chloride in samples MW26-ROX-100724 and MW1-ROX-100724 was previously qualified due to trip blank contamination. No further qualification is required.

Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would	X			The laboratory report was revised on December 2, 2024,

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	impact the usability of this data set.				to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics**		X		

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method				
Method 8260D (VOCs) The initial continuing calibration verifications (ICVs) for acrolein, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), and vinyl acetate were outside evaluation criteria, biased low. The associated results for samples MW1-ROX-100724-DUP, MW10-ROX-100724, MW26-ROX-100724, and MW1-ROX-100724 were qualified as estimated (UJ). The continuing calibration verification (CCV) for 2-chloroethyl vinyl ether, ethyl methacrylate, bromoform, 1,2,3-trichloropropane, naphthalene, acrolein, acetone, acrylonitrile, vinyl acetate, and 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), 2-hexanone, bromoform, hexachlorobutadiene, and naphthalene were outside evaluation criteria, biased low. The associated results for samples MW1-ROX-100724-DUP, MW10-ROX-100724, MW26-ROX-100724, and MW1-ROX-100724 were qualified as estimated (UJ). Acrylonitrile in samples MW26-ROX-100724 and MW1-ROX-100724 were previously qualified due to LCS/LCSD recovery outside evaluation criteria; no further qualification is required. Vinyl acetate in samples MW26-ROX-100724 and MW1-ROX-100724 were previously qualified due to ICV recovery outside evaluation criteria; no further qualification is required. **Method 8270E (SVOCs)** The continuing calibration verification (CCV) for 3-nitroaniline was outside evaluation criteria, biased low. The associated results for samples MW1-ROX-100724 and MW26-ROX-100724 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	the primary and confirmation columns.				
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/22/2024 3:04:50 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-263862-1

Reviewed 11/26/2024
VA

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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

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

Authorization

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Authorized for release by
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Job Narrative
400-263862-1

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 10/8/2024 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 3.1°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) analyzed in batch 500-791267 was outside the method criteria for the following analyte(s): Acetone, Acrolein, Acrylonitrile, Bromoform, 2-Butanone (MEK), Hexachlorobutadiene, 2-Hexanone, 4-Methyl-2-pentanone (MIBK), Naphthalene and Vinyl acetate. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260D: The continuing calibration verification (CCV) analyzed in batch 500-791548 was outside the method criteria for the following analyte(s): Acetone, Acrolein, Bromoform, Bromomethane, 2-Chloroethyl vinyl ether, Ethyl methacrylate, 2-Hexanone, Naphthalene, Trichlorofluoromethane and 1,2,3-Trichloropropane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. 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 500-791548 recovered outside control limits for the following analytes: Acrolein. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 400-687921 recovered outside acceptance criteria, low biased, for 3-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-687921 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol, Di-n-butyl phthalate, Hexachlorobenzene and Hexachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration curve analyzed in batch 400-687921 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Job ID: 400-263862-1 (Continued) Eurofins Pensacola

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-687852 and analytical batch 400-688140 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 400-688140 recovered above the upper control limit for 4-Nitrophenol, Aniline 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 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-683370 was outside method criteria for the following analyte(s): Aniline, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC Semi VOA

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-263862-1	TB-ROX-100724-8260	Water	10/07/24 12:00	10/08/24 08:50
400-263862-2	TB-ROX-100724-8011	Water	10/07/24 12:00	10/08/24 08:50
400-263862-3	MW26-ROX-100724	Water	10/07/24 09:30	10/08/24 08:50
400-263862-4	MW1-ROX-100724	Water	10/07/24 10:50	10/08/24 08:50
400-263862-5	MW1-ROX-100724-DUP	Water	10/07/24 10:50	10/08/24 08:50
400-263862-6	MW10-ROX-100724	Water	10/07/24 12:55	10/08/24 08:50

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: TB-ROX-100724-8260 — Lab Sample ID: 400-263862-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	12	B	5.0	3.6	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-100724-8011 — Lab Sample ID: 400-263862-2

No Detections.

Client Sample ID: MW26-ROX-100724 — Lab Sample ID: 400-263862-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	~~10~~	~~B~~ U	~~5.0~~ 10	3.6	ug/L	1		8260D	Total/NA
Phenol	67		9.6	4.0	ug/L	1		8270E	Total/NA

Client Sample ID: MW1-ROX-100724 — Lab Sample ID: 400-263862-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	~~10~~	~~B~~ U	~~5.0~~ 10	3.6	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.48	J	1.0	0.43	ug/L	1		8260D	Total/NA

Client Sample ID: MW1-ROX-100724-DUP — Lab Sample ID: 400-263862-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		1.0	0.43	ug/L	1		8260D	Total/NA

Client Sample ID: MW10-ROX-100724 — Lab Sample ID: 400-263862-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Styrene	0.63	J	1.0	0.31	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: TB-ROX-100724-8260
Date Collected: 10/07/24 12:00
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/18/24 19:42	1
Acrolein	ND		100	35	ug/L			10/18/24 19:42	1
Acrylonitrile	ND	*-	20	6.0	ug/L			10/18/24 19:42	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 19:42	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 19:42	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 19:42	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 19:42	1
Bromoform	ND		1.0	0.96	ug/L			10/18/24 19:42	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 19:42	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/18/24 19:42	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 19:42	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 19:42	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 19:42	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 19:42	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 19:42	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 19:42	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 19:42	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 19:42	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 19:42	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 19:42	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 19:42	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 19:42	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 19:42	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 19:42	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 19:42	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 19:42	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 19:42	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 19:42	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 19:42	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 19:42	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 19:42	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 19:42	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 19:42	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 19:42	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/18/24 19:42	1
2-Hexanone	ND		5.0	2.2	ug/L			10/18/24 19:42	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 19:42	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 19:42	1
Methylene Chloride	12	B	5.0	3.6	ug/L			10/18/24 19:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/18/24 19:42	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 19:42	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 19:42	1
Naphthalene	ND		1.0	0.44	ug/L			10/18/24 19:42	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 19:42	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 19:42	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 19:42	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 19:42	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 19:42	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 19:42	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: TB-ROX-100724-8260
Date Collected: 10/07/24 12:00
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-1
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	0.27	ug/L			10/18/24 19:42	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 19:42	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 19:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 19:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 19:42	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 19:42	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 19:42	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 19:42	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 19:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 19:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 19:42	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 19:42	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 19:42	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 19:42	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 19:42	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 19:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 19:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 19:42	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/18/24 19:42	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 19:42	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*72 - 124*		*10/18/24 19:42*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*10/18/24 19:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*75 - 126*		*10/18/24 19:42*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*10/18/24 19:42*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: TB-ROX-100724-8011
Date Collected: 10/07/24 12:00
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-2
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		10/10/24 09:56	10/10/24 18:10	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		10/10/24 09:56	10/10/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*10/10/24 09:56*	*10/10/24 18:10*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: MW26-ROX-100724
Date Collected: 10/07/24 09:30
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	10	4.3	ug/L			10/18/24 20:07	1
Acrolein	ND		100	35	ug/L			10/18/24 20:07	1
Acrylonitrile	ND	*- UJ	20	6.0	ug/L			10/18/24 20:07	1
Benzene	ND	UJ	0.50	0.18	ug/L			10/18/24 20:07	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 20:07	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 20:07	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 20:07	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/18/24 20:07	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 20:07	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/18/24 20:07	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 20:07	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 20:07	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 20:07	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 20:07	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 20:07	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 20:07	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 20:07	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 20:07	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 20:07	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 20:07	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 20:07	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 20:07	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 20:07	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 20:07	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 20:07	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 20:07	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 20:07	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 20:07	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 20:07	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 20:07	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 20:07	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 20:07	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 20:07	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 20:07	1
Hexachlorobutadiene	ND	UJ	1.0	0.54	ug/L			10/18/24 20:07	1
2-Hexanone	ND	UJ	5.0	2.2	ug/L			10/18/24 20:07	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 20:07	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 20:07	1
Methylene Chloride	~~10~~ **B**	U	~~5.0~~	10 3.6	ug/L			10/18/24 20:07	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/18/24 20:07	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 20:07	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 20:07	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/18/24 20:07	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 20:07	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 20:07	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 20:07	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 20:07	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 20:07	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 20:07	1

Client Sample ID: MW26-ROX-100724
Date Collected: 10/07/24 09:30
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-3
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	0.27	ug/L			10/18/24 20:07	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 20:07	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 20:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 20:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 20:07	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 20:07	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 20:07	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 20:07	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 20:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 20:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 20:07	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 20:07	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 20:07	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 20:07	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 20:07	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 20:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 20:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 20:07	1
Vinyl acetate	ND	UJ	2.0	0.78	ug/L			10/18/24 20:07	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 20:07	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*72 - 124*		*10/18/24 20:07*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*10/18/24 20:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*		*10/18/24 20:07*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*10/18/24 20:07*	*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		10/11/24 11:30	10/15/24 18:25	1
Benzenethiol	ND		9.6	9.5	ug/L		10/11/24 11:30	10/15/24 18:25	1
Benzoic acid	ND		29	23	ug/L		10/11/24 11:30	10/15/24 18:25	1
Benzyl alcohol	ND		9.6	7.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
Bis(2-chloroethyl)ether	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		10/11/24 11:30	10/15/24 18:25	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Bromophenyl phenyl ether	ND		9.6	8.3	ug/L		10/11/24 11:30	10/15/24 18:25	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Chloroaniline	ND		9.6	4.5	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		10/11/24 11:30	10/15/24 18:25	1
2-Chloronaphthalene	ND		9.6	3.7	ug/L		10/11/24 11:30	10/15/24 18:25	1
2-Chlorophenol	ND		9.6	3.9	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Chlorophenyl phenyl ether	ND		9.6	3.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		10/11/24 11:30	10/15/24 18:25	1
Dibenzofuran	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		10/11/24 11:30	10/15/24 18:25	1
Diethyl phthalate	ND		9.6	4.2	ug/L		10/11/24 11:30	10/15/24 18:25	1

Client Sample ID: MW26-ROX-100724
Date Collected: 10/07/24 09:30
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,6-Dinitrotoluene	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
1,4-Dioxane	ND		9.6	4.1	ug/L		10/11/24 11:30	10/15/24 18:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		10/11/24 11:30	10/15/24 18:25	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		10/11/24 11:30	10/15/24 18:25	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/11/24 11:30	10/15/24 18:25	1
Hexachloroethane	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
Indene	ND		9.6	3.5	ug/L		10/11/24 11:30	10/15/24 18:25	1
Isophorone	ND		9.6	5.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
2-Methylphenol	ND		9.6	3.1	ug/L		10/11/24 11:30	10/15/24 18:25	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
2-Nitroaniline	ND		9.6	4.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
3-Nitroaniline	ND	UJ	9.6	4.5	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Nitroaniline	ND		9.6	3.9	ug/L		10/11/24 11:30	10/15/24 18:25	1
Nitrobenzene	ND		9.6	4.5	ug/L		10/11/24 11:30	10/15/24 18:25	1
2-Nitrophenol	ND		9.6	4.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
4-Nitrophenol	ND		9.6	3.2	ug/L		10/11/24 11:30	10/15/24 18:25	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		10/11/24 11:30	10/15/24 18:25	1
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		10/11/24 11:30	10/15/24 18:25	1
N-Nitrosodiphenylamine	ND		9.6	3.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
Pentachlorophenol	ND		19	11	ug/L		10/11/24 11:30	10/15/24 18:25	1
Phenol	**67**		9.6	4.0	ug/L		10/11/24 11:30	10/15/24 18:25	1
Pyridine	ND	*- UJ	9.6	9.6	ug/L		10/11/24 11:30	10/15/24 18:25	1
Quinoline	ND		9.6	2.3	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,4,5-Trichlorophenol	ND		9.6	3.8	ug/L		10/11/24 11:30	10/15/24 18:25	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/11/24 11:30	10/15/24 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*10/11/24 11:30*	*10/15/24 18:25*	*1*
2-Fluorophenol	*41*		*10 - 105*	*10/11/24 11:30*	*10/15/24 18:25*	*1*
Nitrobenzene-d5	*60*		*16 - 127*	*10/11/24 11:30*	*10/15/24 18:25*	*1*
Phenol-d5	*28*		*10 - 129*	*10/11/24 11:30*	*10/15/24 18:25*	*1*
Terphenyl-d14	*76*		*13 - 150*	*10/11/24 11:30*	*10/15/24 18:25*	*1*
2,4,6-Tribromophenol	*77*		*10 - 150*	*10/11/24 11:30*	*10/15/24 18:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/11/24 12:30	10/12/24 08:39	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/11/24 12:30	10/12/24 08:39	1
Anthracene	ND		0.20	0.073	ug/L		10/11/24 12:30	10/12/24 08:39	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 08:39	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/11/24 12:30	10/12/24 08:39	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/11/24 12:30	10/12/24 08:39	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: MW26-ROX-100724
Date Collected: 10/07/24 09:30
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/11/24 12:30	10/12/24 08:39	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 08:39	1
Chrysene	ND		0.20	0.039	ug/L		10/11/24 12:30	10/12/24 08:39	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 08:39	1
Fluoranthene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 08:39	1
Fluorene	ND		0.20	0.087	ug/L		10/11/24 12:30	10/12/24 08:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 08:39	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/11/24 12:30	10/12/24 08:39	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/11/24 12:30	10/12/24 08:39	1
Phenanthrene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 08:39	1
Pyrene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 08:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*50 - 150*	*10/11/24 12:30*	*10/12/24 08:39*	*1*
Nitrobenzene-d5	*111*		*50 - 150*	*10/11/24 12:30*	*10/12/24 08:39*	*1*
Terphenyl-d14	*75*		*50 - 150*	*10/11/24 12:30*	*10/12/24 08:39*	*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		0.033	0.019	ug/L		10/10/24 09:56	10/10/24 18:31	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/10/24 09:56	10/10/24 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/10/24 09:56*	*10/10/24 18:31*	*1*

Client Sample ID: MW1-ROX-100724
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/18/24 20:32	1
Acrolein	ND	UJ	100	35	ug/L			10/18/24 20:32	1
Acrylonitrile	ND	*- UJ	20	6.0	ug/L			10/18/24 20:32	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 20:32	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 20:32	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 20:32	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 20:32	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/18/24 20:32	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 20:32	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/18/24 20:32	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 20:32	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 20:32	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 20:32	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 20:32	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 20:32	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 20:32	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 20:32	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 20:32	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 20:32	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 20:32	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 20:32	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 20:32	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 20:32	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 20:32	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 20:32	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 20:32	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 20:32	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 20:32	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 20:32	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 20:32	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 20:32	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 20:32	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 20:32	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 20:32	1
Hexachlorobutadiene	ND	UJ	1.0	0.54	ug/L			10/18/24 20:32	1
2-Hexanone	ND	UJ	5.0	2.2	ug/L			10/18/24 20:32	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 20:32	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 20:32	1
Methylene Chloride	~~10~~	~~B~~ U	~~5.0~~ 10	3.6	ug/L			10/18/24 20:32	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/18/24 20:32	1
Methyl tert-butyl ether	0.48	J	1.0	0.43	ug/L			10/18/24 20:32	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 20:32	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/18/24 20:32	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 20:32	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 20:32	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 20:32	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 20:32	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 20:32	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/18/24 20:32	1

Client Sample ID: MW1-ROX-100724
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-4
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	0.27	ug/L			10/18/24 20:32	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 20:32	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 20:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 20:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 20:32	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 20:32	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 20:32	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 20:32	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 20:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 20:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/18/24 20:32	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 20:32	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 20:32	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 20:32	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 20:32	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 20:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 20:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 20:32	1
Vinyl acetate	ND	UJ	2.0	0.78	ug/L			10/18/24 20:32	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 20:32	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 20:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*10/18/24 20:32*	*1*
Dibromofluoromethane	*99*		*75 - 120*		*10/18/24 20:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*75 - 126*		*10/18/24 20:32*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*10/18/24 20:32*	*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		10/11/24 11:30	10/15/24 18:47	1
Benzenethiol	ND		9.5	9.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
Benzoic acid	ND		29	23	ug/L		10/11/24 11:30	10/15/24 18:47	1
Benzyl alcohol	ND		9.5	6.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		10/11/24 11:30	10/15/24 18:47	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		10/11/24 11:30	10/15/24 18:47	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		10/11/24 11:30	10/15/24 18:47	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Chloroaniline	ND		9.5	4.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		10/11/24 11:30	10/15/24 18:47	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		10/11/24 11:30	10/15/24 18:47	1
2-Chlorophenol	ND		9.5	3.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		10/11/24 11:30	10/15/24 18:47	1
Dibenzofuran	ND		9.5	3.8	ug/L		10/11/24 11:30	10/15/24 18:47	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		10/11/24 11:30	10/15/24 18:47	1
Diethyl phthalate	ND		9.5	4.2	ug/L		10/11/24 11:30	10/15/24 18:47	1

Client Sample ID: MW1-ROX-100724
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		9.5	4.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
Dimethyl phthalate	ND		9.5	4.0	ug/L		10/11/24 11:30	10/15/24 18:47	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		10/11/24 11:30	10/15/24 18:47	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		10/11/24 11:30	10/15/24 18:47	1
1,4-Dioxane	ND		9.5	4.1	ug/L		10/11/24 11:30	10/15/24 18:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		10/11/24 11:30	10/15/24 18:47	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		10/11/24 11:30	10/15/24 18:47	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/11/24 11:30	10/15/24 18:47	1
Hexachloroethane	ND		9.5	4.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
Indene	ND		9.5	3.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
Isophorone	ND		9.5	4.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
2-Methylphenol	ND		9.5	3.0	ug/L		10/11/24 11:30	10/15/24 18:47	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
2-Nitroaniline	ND		9.5	4.8	ug/L		10/11/24 11:30	10/15/24 18:47	1
3-Nitroaniline	ND	UJ	9.5	4.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Nitroaniline	ND		9.5	3.9	ug/L		10/11/24 11:30	10/15/24 18:47	1
Nitrobenzene	ND		9.5	4.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
2-Nitrophenol	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
4-Nitrophenol	ND		9.5	3.1	ug/L		10/11/24 11:30	10/15/24 18:47	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		10/11/24 11:30	10/15/24 18:47	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		10/11/24 11:30	10/15/24 18:47	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
Pentachlorophenol	ND		19	11	ug/L		10/11/24 11:30	10/15/24 18:47	1
Phenol	ND		9.5	4.0	ug/L		10/11/24 11:30	10/15/24 18:47	1
Pyridine	ND	*- UJ	9.5	9.5	ug/L		10/11/24 11:30	10/15/24 18:47	1
Quinoline	ND		9.5	2.3	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		10/11/24 11:30	10/15/24 18:47	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/11/24 11:30	10/15/24 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*21 - 114*	*10/11/24 11:30*	*10/15/24 18:47*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/11/24 11:30*	*10/15/24 18:47*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*10/11/24 11:30*	*10/15/24 18:47*	*1*
Phenol-d5	*32*		*10 - 129*	*10/11/24 11:30*	*10/15/24 18:47*	*1*
Terphenyl-d14	*76*		*13 - 150*	*10/11/24 11:30*	*10/15/24 18:47*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*10/11/24 11:30*	*10/15/24 18:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/11/24 12:30	10/12/24 09:08	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/11/24 12:30	10/12/24 09:08	1
Anthracene	ND		0.20	0.073	ug/L		10/11/24 12:30	10/12/24 09:08	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:08	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/11/24 12:30	10/12/24 09:08	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/11/24 12:30	10/12/24 09:08	1

Client Sample ID: MW1-ROX-100724
Lab Sample ID: 400-263862-4

Date Collected: 10/07/24 10:50
Matrix: Water
Date Received: 10/08/24 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/11/24 12:30	10/12/24 09:08	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:08	1
Chrysene	ND		0.20	0.039	ug/L		10/11/24 12:30	10/12/24 09:08	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 09:08	1
Fluoranthene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 09:08	1
Fluorene	ND		0.20	0.087	ug/L		10/11/24 12:30	10/12/24 09:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 09:08	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/11/24 12:30	10/12/24 09:08	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/11/24 12:30	10/12/24 09:08	1
Phenanthrene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 09:08	1
Pyrene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:08*	*1*
Nitrobenzene-d5	*118*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:08*	*1*
Terphenyl-d14	*82*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:08*	*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		0.034	0.019	ug/L		10/10/24 09:56	10/10/24 18:52	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/10/24 09:56	10/10/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*10/10/24 09:56*	*10/10/24 18:52*	*1*

Client Sample ID: MW1-ROX-100724-DUP
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/21/24 12:27	1
Acrolein	ND	*+ UJ	100	35	ug/L			10/21/24 12:27	1
Acrylonitrile	ND		20	6.0	ug/L			10/21/24 12:27	1
Benzene	ND		0.50	0.18	ug/L			10/21/24 12:27	1
Bromobenzene	ND		1.0	0.60	ug/L			10/21/24 12:27	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/21/24 12:27	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/21/24 12:27	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/21/24 12:27	1
Bromomethane	ND		3.0	1.8	ug/L			10/21/24 12:27	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/21/24 12:27	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/21/24 12:27	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/21/24 12:27	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/21/24 12:27	1
Chloroethane	ND		5.0	0.47	ug/L			10/21/24 12:27	1
2-Chloroethyl vinyl ether	ND	UJ	2.0	1.6	ug/L			10/21/24 12:27	1
Chloroform	ND		2.0	0.92	ug/L			10/21/24 12:27	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/21/24 12:27	1
Chloromethane	ND		5.0	0.79	ug/L			10/21/24 12:27	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/21/24 12:27	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/21/24 12:27	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/21/24 12:27	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/21/24 12:27	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/21/24 12:27	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/21/24 12:27	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/21/24 12:27	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/21/24 12:27	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/21/24 12:27	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/21/24 12:27	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/21/24 12:27	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/21/24 12:27	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/21/24 12:27	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/21/24 12:27	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/21/24 12:27	1
Ethyl methacrylate	ND	UJ	2.5	0.80	ug/L			10/21/24 12:27	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/21/24 12:27	1
2-Hexanone	ND		5.0	2.2	ug/L			10/21/24 12:27	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/21/24 12:27	1
Methylene bromide	ND		1.0	0.58	ug/L			10/21/24 12:27	1
Methylene Chloride	ND		5.0	3.6	ug/L			10/21/24 12:27	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/21/24 12:27	1
Methyl tert-butyl ether	**1.1**		1.0	0.43	ug/L			10/21/24 12:27	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/21/24 12:27	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/21/24 12:27	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/21/24 12:27	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/21/24 12:27	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/21/24 12:27	1
o-Xylene	ND		0.50	0.21	ug/L			10/21/24 12:27	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/21/24 12:27	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/21/24 12:27	1

Client Sample ID: MW1-ROX-100724-DUP
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-5
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	0.27	ug/L			10/21/24 12:27	1
Styrene	ND		1.0	0.31	ug/L			10/21/24 12:27	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/21/24 12:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/21/24 12:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/21/24 12:27	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/21/24 12:27	1
Toluene	ND		0.50	0.21	ug/L			10/21/24 12:27	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/21/24 12:27	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/21/24 12:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/21/24 12:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/21/24 12:27	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/21/24 12:27	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/21/24 12:27	1
Trichloroethene	ND		0.50	0.15	ug/L			10/21/24 12:27	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/21/24 12:27	1
1,2,3-Trichloropropane	ND	UJ	2.0	1.5	ug/L			10/21/24 12:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/21/24 12:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/21/24 12:27	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/21/24 12:27	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/21/24 12:27	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/21/24 12:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*		*10/21/24 12:27*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*10/21/24 12:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*75 - 126*		*10/21/24 12:27*	*1*
Toluene-d8 (Surr)	*82*		*75 - 120*		*10/21/24 12:27*	*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		10/14/24 13:55	10/16/24 18:08	1
Benzenethiol	ND		9.4	9.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
Benzoic acid	ND		28	23	ug/L		10/14/24 13:55	10/16/24 18:08	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/14/24 13:55	10/16/24 18:08	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/14/24 13:55	10/16/24 18:08	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/14/24 13:55	10/16/24 18:08	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/14/24 13:55	10/16/24 18:08	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/14/24 13:55	10/16/24 18:08	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/14/24 13:55	10/16/24 18:08	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/14/24 13:55	10/16/24 18:08	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
Diethyl phthalate	ND		9.4	4.2	ug/L		10/14/24 13:55	10/16/24 18:08	1

Client Sample ID: MW1-ROX-100724-DUP
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/14/24 13:55	10/16/24 18:08	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/14/24 13:55	10/16/24 18:08	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/14/24 13:55	10/16/24 18:08	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		10/14/24 13:55	10/16/24 18:08	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/14/24 13:55	10/16/24 18:08	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
Indene	ND		9.4	3.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
Isophorone	ND		9.4	4.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/14/24 13:55	10/16/24 18:08	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/14/24 13:55	10/16/24 18:08	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/14/24 13:55	10/16/24 18:08	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/14/24 13:55	10/16/24 18:08	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/14/24 13:55	10/16/24 18:08	1
Pentachlorophenol	ND		19	11	ug/L		10/14/24 13:55	10/16/24 18:08	1
Phenol	ND		9.4	4.0	ug/L		10/14/24 13:55	10/16/24 18:08	1
Pyridine	ND		9.4	9.4	ug/L		10/14/24 13:55	10/16/24 18:08	1
Quinoline	ND		9.4	2.3	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/14/24 13:55	10/16/24 18:08	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/14/24 13:55	10/16/24 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*10/14/24 13:55*	*10/16/24 18:08*	*1*
2-Fluorophenol	*52*		*10 - 105*	*10/14/24 13:55*	*10/16/24 18:08*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*10/14/24 13:55*	*10/16/24 18:08*	*1*
Phenol-d5	*44*		*10 - 129*	*10/14/24 13:55*	*10/16/24 18:08*	*1*
Terphenyl-d14	*86*		*13 - 150*	*10/14/24 13:55*	*10/16/24 18:08*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/14/24 13:55*	*10/16/24 18:08*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/11/24 12:30	10/12/24 09:38	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/11/24 12:30	10/12/24 09:38	1
Anthracene	ND		0.20	0.073	ug/L		10/11/24 12:30	10/12/24 09:38	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:38	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/11/24 12:30	10/12/24 09:38	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/11/24 12:30	10/12/24 09:38	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: MW1-ROX-100724-DUP
Date Collected: 10/07/24 10:50
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/11/24 12:30	10/12/24 09:38	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:38	1
Chrysene	ND		0.20	0.039	ug/L		10/11/24 12:30	10/12/24 09:38	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 09:38	1
Fluoranthene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 09:38	1
Fluorene	ND		0.20	0.087	ug/L		10/11/24 12:30	10/12/24 09:38	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 09:38	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/11/24 12:30	10/12/24 09:38	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/11/24 12:30	10/12/24 09:38	1
Phenanthrene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 09:38	1
Pyrene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 09:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:38*	*1*
Nitrobenzene-d5	*108*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:38*	*1*
Terphenyl-d14	*78*		*50 - 150*	*10/11/24 12:30*	*10/12/24 09:38*	*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		0.033	0.019	ug/L		10/10/24 09:56	10/10/24 19:13	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/10/24 09:56	10/10/24 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*10/10/24 09:56*	*10/10/24 19:13*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Client Sample ID: MW10-ROX-100724
Date Collected: 10/07/24 12:55
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	10	4.3	ug/L			10/21/24 12:53	1
Acrolein	ND	*+ UJ	100	35	ug/L			10/21/24 12:53	1
Acrylonitrile	ND		20	6.0	ug/L			10/21/24 12:53	1
Benzene	ND		0.50	0.18	ug/L			10/21/24 12:53	1
Bromobenzene	ND		1.0	0.60	ug/L			10/21/24 12:53	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/21/24 12:53	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/21/24 12:53	1
Bromoform	ND	UJ	1.0	0.96	ug/L			10/21/24 12:53	1
Bromomethane	ND		3.0	1.8	ug/L			10/21/24 12:53	1
2-Butanone (MEK)	ND	UJ	5.0	2.3	ug/L			10/21/24 12:53	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/21/24 12:53	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/21/24 12:53	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/21/24 12:53	1
Chloroethane	ND		5.0	0.47	ug/L			10/21/24 12:53	1
2-Chloroethyl vinyl ether	ND	UJ	2.0	1.6	ug/L			10/21/24 12:53	1
Chloroform	ND		2.0	0.92	ug/L			10/21/24 12:53	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/21/24 12:53	1
Chloromethane	ND		5.0	0.79	ug/L			10/21/24 12:53	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/21/24 12:53	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/21/24 12:53	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/21/24 12:53	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/21/24 12:53	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/21/24 12:53	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/21/24 12:53	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/21/24 12:53	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/21/24 12:53	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/21/24 12:53	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/21/24 12:53	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/21/24 12:53	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/21/24 12:53	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/21/24 12:53	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/21/24 12:53	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/21/24 12:53	1
Ethyl methacrylate	ND	UJ	2.5	0.80	ug/L			10/21/24 12:53	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/21/24 12:53	1
2-Hexanone	ND		5.0	2.2	ug/L			10/21/24 12:53	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/21/24 12:53	1
Methylene bromide	ND		1.0	0.58	ug/L			10/21/24 12:53	1
Methylene Chloride	ND		5.0	3.6	ug/L			10/21/24 12:53	1
4-Methyl-2-pentanone (MIBK)	ND	UJ	5.0	2.0	ug/L			10/21/24 12:53	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/21/24 12:53	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/21/24 12:53	1
Naphthalene	ND	UJ	1.0	0.44	ug/L			10/21/24 12:53	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/21/24 12:53	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/21/24 12:53	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/21/24 12:53	1
o-Xylene	ND		0.50	0.21	ug/L			10/21/24 12:53	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/21/24 12:53	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/21/24 12:53	1

Client Sample ID: MW10-ROX-100724
Date Collected: 10/07/24 12:55
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-6
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	0.27	ug/L			10/21/24 12:53	1
Styrene	**0.63**	**J**	1.0	0.31	ug/L			10/21/24 12:53	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/21/24 12:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/21/24 12:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/21/24 12:53	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/21/24 12:53	1
Toluene	ND		0.50	0.21	ug/L			10/21/24 12:53	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/21/24 12:53	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/21/24 12:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/21/24 12:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/21/24 12:53	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/21/24 12:53	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/21/24 12:53	1
Trichloroethene	ND		0.50	0.15	ug/L			10/21/24 12:53	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/21/24 12:53	1
1,2,3-Trichloropropane	ND	UJ	2.0	1.5	ug/L			10/21/24 12:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/21/24 12:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/21/24 12:53	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/21/24 12:53	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/21/24 12:53	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/21/24 12:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*72 - 124*		*10/21/24 12:53*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*10/21/24 12:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*75 - 126*		*10/21/24 12:53*	*1*
Toluene-d8 (Surr)	*83*		*75 - 120*		*10/21/24 12:53*	*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		10/14/24 13:55	10/16/24 18:33	1
Benzenethiol	ND		9.6	9.5	ug/L		10/14/24 13:55	10/16/24 18:33	1
Benzoic acid	ND		29	23	ug/L		10/14/24 13:55	10/16/24 18:33	1
Benzyl alcohol	ND		9.6	7.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
Bis(2-chloroethyl)ether	ND		9.6	3.8	ug/L		10/14/24 13:55	10/16/24 18:33	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		10/14/24 13:55	10/16/24 18:33	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Bromophenyl phenyl ether	ND		9.6	8.3	ug/L		10/14/24 13:55	10/16/24 18:33	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Chloroaniline	ND		9.6	4.5	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		10/14/24 13:55	10/16/24 18:33	1
2-Chloronaphthalene	ND		9.6	3.7	ug/L		10/14/24 13:55	10/16/24 18:33	1
2-Chlorophenol	ND		9.6	3.9	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Chlorophenyl phenyl ether	ND		9.6	3.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		10/14/24 13:55	10/16/24 18:33	1
Dibenzofuran	ND		9.6	3.9	ug/L		10/14/24 13:55	10/16/24 18:33	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		10/14/24 13:55	10/16/24 18:33	1
Diethyl phthalate	ND		9.6	4.2	ug/L		10/14/24 13:55	10/16/24 18:33	1

Client Sample ID: MW10-ROX-100724
Date Collected: 10/07/24 12:55
Date Received: 10/08/24 08:50

Lab Sample ID: 400-263862-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
Dimethyl phthalate	ND		9.6	4.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,6-Dinitrotoluene	ND		9.6	3.8	ug/L		10/14/24 13:55	10/16/24 18:33	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		10/14/24 13:55	10/16/24 18:33	1
1,4-Dioxane	ND		9.6	4.1	ug/L		10/14/24 13:55	10/16/24 18:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		10/14/24 13:55	10/16/24 18:33	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		10/14/24 13:55	10/16/24 18:33	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/14/24 13:55	10/16/24 18:33	1
Hexachloroethane	ND		9.6	5.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
Indene	ND		9.6	3.5	ug/L		10/14/24 13:55	10/16/24 18:33	1
Isophorone	ND		9.6	5.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
2-Methylphenol	ND		9.6	3.1	ug/L		10/14/24 13:55	10/16/24 18:33	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
2-Nitroaniline	ND		9.6	4.8	ug/L		10/14/24 13:55	10/16/24 18:33	1
3-Nitroaniline	ND		9.6	4.5	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Nitroaniline	ND		9.6	3.9	ug/L		10/14/24 13:55	10/16/24 18:33	1
Nitrobenzene	ND		9.6	4.5	ug/L		10/14/24 13:55	10/16/24 18:33	1
2-Nitrophenol	ND		9.6	4.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
4-Nitrophenol	ND		9.6	3.2	ug/L		10/14/24 13:55	10/16/24 18:33	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		10/14/24 13:55	10/16/24 18:33	1
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		10/14/24 13:55	10/16/24 18:33	1
N-Nitrosodiphenylamine	ND		9.6	3.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
Pentachlorophenol	ND		19	11	ug/L		10/14/24 13:55	10/16/24 18:33	1
Phenol	ND		9.6	4.0	ug/L		10/14/24 13:55	10/16/24 18:33	1
Pyridine	ND		9.6	9.6	ug/L		10/14/24 13:55	10/16/24 18:33	1
Quinoline	ND		9.6	2.3	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,4,5-Trichlorophenol	ND		9.6	3.9	ug/L		10/14/24 13:55	10/16/24 18:33	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/14/24 13:55	10/16/24 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*10/14/24 13:55*	*10/16/24 18:33*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/14/24 13:55*	*10/16/24 18:33*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*10/14/24 13:55*	*10/16/24 18:33*	*1*
Phenol-d5	*42*		*10 - 129*	*10/14/24 13:55*	*10/16/24 18:33*	*1*
Terphenyl-d14	*86*		*13 - 150*	*10/14/24 13:55*	*10/16/24 18:33*	*1*
2,4,6-Tribromophenol	*65*		*10 - 150*	*10/14/24 13:55*	*10/16/24 18:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/11/24 12:30	10/12/24 10:08	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/11/24 12:30	10/12/24 10:08	1
Anthracene	ND		0.20	0.073	ug/L		10/11/24 12:30	10/12/24 10:08	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 10:08	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/11/24 12:30	10/12/24 10:08	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/11/24 12:30	10/12/24 10:08	1

Client Sample ID: MW10-ROX-100724
Lab Sample ID: 400-263862-6
Date Collected: 10/07/24 12:55
Matrix: Water
Date Received: 10/08/24 08:50

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/11/24 12:30	10/12/24 10:08	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 10:08	1
Chrysene	ND		0.20	0.039	ug/L		10/11/24 12:30	10/12/24 10:08	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 10:08	1
Fluoranthene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 10:08	1
Fluorene	ND		0.20	0.086	ug/L		10/11/24 12:30	10/12/24 10:08	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 10:08	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/11/24 12:30	10/12/24 10:08	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/11/24 12:30	10/12/24 10:08	1
Phenanthrene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 10:08	1
Pyrene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*50 - 150*	*10/11/24 12:30*	*10/12/24 10:08*	*1*
Nitrobenzene-d5	*102*		*50 - 150*	*10/11/24 12:30*	*10/12/24 10:08*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/11/24 12:30*	*10/12/24 10:08*	*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		0.034	0.019	ug/L		10/10/24 09:56	10/10/24 19:34	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		10/10/24 09:56	10/10/24 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*10/10/24 09:56*	*10/10/24 19:34*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-263862-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(72-124)	(75-120)	(75-126)	(75-120)
400-263862-1	TB-ROX-100724-8260	87	99	102	106
400-263862-3	MW26-ROX-100724	86	99	101	106
400-263862-4	MW1-ROX-100724	89	99	100	107
400-263862-5	MW1-ROX-100724-DUP	84	95	86	82
400-263862-6	MW10-ROX-100724	82	97	88	83
LCS 500-790942/2-A	Lab Control Sample	78	99	97	107
LCS 500-791548/4	Lab Control Sample	84	91	78	85
MB 500-791267/8	Method Blank	89	95	96	106
MB 500-791548/7	Method Blank	81	97	85	83

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
DCA = 1,2-Dichloroethane-d4 (Surr)
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)
400-263862-3	MW26-ROX-100724	65	41	60	28	76	77
400-263862-4	MW1-ROX-100724	64	45	57	32	76	76
400-263862-5	MW1-ROX-100724-DUP	65	52	67	44	86	74
400-263862-6	MW10-ROX-100724	62	48	64	42	86	65
LCS 400-687584/2-A	Lab Control Sample	68	54	64	44	72	95
LCS 400-687584/4-A	Lab Control Sample	60	50	62	38	76	82
LCS 400-687852/22-A	Lab Control Sample	59	52	66	42	84	60
LCS 400-687852/2-A	Lab Control Sample	66	57	73	51	82	81
LCSD 400-687584/3-A	Lab Control Sample Dup	67	54	65	44	70	95
LCSD 400-687584/5-A	Lab Control Sample Dup	63	50	59	38	74	79
LCSD 400-687852/23-A	Lab Control Sample Dup	61	55	70	46	88	64
LCSD 400-687852/3-A	Lab Control Sample Dup	62	49	67	45	80	80
MB 400-687584/1-A	Method Blank	63	49	65	35	78	83
MB 400-687852/1-A	Method Blank	57	50	67	42	85	66

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
Job ID: 400-263862-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-263862-3	MW26-ROX-100724	69	111	75
400-263862-4	MW1-ROX-100724	80	118	82
400-263862-5	MW1-ROX-100724-DUP	76	108	78
400-263862-6	MW10-ROX-100724	70	102	79
LCS 400-687595/2-A	Lab Control Sample	77	106	84
MB 400-687595/1-A	Method Blank	64	87	77

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-263862-2	TB-ROX-100724-8011	99
400-263862-3	MW26-ROX-100724	65
400-263862-4	MW1-ROX-100724	72
400-263862-5	MW1-ROX-100724-DUP	69
400-263862-6	MW10-ROX-100724	67
LCS 400-687416/2-A	Lab Control Sample	112
LCSD 400-687416/3-A	Lab Control Sample Dup	124
MB 400-687416/1-A	Method Blank	110

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263862-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	SW846	EET PEN
5030B	Purge and Trap	SW846	EET CHI
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 CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

Lab Chronicle

Client: AECOM
Job ID: 400-263862-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-100724-8260
Lab Sample ID: 400-263862-1
Date Collected: 10/07/24 12:00
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	791267	10/18/24 19:42	PMF	EET CHI

Client Sample ID: TB-ROX-100724-8011
Lab Sample ID: 400-263862-2
Date Collected: 10/07/24 12:00
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31.2 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 18:10	KR	EET PEN

Client Sample ID: MW26-ROX-100724
Lab Sample ID: 400-263862-3
Date Collected: 10/07/24 09:30
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	791267	10/18/24 20:07	PMF	EET CHI
Total/NA	Prep	3511			29.9 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			687675	10/12/24 08:39	DS	EET PEN
Total/NA	Prep	3510C			260 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 18:25	VC1	EET PEN
Total/NA	Prep	8011			32 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 18:31	KR	EET PEN

Client Sample ID: MW1-ROX-100724
Lab Sample ID: 400-263862-4
Date Collected: 10/07/24 10:50
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	791267	10/18/24 20:32	PMF	EET CHI
Total/NA	Prep	3511			30.1 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			687675	10/12/24 09:08	DS	EET PEN
Total/NA	Prep	3510C			262.8 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 18:47	VC1	EET PEN
Total/NA	Prep	8011			30.8 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 18:52	KR	EET PEN

Client Sample ID: MW1-ROX-100724-DUP
Lab Sample ID: 400-263862-5
Date Collected: 10/07/24 10:50
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	791548	10/21/24 12:27	MM	EET CHI
Total/NA	Prep	3510C			264.8 mL	1 mL	687852	10/14/24 13:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/16/24 18:08	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263862-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW1-ROX-100724-DUP
Lab Sample ID: 400-263862-5
Date Collected: 10/07/24 10:50
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			29.9 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			687675	10/12/24 09:38	DS	EET PEN
Total/NA	Prep	8011			31.9 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 19:13	KR	EET PEN

Client Sample ID: MW10-ROX-100724
Lab Sample ID: 400-263862-6
Date Collected: 10/07/24 12:55
Matrix: Water
Date Received: 10/08/24 08:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	791548	10/21/24 12:53	MM	EET CHI
Total/NA	Prep	3510C			259.6 mL	1 mL	687852	10/14/24 13:55	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/16/24 18:33	S1B	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			687675	10/12/24 10:08	DS	EET PEN
Total/NA	Prep	8011			31.2 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 19:34	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687416/1-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:18	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687584/1-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 11:40	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687595/1-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	3511			30 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			687675	10/12/24 01:09	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263862-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687852/1-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	687852	10/14/24 13:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/16/24 15:42	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 500-791267/8
Date Collected: N/A
Matrix: Water
Date Received: 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	791267	10/18/24 10:59	PMF	EET CHI

Client Sample ID: Method Blank
Lab Sample ID: MB 500-791548/7
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	791548	10/21/24 11:10	MM	EET CHI

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687416/2-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:39	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/2-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:03	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/4-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:48	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687595/2-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	3511			30 mL	2 mL	687595	10/11/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1	0 mL	1.0 mL	687675	10/12/24 02:10	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687852/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	687852	10/14/24 13:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/17/24 00:16	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687852/2-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	687852	10/14/24 13:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/16/24 16:06	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 500-790942/2-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	Leach	1311			1.0 g	500 mL	790942	10/16/24 15:37	PA	EET CHI
							Completed:	10/17/24 09:37 [1]		
Total/NA	Analysis	8260D		20	5 mL	5 mL	791267	10/18/24 11:48	PMF	EET CHI

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 500-791548/4
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	791548	10/21/24 09:53	MM	EET CHI

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687416/3-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 15:00	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/3-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:25	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/5-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 13:10	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687852/23-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	687852	10/14/24 13:58	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/17/24 00:41	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687852/3-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	687852	10/14/24 13:54	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688140	10/16/24 16:31	S1B	EET PEN

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

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

GC/MS VOA

Leach Batch: 790942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 500-790942/2-A	Lab Control Sample	Total/NA	Water	1311	

Analysis Batch: 791267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-1	TB-ROX-100724-8260	Total/NA	Water	8260D	
400-263862-3	MW26-ROX-100724	Total/NA	Water	8260D	
400-263862-4	MW1-ROX-100724	Total/NA	Water	8260D	
MB 500-791267/8	Method Blank	Total/NA	Water	8260D	
LCS 500-790942/2-A	Lab Control Sample	Total/NA	Water	8260D	790942

Analysis Batch: 791548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	8260D	
400-263862-6	MW10-ROX-100724	Total/NA	Water	8260D	
MB 500-791548/7	Method Blank	Total/NA	Water	8260D	
LCS 500-791548/4	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 687584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-3	MW26-ROX-100724	Total/NA	Water	3510C	
400-263862-4	MW1-ROX-100724	Total/NA	Water	3510C	
MB 400-687584/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 687595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-3	MW26-ROX-100724	Total/NA	Water	3511	
400-263862-4	MW1-ROX-100724	Total/NA	Water	3511	
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	3511	
400-263862-6	MW10-ROX-100724	Total/NA	Water	3511	
MB 400-687595/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-687595/2-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 687675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-3	MW26-ROX-100724	Total/NA	Water	8270E	687595
400-263862-4	MW1-ROX-100724	Total/NA	Water	8270E	687595
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	8270E	687595
400-263862-6	MW10-ROX-100724	Total/NA	Water	8270E	687595
MB 400-687595/1-A	Method Blank	Total/NA	Water	8270E	687595
LCS 400-687595/2-A	Lab Control Sample	Total/NA	Water	8270E	687595

Prep Batch: 687852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	3510C	
400-263862-6	MW10-ROX-100724	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 687852 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-687852/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-687852/22-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-687852/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-687852/23-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-687852/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 687921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-3	MW26-ROX-100724	Total/NA	Water	8270E	687584
400-263862-4	MW1-ROX-100724	Total/NA	Water	8270E	687584
MB 400-687584/1-A	Method Blank	Total/NA	Water	8270E	687584
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584

Analysis Batch: 688140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	8270E	687852
400-263862-6	MW10-ROX-100724	Total/NA	Water	8270E	687852
MB 400-687852/1-A	Method Blank	Total/NA	Water	8270E	687852
LCS 400-687852/22-A	Lab Control Sample	Total/NA	Water	8270E	687852
LCS 400-687852/2-A	Lab Control Sample	Total/NA	Water	8270E	687852
LCSD 400-687852/23-A	Lab Control Sample Dup	Total/NA	Water	8270E	687852
LCSD 400-687852/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	687852

GC Semi VOA

Prep Batch: 687416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-2	TB-ROX-100724-8011	Total/NA	Water	8011	
400-263862-3	MW26-ROX-100724	Total/NA	Water	8011	
400-263862-4	MW1-ROX-100724	Total/NA	Water	8011	
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	8011	
400-263862-6	MW10-ROX-100724	Total/NA	Water	8011	
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 687442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263862-2	TB-ROX-100724-8011	Total/NA	Water	8011	687416
400-263862-3	MW26-ROX-100724	Total/NA	Water	8011	687416
400-263862-4	MW1-ROX-100724	Total/NA	Water	8011	687416
400-263862-5	MW1-ROX-100724-DUP	Total/NA	Water	8011	687416
400-263862-6	MW10-ROX-100724	Total/NA	Water	8011	687416
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	687416
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	687416
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	687416

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

Lab Sample ID: MB 500-791267/8
Matrix: Water
Analysis Batch: 791267

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/18/24 10:59	1
Acrolein	ND		100	35	ug/L			10/18/24 10:59	1
Acrylonitrile	ND		20	6.0	ug/L			10/18/24 10:59	1
Benzene	ND		0.50	0.18	ug/L			10/18/24 10:59	1
Bromobenzene	ND		1.0	0.60	ug/L			10/18/24 10:59	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/18/24 10:59	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/18/24 10:59	1
Bromoform	ND		1.0	0.96	ug/L			10/18/24 10:59	1
Bromomethane	ND		3.0	1.8	ug/L			10/18/24 10:59	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/18/24 10:59	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/18/24 10:59	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/18/24 10:59	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/18/24 10:59	1
Chloroethane	ND		5.0	0.47	ug/L			10/18/24 10:59	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/18/24 10:59	1
Chloroform	ND		2.0	0.92	ug/L			10/18/24 10:59	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/18/24 10:59	1
Chloromethane	ND		5.0	0.79	ug/L			10/18/24 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/18/24 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/18/24 10:59	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/18/24 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/18/24 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/18/24 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/18/24 10:59	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/18/24 10:59	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/18/24 10:59	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/18/24 10:59	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/18/24 10:59	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/18/24 10:59	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/18/24 10:59	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/18/24 10:59	1
1,1-Dichloropropene	ND		1.0	0.33	ug/L			10/18/24 10:59	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/18/24 10:59	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/18/24 10:59	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/18/24 10:59	1
2-Hexanone	ND		5.0	2.2	ug/L			10/18/24 10:59	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/18/24 10:59	1
Methylene bromide	ND		1.0	0.58	ug/L			10/18/24 10:59	1
Methylene Chloride	8.95		5.0	3.6	ug/L			10/18/24 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/18/24 10:59	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/18/24 10:59	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/18/24 10:59	1
Naphthalene	0.453	J	1.0	0.44	ug/L			10/18/24 10:59	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/18/24 10:59	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/18/24 10:59	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/18/24 10:59	1
o-Xylene	ND		0.50	0.21	ug/L			10/18/24 10:59	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/18/24 10:59	1

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

Lab Sample ID: MB 500-791267/8
Matrix: Water
Analysis Batch: 791267

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	0.29	ug/L			10/18/24 10:59	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			10/18/24 10:59	1
Styrene	ND		1.0	0.31	ug/L			10/18/24 10:59	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/18/24 10:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/18/24 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/18/24 10:59	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/18/24 10:59	1
Toluene	ND		0.50	0.21	ug/L			10/18/24 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/18/24 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/18/24 10:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/18/24 10:59	1
1,2,4-Trichlorobenzene	0.370	J	1.0	0.31	ug/L			10/18/24 10:59	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/18/24 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/18/24 10:59	1
Trichloroethene	ND		0.50	0.15	ug/L			10/18/24 10:59	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/18/24 10:59	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/18/24 10:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/18/24 10:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/18/24 10:59	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/18/24 10:59	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/18/24 10:59	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/18/24 10:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*72 - 124*		*10/18/24 10:59*	*1*
Dibromofluoromethane	*95*		*75 - 120*		*10/18/24 10:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 126*		*10/18/24 10:59*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*10/18/24 10:59*	*1*

Lab Sample ID: LCS 500-790942/2-A
Matrix: Water
Analysis Batch: 791267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	1000	563		ug/L		56	40 - 143
Acrylonitrile	10000	6170	*-	ug/L		62	67 - 140
Benzene	1000	872		ug/L		87	70 - 120
Bromobenzene	1000	861		ug/L		86	70 - 122
Bromochloromethane	1000	903		ug/L		90	65 - 122
Bromodichloromethane	1000	846		ug/L		85	69 - 120
Bromoform	1000	686		ug/L		69	56 - 132
Bromomethane	1000	1200		ug/L		120	40 - 152
2-Butanone (MEK)	1000	562		ug/L		56	46 - 144
Carbon disulfide	1000	909		ug/L		91	66 - 120
Carbon tetrachloride	1000	988		ug/L		99	59 - 133
Chlorobenzene	1000	967		ug/L		97	70 - 120
Chloroethane	1000	1040		ug/L		104	48 - 136
2-Chloroethyl vinyl ether	1000	731		ug/L		73	52 - 136

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

Lab Sample ID: LCS 500-790942/2-A
Matrix: Water
Analysis Batch: 791267

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	1000	798		ug/L		80	70 - 120
Chloromethane	1000	1060		ug/L		106	56 - 152
cis-1,2-Dichloroethene	1000	890		ug/L		89	70 - 125
cis-1,3-Dichloropropene	1000	866		ug/L		87	64 - 127
Dibromochloromethane	1000	831		ug/L		83	68 - 125
1,2-Dichlorobenzene	1000	926		ug/L		93	70 - 125
1,3-Dichlorobenzene	1000	903		ug/L		90	70 - 125
1,4-Dichlorobenzene	1000	897		ug/L		90	70 - 120
Dichlorodifluoromethane	1000	926		ug/L		93	40 - 159
1,1-Dichloroethane	1000	860		ug/L		86	70 - 125
1,2-Dichloroethane	1000	885		ug/L		88	68 - 127
1,1-Dichloroethene	1000	970		ug/L		97	67 - 122
1,2-Dichloropropane	1000	842		ug/L		84	67 - 130
1,3-Dichloropropane	1000	873		ug/L		87	62 - 136
2,2-Dichloropropane	1000	1030		ug/L		103	58 - 139
1,1-Dichloropropene	1000	928		ug/L		93	70 - 121
Ethylbenzene	1000	926		ug/L		93	70 - 123
Ethyl methacrylate	1000	770		ug/L		77	63 - 129
Hexachlorobutadiene	1000	808		ug/L		81	51 - 150
2-Hexanone	1000	631		ug/L		63	54 - 146
Isopropylbenzene	1000	839		ug/L		84	70 - 126
Methylene bromide	1000	830		ug/L		83	70 - 120
Methylene Chloride	1000	1040		ug/L		104	69 - 125
4-Methyl-2-pentanone (MIBK)	1000	615		ug/L		62	55 - 139
Methyl tert-butyl ether	1000	870		ug/L		87	55 - 123
m-Xylene & p-Xylene	1000	884		ug/L		88	70 - 125
Naphthalene	1000	635		ug/L		63	53 - 144
n-Butylbenzene	1000	967		ug/L		97	68 - 125
N-Propylbenzene	1000	884		ug/L		88	69 - 127
o-Chlorotoluene	1000	818		ug/L		82	70 - 125
o-Xylene	1000	893		ug/L		89	70 - 120
p-Chlorotoluene	1000	849		ug/L		85	68 - 124
p-Isopropyltoluene	1000	958		ug/L		96	70 - 125
sec-Butylbenzene	1000	932		ug/L		93	70 - 123
Styrene	1000	942		ug/L		94	70 - 120
tert-Butylbenzene	1000	922		ug/L		92	70 - 121
1,1,1,2-Tetrachloroethane	1000	935		ug/L		94	70 - 125
1,1,2,2-Tetrachloroethane	1000	699		ug/L		70	62 - 140
Tetrachloroethene	1000	1020		ug/L		102	70 - 128
Toluene	1000	919		ug/L		92	70 - 125
trans-1,2-Dichloroethene	1000	946		ug/L		95	70 - 125
trans-1,3-Dichloropropene	1000	831		ug/L		83	62 - 128
1,2,3-Trichlorobenzene	1000	796		ug/L		80	51 - 145
1,2,4-Trichlorobenzene	1000	820		ug/L		82	57 - 137
1,1,1-Trichloroethane	1000	973		ug/L		97	70 - 125
1,1,2-Trichloroethane	1000	789		ug/L		79	71 - 130
Trichloroethene	1000	929		ug/L		93	70 - 125
Trichlorofluoromethane	1000	952		ug/L		95	55 - 128
1,2,3-Trichloropropane	1000	705		ug/L		71	50 - 133

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

Lab Sample ID: LCS 500-790942/2-A
Matrix: Water
Analysis Batch: 791267

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-Trimethylbenzene	1000	875		ug/L		88	70 - 123
1,3,5-Trimethylbenzene	1000	906		ug/L		91	70 - 123
Vinyl acetate	1000	580		ug/L		58	43 - 133
Vinyl chloride	1000	1190		ug/L		119	64 - 126
Xylenes, Total	2000	1780		ug/L		89	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*78*		*72 - 124*
Dibromofluoromethane	*99*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 126*
Toluene-d8 (Surr)	*107*		*75 - 120*

Lab Sample ID: MB 500-791548/7
Matrix: Water
Analysis Batch: 791548

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	4.3	ug/L			10/21/24 11:10	1
Acrolein	ND		100	35	ug/L			10/21/24 11:10	1
Acrylonitrile	ND		20	6.0	ug/L			10/21/24 11:10	1
Benzene	ND		0.50	0.18	ug/L			10/21/24 11:10	1
Bromobenzene	ND		1.0	0.60	ug/L			10/21/24 11:10	1
Bromochloromethane	ND		1.0	0.50	ug/L			10/21/24 11:10	1
Bromodichloromethane	ND		1.0	0.57	ug/L			10/21/24 11:10	1
Bromoform	ND		1.0	0.96	ug/L			10/21/24 11:10	1
Bromomethane	ND		3.0	1.8	ug/L			10/21/24 11:10	1
2-Butanone (MEK)	ND		5.0	2.3	ug/L			10/21/24 11:10	1
Carbon disulfide	ND		2.0	1.1	ug/L			10/21/24 11:10	1
Carbon tetrachloride	ND		1.0	0.41	ug/L			10/21/24 11:10	1
Chlorobenzene	ND		1.0	0.41	ug/L			10/21/24 11:10	1
Chloroethane	ND		5.0	0.47	ug/L			10/21/24 11:10	1
2-Chloroethyl vinyl ether	ND		2.0	1.6	ug/L			10/21/24 11:10	1
Chloroform	ND		2.0	0.92	ug/L			10/21/24 11:10	1
1-Chlorohexane	ND		1.0	0.53	ug/L			10/21/24 11:10	1
Chloromethane	ND		5.0	0.79	ug/L			10/21/24 11:10	1
cis-1,2-Dichloroethene	ND		1.0	0.42	ug/L			10/21/24 11:10	1
cis-1,3-Dichloropropene	ND		1.0	0.52	ug/L			10/21/24 11:10	1
Dibromochloromethane	ND		1.0	0.83	ug/L			10/21/24 11:10	1
1,2-Dichlorobenzene	ND		1.0	0.48	ug/L			10/21/24 11:10	1
1,3-Dichlorobenzene	ND		1.0	0.41	ug/L			10/21/24 11:10	1
1,4-Dichlorobenzene	ND		1.0	0.45	ug/L			10/21/24 11:10	1
Dichlorodifluoromethane	ND		3.0	1.8	ug/L			10/21/24 11:10	1
1,1-Dichloroethane	ND		1.0	0.36	ug/L			10/21/24 11:10	1
1,2-Dichloroethane	ND		1.0	0.58	ug/L			10/21/24 11:10	1
1,1-Dichloroethene	ND		1.0	0.48	ug/L			10/21/24 11:10	1
1,2-Dichloropropane	ND		1.0	0.37	ug/L			10/21/24 11:10	1
1,3-Dichloropropane	ND		1.0	0.56	ug/L			10/21/24 11:10	1
2,2-Dichloropropane	ND		5.0	0.48	ug/L			10/21/24 11:10	1

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

Lab Sample ID: MB 500-791548/7
Matrix: Water
Analysis Batch: 791548

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	0.33	ug/L			10/21/24 11:10	1
Ethylbenzene	ND		0.50	0.20	ug/L			10/21/24 11:10	1
Ethyl methacrylate	ND		2.5	0.80	ug/L			10/21/24 11:10	1
Hexachlorobutadiene	ND		1.0	0.54	ug/L			10/21/24 11:10	1
2-Hexanone	ND		5.0	2.2	ug/L			10/21/24 11:10	1
Isopropylbenzene	ND		1.0	0.29	ug/L			10/21/24 11:10	1
Methylene bromide	ND		1.0	0.58	ug/L			10/21/24 11:10	1
Methylene Chloride	ND		5.0	3.6	ug/L			10/21/24 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.0	ug/L			10/21/24 11:10	1
Methyl tert-butyl ether	ND		1.0	0.43	ug/L			10/21/24 11:10	1
m-Xylene & p-Xylene	ND		1.0	0.30	ug/L			10/21/24 11:10	1
Naphthalene	ND		1.0	0.44	ug/L			10/21/24 11:10	1
n-Butylbenzene	ND		1.0	0.33	ug/L			10/21/24 11:10	1
N-Propylbenzene	ND		1.0	0.32	ug/L			10/21/24 11:10	1
o-Chlorotoluene	ND		1.0	0.36	ug/L			10/21/24 11:10	1
o-Xylene	ND		0.50	0.21	ug/L			10/21/24 11:10	1
p-Chlorotoluene	ND		1.0	0.34	ug/L			10/21/24 11:10	1
p-Isopropyltoluene	ND		1.0	0.29	ug/L			10/21/24 11:10	1
sec-Butylbenzene	ND		1.0	0.27	ug/L			10/21/24 11:10	1
Styrene	ND		1.0	0.31	ug/L			10/21/24 11:10	1
tert-Butylbenzene	ND		1.0	0.26	ug/L			10/21/24 11:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.67	ug/L			10/21/24 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.65	ug/L			10/21/24 11:10	1
Tetrachloroethene	ND		1.0	0.39	ug/L			10/21/24 11:10	1
Toluene	ND		0.50	0.21	ug/L			10/21/24 11:10	1
trans-1,2-Dichloroethene	ND		1.0	0.44	ug/L			10/21/24 11:10	1
trans-1,3-Dichloropropene	ND		1.0	0.63	ug/L			10/21/24 11:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.35	ug/L			10/21/24 11:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			10/21/24 11:10	1
1,1,1-Trichloroethane	ND		1.0	0.45	ug/L			10/21/24 11:10	1
1,1,2-Trichloroethane	ND		1.0	0.73	ug/L			10/21/24 11:10	1
Trichloroethene	ND		0.50	0.15	ug/L			10/21/24 11:10	1
Trichlorofluoromethane	ND		1.0	0.44	ug/L			10/21/24 11:10	1
1,2,3-Trichloropropane	ND		2.0	1.5	ug/L			10/21/24 11:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.30	ug/L			10/21/24 11:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.29	ug/L			10/21/24 11:10	1
Vinyl acetate	ND		2.0	0.78	ug/L			10/21/24 11:10	1
Vinyl chloride	ND		1.0	0.47	ug/L			10/21/24 11:10	1
Xylenes, Total	ND		1.0	0.30	ug/L			10/21/24 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*72 - 124*		*10/21/24 11:10*	*1*
Dibromofluoromethane	*97*		*75 - 120*		*10/21/24 11:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*75 - 126*		*10/21/24 11:10*	*1*
Toluene-d8 (Surr)	*83*		*75 - 120*		*10/21/24 11:10*	*1*

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

Lab Sample ID: LCS 500-791548/4
Matrix: Water
Analysis Batch: 791548

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	50.0	53.3		ug/L		107	40 - 143
Acrolein	2000	4340	*+	ug/L		217	40 - 150
Acrylonitrile	500	468		ug/L		94	67 - 140
Benzene	50.0	60.1		ug/L		120	70 - 120
Bromobenzene	50.0	43.5		ug/L		87	70 - 122
Bromochloromethane	50.0	51.6		ug/L		103	65 - 122
Bromodichloromethane	50.0	54.1		ug/L		108	69 - 120
Bromoform	50.0	37.4		ug/L		75	56 - 132
Bromomethane	50.0	75.4		ug/L		151	40 - 152
2-Butanone (MEK)	50.0	50.9		ug/L		102	46 - 144
Carbon disulfide	50.0	55.4		ug/L		111	66 - 120
Carbon tetrachloride	50.0	55.0		ug/L		110	59 - 133
Chlorobenzene	50.0	47.7		ug/L		95	70 - 120
Chloroethane	50.0	54.8		ug/L		110	48 - 136
2-Chloroethyl vinyl ether	50.0	31.4		ug/L		63	52 - 136
Chloroform	50.0	55.0		ug/L		110	70 - 120
Chloromethane	50.0	55.1		ug/L		110	56 - 152
cis-1,2-Dichloroethene	50.0	53.7		ug/L		107	70 - 125
cis-1,3-Dichloropropene	50.0	43.1		ug/L		86	64 - 127
Dibromochloromethane	50.0	41.0		ug/L		82	68 - 125
1,2-Dichlorobenzene	50.0	44.8		ug/L		90	70 - 125
1,3-Dichlorobenzene	50.0	45.2		ug/L		90	70 - 125
1,4-Dichlorobenzene	50.0	45.4		ug/L		91	70 - 120
Dichlorodifluoromethane	50.0	51.9		ug/L		104	40 - 159
1,1-Dichloroethane	50.0	53.8		ug/L		108	70 - 125
1,2-Dichloroethane	50.0	50.7		ug/L		101	68 - 127
1,1-Dichloroethene	50.0	56.2		ug/L		112	67 - 122
1,2-Dichloropropane	50.0	52.7		ug/L		105	67 - 130
1,3-Dichloropropane	50.0	47.8		ug/L		96	62 - 136
2,2-Dichloropropane	50.0	50.5		ug/L		101	58 - 139
1,1-Dichloropropene	50.0	53.2		ug/L		106	70 - 121
Ethylbenzene	50.0	45.9		ug/L		92	70 - 123
Ethyl methacrylate	50.0	37.7		ug/L		75	63 - 129
Hexachlorobutadiene	50.0	44.3		ug/L		89	51 - 150
2-Hexanone	50.0	47.4		ug/L		95	54 - 146
Isopropylbenzene	50.0	42.4		ug/L		85	70 - 126
Methylene bromide	50.0	52.8		ug/L		106	70 - 120
Methylene Chloride	50.0	49.2		ug/L		98	69 - 125
4-Methyl-2-pentanone (MIBK)	50.0	42.8		ug/L		86	55 - 139
Methyl tert-butyl ether	50.0	43.6		ug/L		87	55 - 123
m-Xylene & p-Xylene	50.0	47.9		ug/L		96	70 - 125
Naphthalene	50.0	37.0		ug/L		74	53 - 144
n-Butylbenzene	50.0	47.6		ug/L		95	68 - 125
N-Propylbenzene	50.0	45.0		ug/L		90	69 - 127
o-Chlorotoluene	50.0	44.3		ug/L		89	70 - 125
o-Xylene	50.0	46.3		ug/L		93	70 - 120
p-Chlorotoluene	50.0	45.1		ug/L		90	68 - 124
p-Isopropyltoluene	50.0	41.9		ug/L		84	70 - 125

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

Lab Sample ID: LCS 500-791548/4
Matrix: Water
Analysis Batch: 791548

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	47.3		ug/L		95	70 - 123
Styrene	50.0	44.5		ug/L		89	70 - 120
tert-Butylbenzene	50.0	44.4		ug/L		89	70 - 121
1,1,1,2-Tetrachloroethane	50.0	46.4		ug/L		93	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.6		ug/L		87	62 - 140
Tetrachloroethene	50.0	46.2		ug/L		92	70 - 128
Toluene	50.0	45.8		ug/L		92	70 - 125
trans-1,2-Dichloroethene	50.0	56.4		ug/L		113	70 - 125
trans-1,3-Dichloropropene	50.0	40.1		ug/L		80	62 - 128
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	51 - 145
1,2,4-Trichlorobenzene	50.0	45.2		ug/L		90	57 - 137
1,1,1-Trichloroethane	50.0	54.1		ug/L		108	70 - 125
1,1,2-Trichloroethane	50.0	40.8		ug/L		82	71 - 130
Trichloroethene	50.0	57.8		ug/L		116	70 - 125
Trichlorofluoromethane	50.0	63.6		ug/L		127	55 - 128
1,2,3-Trichloropropane	50.0	41.4		ug/L		83	50 - 133
1,2,4-Trimethylbenzene	50.0	45.8		ug/L		92	70 - 123
1,3,5-Trimethylbenzene	50.0	46.1		ug/L		92	70 - 123
Vinyl acetate	50.0	49.9		ug/L		100	43 - 133
Vinyl chloride	50.0	54.0		ug/L		108	64 - 126
Xylenes, Total	100	94.2		ug/L		94	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*72 - 124*
Dibromofluoromethane	*91*		*75 - 120*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 126*
Toluene-d8 (Surr)	*85*		*75 - 120*

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzenethiol	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzoic acid	ND		30	24	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzyl alcohol	ND		10	7.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenzofuran	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Diethyl phthalate	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,4-Dioxane	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachloroethane	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Indene	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Isophorone	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Methylphenol	ND		10	3.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitroaniline	ND		10	5.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3-Nitroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitroaniline	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
Nitrobenzene	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitrophenol	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitrophenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 11:40	1
Phenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Pyridine	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/11/24 11:30	10/15/24 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Nitrobenzene-d5	*65*		*16 - 127*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Phenol-d5	*35*		*10 - 129*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*

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

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	35.0		ug/L		29	10 - 127
Benzoic acid	493	257		ug/L		52	19 - 126
Benzyl alcohol	120	71.7		ug/L		60	17 - 109
Bis(2-chloroethoxy)methane	120	72.5		ug/L		60	24 - 125
Bis(2-chloroethyl)ether	120	66.1		ug/L		55	10 - 121
bis (2-chloroisopropyl) ether	120	69.0		ug/L		58	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.9		ug/L		77	16 - 150
4-Bromophenyl phenyl ether	120	88.4		ug/L		74	17 - 150
Butyl benzyl phthalate	120	89.8		ug/L		75	21 - 150
4-Chloroaniline	120	62.9		ug/L		52	10 - 124
4-Chloro-3-methylphenol	120	95.6		ug/L		80	37 - 131
2-Chloronaphthalene	120	84.2		ug/L		70	24 - 132
2-Chlorophenol	120	78.9		ug/L		66	27 - 124
4-Chlorophenyl phenyl ether	120	91.8		ug/L		76	27 - 147
Dibenz[a,h]acridine	59.9	64.9		ug/L		108	40 - 140
Dibenzofuran	120	87.5		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	128		ug/L		80	10 - 150
2,4-Dichlorophenol	120	86.0		ug/L		72	33 - 132
Diethyl phthalate	120	99.7		ug/L		83	37 - 145
2,4-Dimethylphenol	120	151		ug/L		126	38 - 132
Dimethyl phthalate	120	96.2		ug/L		80	32 - 137
Di-n-butyl phthalate	120	102		ug/L		85	27 - 150
4,6-Dinitro-ortho-cresol	240	246		ug/L		103	14 - 150
2,4-Dinitrophenol	240	323		ug/L		135	15 - 150
2,4-Dinitrotoluene	120	97.8		ug/L		82	35 - 136
2,6-Dinitrotoluene	120	94.0		ug/L		78	29 - 140
Di-n-octyl phthalate	120	93.5		ug/L		78	26 - 150
1,4-Dioxane	120	39.7		ug/L		33	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	80.6		ug/L		67	23 - 138
Hexachlorobenzene	120	95.0		ug/L		79	10 - 150
Hexachlorocyclopentadiene	120	269	*+	ug/L		224	10 - 124
Hexachloroethane	120	56.8		ug/L		47	10 - 127
Indene	120	87.7		ug/L		73	18 - 150
Isophorone	120	79.3		ug/L		66	28 - 127
2-Methylphenol	120	81.7		ug/L		68	34 - 124
3 & 4 Methylphenol	120	76.6		ug/L		64	32 - 122
2-Nitroaniline	120	81.7		ug/L		68	24 - 139
3-Nitroaniline	120	63.3		ug/L		53	10 - 128
4-Nitroaniline	120	84.9		ug/L		71	28 - 118
Nitrobenzene	120	66.3		ug/L		55	29 - 120
2-Nitrophenol	120	81.9		ug/L		68	25 - 148
4-Nitrophenol	240	172		ug/L		72	12 - 129
N-Nitrosodimethylamine	120	43.9		ug/L		37	10 - 115
N-Nitrosodi-n-propylamine	120	75.4		ug/L		63	24 - 142
N-Nitrosodiphenylamine	119	83.1		ug/L		70	29 - 138
Pentachlorophenol	240	211		ug/L		88	19 - 150
Phenol	120	52.7		ug/L		44	11 - 95
Pyridine	240	27.1		ug/L		11	10 - 82

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

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			59.9	40.8		ug/L		68	10 - 141		
2,4,5-Trichlorophenol			120	93.4		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	91.3		ug/L		76	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*64*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCS 400-687584/4-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	96.0		ug/L		80	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	31.4		ug/L		26	10 - 127	11	40
Benzoic acid			493	275		ug/L		56	19 - 126	7	40
Benzyl alcohol			120	72.5		ug/L		60	17 - 109	1	40
Bis(2-chloroethoxy)methane			120	72.1		ug/L		60	24 - 125	1	40
Bis(2-chloroethyl)ether			120	60.5		ug/L		50	10 - 121	9	40
bis (2-chloroisopropyl) ether			120	68.5		ug/L		57	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	88.5		ug/L		74	16 - 150	4	40
4-Bromophenyl phenyl ether			120	87.2		ug/L		73	17 - 150	1	40
Butyl benzyl phthalate			120	89.2		ug/L		74	21 - 150	1	40
4-Chloroaniline			120	60.6		ug/L		50	10 - 124	4	40
4-Chloro-3-methylphenol			120	94.8		ug/L		79	37 - 131	1	40
2-Chloronaphthalene			120	83.2		ug/L		69	24 - 132	1	40
2-Chlorophenol			120	79.4		ug/L		66	27 - 124	1	40
4-Chlorophenyl phenyl ether			120	89.6		ug/L		75	27 - 147	2	40
Dibenz[a,h]acridine			59.9	63.4		ug/L		106	40 - 140	2	40
Dibenzofuran			120	87.0		ug/L		73	30 - 135	1	40

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

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	123		ug/L		77	10 - 150	4	40
2,4-Dichlorophenol			120	87.2		ug/L		73	33 - 132	1	40
Diethyl phthalate			120	96.9		ug/L		81	37 - 145	3	40
2,4-Dimethylphenol			120	148		ug/L		123	38 - 132	2	40
Dimethyl phthalate			120	93.4		ug/L		78	32 - 137	3	40
Di-n-butyl phthalate			120	97.6		ug/L		81	27 - 150	4	40
4,6-Dinitro-ortho-cresol			240	243		ug/L		101	14 - 150	1	40
2,4-Dinitrophenol			240	333		ug/L		139	15 - 150	3	40
2,4-Dinitrotoluene			120	96.1		ug/L		80	35 - 136	2	40
2,6-Dinitrotoluene			120	91.4		ug/L		76	29 - 140	3	40
Di-n-octyl phthalate			120	89.3		ug/L		74	26 - 150	5	40
1,4-Dioxane			120	42.6		ug/L		36	10 - 87	7	40
1,2-Diphenylhydrazine (as Azobenzene)			120	79.7		ug/L		66	23 - 138	1	40
Hexachlorobenzene			120	93.5		ug/L		78	10 - 150	2	40
Hexachlorocyclopentadiene			120	275	*+	ug/L		230	10 - 124	2	40
Hexachloroethane			120	57.0		ug/L		48	10 - 127	0	40
Indene			120	86.4		ug/L		72	18 - 150	1	40
Isophorone			120	77.2		ug/L		64	28 - 127	3	40
2-Methylphenol			120	81.1		ug/L		68	34 - 124	1	40
3 & 4 Methylphenol			120	77.5		ug/L		65	32 - 122	1	40
2-Nitroaniline			120	81.1		ug/L		68	24 - 139	1	40
3-Nitroaniline			120	63.2		ug/L		53	10 - 128	0	40
4-Nitroaniline			120	83.1		ug/L		69	28 - 118	2	40
Nitrobenzene			120	66.6		ug/L		56	29 - 120	0	40
2-Nitrophenol			120	83.8		ug/L		70	25 - 148	2	40
4-Nitrophenol			240	171		ug/L		71	12 - 129	1	40
N-Nitrosodimethylamine			120	46.6		ug/L		39	10 - 115	6	40
N-Nitrosodi-n-propylamine			120	77.3		ug/L		64	24 - 142	2	40
N-Nitrosodiphenylamine			119	83.2		ug/L		70	29 - 138	0	40
Pentachlorophenol			240	209		ug/L		87	19 - 150	1	40
Phenol			120	51.6		ug/L		43	11 - 95	2	40
Pyridine			240	19.5	*-	ug/L		8	10 - 82	33	40
Quinoline			59.9	33.2		ug/L		55	10 - 141	21	40
2,4,5-Trichlorophenol			120	92.3		ug/L		77	30 - 144	1	40
2,4,6-Trichlorophenol			120	89.8		ug/L		75	27 - 147	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*70*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

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

Lab Sample ID: LCSD 400-687584/5-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	88.1		ug/L		73	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

Lab Sample ID: MB 400-687852/1-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
Benzenethiol	ND		10	9.9	ug/L		10/14/24 13:54	10/16/24 15:42	1
Benzoic acid	ND		30	24	ug/L		10/14/24 13:54	10/16/24 15:42	1
Benzyl alcohol	ND		10	7.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/14/24 13:54	10/16/24 15:42	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/14/24 13:54	10/16/24 15:42	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Chloroaniline	ND		10	4.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/14/24 13:54	10/16/24 15:42	1
2-Chlorophenol	ND		10	4.1	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/14/24 13:54	10/16/24 15:42	1
Dibenzofuran	ND		10	4.0	ug/L		10/14/24 13:54	10/16/24 15:42	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
Diethyl phthalate	ND		10	4.4	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/14/24 13:54	10/16/24 15:42	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/14/24 13:54	10/16/24 15:42	1
1,4-Dioxane	ND		10	4.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/14/24 13:54	10/16/24 15:42	1

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

Lab Sample ID: MB 400-687852/1-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687852

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		10	5.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
Indene	ND		10	3.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
Isophorone	ND		10	5.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
2-Methylphenol	ND		10	3.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
2-Nitroaniline	ND		10	5.0	ug/L		10/14/24 13:54	10/16/24 15:42	1
3-Nitroaniline	ND		10	4.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Nitroaniline	ND		10	4.1	ug/L		10/14/24 13:54	10/16/24 15:42	1
Nitrobenzene	ND		10	4.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
2-Nitrophenol	ND		10	4.6	ug/L		10/14/24 13:54	10/16/24 15:42	1
4-Nitrophenol	ND		10	3.3	ug/L		10/14/24 13:54	10/16/24 15:42	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/14/24 13:54	10/16/24 15:42	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/14/24 13:54	10/16/24 15:42	1
Pentachlorophenol	ND		20	12	ug/L		10/14/24 13:54	10/16/24 15:42	1
Phenol	ND		10	4.2	ug/L		10/14/24 13:54	10/16/24 15:42	1
Pyridine	ND		10	10	ug/L		10/14/24 13:54	10/16/24 15:42	1
Quinoline	ND		10	2.4	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/14/24 13:54	10/16/24 15:42	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/14/24 13:54	10/16/24 15:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*21 - 114*	*10/14/24 13:54*	*10/16/24 15:42*	*1*
2-Fluorophenol	*50*		*10 - 105*	*10/14/24 13:54*	*10/16/24 15:42*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*10/14/24 13:54*	*10/16/24 15:42*	*1*
Phenol-d5	*42*		*10 - 129*	*10/14/24 13:54*	*10/16/24 15:42*	*1*
Terphenyl-d14	*85*		*13 - 150*	*10/14/24 13:54*	*10/16/24 15:42*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*10/14/24 13:54*	*10/16/24 15:42*	*1*

Lab Sample ID: LCS 400-687852/22-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687852

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	71.9		ug/L		60	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*21 - 114*
2-Fluorophenol	*52*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*84*		*13 - 150*
2,4,6-Tribromophenol	*60*		*10 - 150*

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

Lab Sample ID: LCS 400-687852/2-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687852

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	59.0		ug/L		49	10 - 127
Benzoic acid	493	237		ug/L		48	19 - 126
Benzyl alcohol	120	86.8		ug/L		72	17 - 109
Bis(2-chloroethoxy)methane	120	72.5		ug/L		60	24 - 125
Bis(2-chloroethyl)ether	120	56.9		ug/L		47	10 - 121
bis (2-chloroisopropyl) ether	120	72.0		ug/L		60	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.3		ug/L		76	16 - 150
4-Bromophenyl phenyl ether	120	100		ug/L		84	17 - 150
Butyl benzyl phthalate	120	89.9		ug/L		75	21 - 150
4-Chloroaniline	120	67.4		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	101		ug/L		84	37 - 131
2-Chloronaphthalene	120	84.3		ug/L		70	24 - 132
2-Chlorophenol	120	79.1		ug/L		66	27 - 124
4-Chlorophenyl phenyl ether	120	93.4		ug/L		78	27 - 147
Dibenz[a,h]acridine	59.9	62.8		ug/L		105	40 - 140
Dibenzofuran	120	87.1		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	240	201		ug/L		84	10 - 150
2,4-Dichlorophenol	120	81.4		ug/L		68	33 - 132
Diethyl phthalate	120	102		ug/L		85	37 - 145
2,4-Dimethylphenol	120	148		ug/L		123	38 - 132
Dimethyl phthalate	120	89.2		ug/L		74	32 - 137
Di-n-butyl phthalate	120	97.0		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	246		ug/L		103	14 - 150
2,4-Dinitrophenol	240	247		ug/L		103	15 - 150
2,4-Dinitrotoluene	120	94.1		ug/L		78	35 - 136
2,6-Dinitrotoluene	120	84.9		ug/L		71	29 - 140
Di-n-octyl phthalate	120	97.7		ug/L		81	26 - 150
1,4-Dioxane	120	47.7		ug/L		40	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	96.8		ug/L		81	23 - 138
Hexachlorobenzene	120	106		ug/L		89	10 - 150
Hexachlorocyclopentadiene	120	223	*+	ug/L		186	10 - 124
Hexachloroethane	120	55.2		ug/L		46	10 - 127
Indene	120	88.9		ug/L		74	18 - 150
Isophorone	120	71.3		ug/L		59	28 - 127
2-Methylphenol	120	85.6		ug/L		71	34 - 124
3 & 4 Methylphenol	120	78.9		ug/L		66	32 - 122
2-Nitroaniline	120	103		ug/L		86	24 - 139
3-Nitroaniline	120	89.4		ug/L		74	10 - 128
4-Nitroaniline	120	84.1		ug/L		70	28 - 118
Nitrobenzene	120	78.0		ug/L		65	29 - 120
2-Nitrophenol	120	72.2		ug/L		60	25 - 148
4-Nitrophenol	240	248		ug/L		103	12 - 129
N-Nitrosodimethylamine	120	86.1		ug/L		72	10 - 115
N-Nitrosodi-n-propylamine	120	75.0		ug/L		63	24 - 142
N-Nitrosodiphenylamine	119	97.5		ug/L		82	29 - 138
Pentachlorophenol	240	210		ug/L		87	19 - 150
Phenol	120	57.9		ug/L		48	11 - 95
Pyridine	240	24.8		ug/L		10	10 - 82

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

Lab Sample ID: LCS 400-687852/2-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687852

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			59.9	45.3		ug/L		76	10 - 141		
2,4,5-Trichlorophenol			120	93.7		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	90.3		ug/L		75	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*57*		*10 - 105*
Nitrobenzene-d5	*73*		*16 - 127*
Phenol-d5	*51*		*10 - 129*
Terphenyl-d14	*82*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCSD 400-687852/23-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687852

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	68.8		ug/L		57	10 - 140	4	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*55*		*10 - 105*
Nitrobenzene-d5	*70*		*16 - 127*
Phenol-d5	*46*		*10 - 129*
Terphenyl-d14	*88*		*13 - 150*
2,4,6-Tribromophenol	*64*		*10 - 150*

Lab Sample ID: LCSD 400-687852/3-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687852

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	68.3		ug/L		57	10 - 127	15	40
Benzoic acid			493	232		ug/L		47	19 - 126	2	40
Benzyl alcohol			120	80.0		ug/L		67	17 - 109	8	40
Bis(2-chloroethoxy)methane			120	66.6		ug/L		56	24 - 125	8	40
Bis(2-chloroethyl)ether			120	53.7		ug/L		45	10 - 121	6	40
bis (2-chloroisopropyl) ether			120	65.2		ug/L		54	14 - 123	10	40
Bis(2-ethylhexyl) phthalate			120	88.1		ug/L		73	16 - 150	4	40
4-Bromophenyl phenyl ether			120	96.3		ug/L		80	17 - 150	4	40
Butyl benzyl phthalate			120	88.1		ug/L		73	21 - 150	2	40
4-Chloroaniline			120	68.3		ug/L		57	10 - 124	1	40
4-Chloro-3-methylphenol			120	96.2		ug/L		80	37 - 131	4	40
2-Chloronaphthalene			120	78.9		ug/L		66	24 - 132	7	40
2-Chlorophenol			120	72.3		ug/L		60	27 - 124	9	40
4-Chlorophenyl phenyl ether			120	89.4		ug/L		74	27 - 147	4	40
Dibenz[a,h]acridine			59.9	62.7		ug/L		105	40 - 140	0	40
Dibenzofuran			120	83.0		ug/L		69	30 - 135	5	40

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

Lab Sample ID: LCSD 400-687852/3-A
Matrix: Water
Analysis Batch: 688140

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687852

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			240	201		ug/L		84	10 - 150	0	40
2,4-Dichlorophenol			120	77.4		ug/L		64	33 - 132	5	40
Diethyl phthalate			120	98.1		ug/L		82	37 - 145	4	40
2,4-Dimethylphenol			120	143		ug/L		120	38 - 132	3	40
Dimethyl phthalate			120	83.5		ug/L		70	32 - 137	7	40
Di-n-butyl phthalate			120	95.0		ug/L		79	27 - 150	2	40
4,6-Dinitro-ortho-cresol			240	238		ug/L		99	14 - 150	3	40
2,4-Dinitrophenol			240	242		ug/L		101	15 - 150	2	40
2,4-Dinitrotoluene			120	90.3		ug/L		75	35 - 136	4	40
2,6-Dinitrotoluene			120	81.7		ug/L		68	29 - 140	4	40
Di-n-octyl phthalate			120	95.6		ug/L		80	26 - 150	2	40
1,4-Dioxane			120	43.0		ug/L		36	10 - 87	10	40
1,2-Diphenylhydrazine (as Azobenzene)			120	89.6		ug/L		75	23 - 138	8	40
Hexachlorobenzene			120	103		ug/L		86	10 - 150	3	40
Hexachlorocyclopentadiene			120	186	*+	ug/L		155	10 - 124	18	40
Hexachloroethane			120	52.8		ug/L		44	10 - 127	4	40
Indene			120	81.2		ug/L		68	18 - 150	9	40
Isophorone			120	67.4		ug/L		56	28 - 127	5	40
2-Methylphenol			120	79.0		ug/L		66	34 - 124	8	40
3 & 4 Methylphenol			120	75.1		ug/L		63	32 - 122	5	40
2-Nitroaniline			120	95.2		ug/L		79	24 - 139	8	40
3-Nitroaniline			120	87.8		ug/L		73	10 - 128	2	40
4-Nitroaniline			120	80.5		ug/L		67	28 - 118	4	40
Nitrobenzene			120	69.8		ug/L		58	29 - 120	11	40
2-Nitrophenol			120	67.7		ug/L		56	25 - 148	6	40
4-Nitrophenol			240	240		ug/L		100	12 - 129	3	40
N-Nitrosodimethylamine			120	74.1		ug/L		62	10 - 115	15	40
N-Nitrosodi-n-propylamine			120	71.7		ug/L		60	24 - 142	5	40
N-Nitrosodiphenylamine			119	93.5		ug/L		79	29 - 138	4	40
Pentachlorophenol			240	209		ug/L		87	19 - 150	1	40
Phenol			120	52.7		ug/L		44	11 - 95	9	40
Pyridine			240	34.5		ug/L		14	10 - 82	33	40
Quinoline			59.9	45.0		ug/L		75	10 - 141	1	40
2,4,5-Trichlorophenol			120	87.6		ug/L		73	30 - 144	7	40
2,4,6-Trichlorophenol			120	85.0		ug/L		71	27 - 147	6	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*45*		*10 - 129*
Terphenyl-d14	*80*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

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

Lab Sample ID: MB 400-687595/1-A
Matrix: Water
Analysis Batch: 687675

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687595

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/11/24 12:30	10/12/24 01:09	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/11/24 12:30	10/12/24 01:09	1
Anthracene	ND		0.20	0.073	ug/L		10/11/24 12:30	10/12/24 01:09	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 01:09	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/11/24 12:30	10/12/24 01:09	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/11/24 12:30	10/12/24 01:09	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/11/24 12:30	10/12/24 01:09	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 01:09	1
Chrysene	ND		0.20	0.039	ug/L		10/11/24 12:30	10/12/24 01:09	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 01:09	1
Fluoranthene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 01:09	1
Fluorene	ND		0.20	0.087	ug/L		10/11/24 12:30	10/12/24 01:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/11/24 12:30	10/12/24 01:09	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/11/24 12:30	10/12/24 01:09	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/11/24 12:30	10/12/24 01:09	1
Phenanthrene	ND		0.20	0.044	ug/L		10/11/24 12:30	10/12/24 01:09	1
Pyrene	ND		0.20	0.040	ug/L		10/11/24 12:30	10/12/24 01:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*50 - 150*	*10/11/24 12:30*	*10/12/24 01:09*	*1*
Nitrobenzene-d5	*87*		*50 - 150*	*10/11/24 12:30*	*10/12/24 01:09*	*1*
Terphenyl-d14	*77*		*50 - 150*	*10/11/24 12:30*	*10/12/24 01:09*	*1*

Lab Sample ID: LCS 400-687595/2-A
Matrix: Water
Analysis Batch: 687675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687595

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.63		ug/L		79	50 - 150
Acenaphthylene	3.34	2.75		ug/L		83	50 - 150
Anthracene	3.34	2.78		ug/L		83	50 - 150
Benzo[a]anthracene	3.34	3.15		ug/L		95	50 - 150
Benzo[a]pyrene	3.34	2.94		ug/L		88	50 - 150
Benzo[b]fluoranthene	3.34	3.01		ug/L		90	50 - 150
Benzo[g,h,i]perylene	3.34	2.70		ug/L		81	50 - 150
Benzo[k]fluoranthene	3.34	2.85		ug/L		86	50 - 150
Chrysene	3.34	2.78		ug/L		83	50 - 150
Dibenz(a,h)anthracene	3.34	2.65		ug/L		80	50 - 150
Fluoranthene	3.34	2.87		ug/L		86	50 - 150
Fluorene	3.34	2.74		ug/L		82	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.70		ug/L		81	50 - 150
1-Methylnaphthalene	3.34	2.50		ug/L		75	50 - 150
2-Methylnaphthalene	3.34	2.27		ug/L		68	50 - 150
Phenanthrene	3.34	2.79		ug/L		84	50 - 150
Pyrene	3.34	2.83		ug/L		85	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*

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

Lab Sample ID: LCS 400-687595/2-A
Matrix: Water
Analysis Batch: 687675

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687595

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*106*		*50 - 150*
Terphenyl-d14	*84*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-687416/1-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687416

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		10/10/24 09:56	10/10/24 14:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/10/24 09:56	10/10/24 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*10/10/24 09:56*	*10/10/24 14:18*	*1*

Lab Sample ID: LCS 400-687416/2-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687416

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.101	0.100		ug/L		100	60 - 140
1,2-Dibromoethane	0.100	0.118		ug/L		118	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*51 - 149*

Lab Sample ID: LCSD 400-687416/3-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687416

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0987		ug/L		98	60 - 140	2	30
1,2-Dibromoethane	0.100	0.103		ug/L		103	60 - 140	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*124*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/7/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 1.2 / 3.1 IR

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-100724-8260	10/7/2024	0000	Water	2					2	X			
	TB-ROX-100724-8011	10/7/2024	0000	Water	2					2		X		
	MW26-ROX-100724	10/7/2024	0930	Water	6			4		10	X	X	X	X
	MW1-ROX-100724	10/7/2024	1050	Water	6			4		10	X	X	X	X
	MW1-ROX-100724-DUP	10/7/2024	1050	Water	6			4		10	X	X	X	X
	MW10-ROX-100724	10/7/2024	1255	Water	6			4		10	X	X	X	X

400-263862 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0546 9953, 7252 0546 9964	10/7/2024	1600
		10/18/24	8:50

Version: 19Sept24

CUSTODY SEALS: 1599932, 1599933, 1599934, 1599935

10/22/2024

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone 850 474-1001 Fax 850-478-2671

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Klingensmith, Leah	Carrier Tracking No(s)	COC No: 400-361535 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Leah Klingensmith@et eurofinsus com	State of Origin: Illinois	Page: Page 1 of 1
Company: Eurofins Environment Testing North Centr		Accreditations Required (See note): NELAP - Illinois		Job #: 400 263862 1
Address: 2417 Bond Street, ,	Due Date Requested: 10/18/2024			
City: University Park	TAT Requested (days):			
State, Zip: IL, 60484				
Phone: 708 534 5200(Tel) 708-534 5211(Fax)	PO #			
Email	WO #			
Project Name: ROXANA QUARTERLY GW	Project #: 40006124			
Site	SSOW#			

400-263862 COC

Analysis Requested

Preservation Codes:

Other.

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D/5030B (MOD) 8260B VOCs (Chl)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
TB-ROX-100724-8260 (400-263862-1)	10/7/24	12:00 Central	G	Water			X	2	
MW26-ROX-100724 (400-263862-3)	10/7/24	09.30 Central	G	Water			X	3	
MW1-ROX-100724 (400-263862-4)	10/7/24	10 50 Central	G	Water			X	3	
MW1-ROX 100724-DUP (400-263862 5)	10/7/24	10.50 Central	G	Water			X	3	
MW10-ROX 100724 (400-263862-6)	10/7/24	12:55 Central	G	Water			X	3	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Southeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Southeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Southeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Southeast, LLC

Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I, II, III, IV, Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment.

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	10-9-24/1700			10/10/24 0905	
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.4-3.1

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-263862-1

Login Number: 263862
List Number: 1
Creator: Beecher (Roberts), Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2°C, 3.1°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-263862-1

Login Number: 263862
List Number: 2
Creator: Scott, Sherri L

List Source: Eurofins Chicago
List Creation: 10/10/24 06:52 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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	3.1
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.	True	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-263862-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
US Fish & Wildlife	US Federal Programs	A22340	06-30-25
USDA	US Federal Programs	FLGNV23001	01-08-26
USDA	US Federal Programs	P330-21-00056	01-09-26
Virginia	NELAP	460166	06-14-25
West Virginia DEP	State	136	03-31-25

Laboratory: Eurofins Chicago

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Georgia	State	N/A	05-31-25
Georgia (DW)	State	939	05-31-25
Hawaii	State	NA	05-31-25
Illinois	NELAP	IL00035	05-31-25
Indiana	State	C-IL-02	05-31-25
Iowa	State	082	05-01-26
Kansas	NELAP	E-10161	10-31-24
Kentucky (UST)	State	AI # 108083	05-31-25
Kentucky (WW)	State	KY90023	12-31-24
Louisiana (All)	NELAP	02046	06-30-25
Mississippi	State	NA	05-31-25
North Carolina (WW/SW)	State	291	12-31-24
North Dakota	State	R-194	04-29-24 *
Oklahoma	State	8908	08-31-24 *
South Carolina	State	77001003	05-31-25
USDA	US Federal Programs	P330-18-00018	03-30-26
Wisconsin	State	999580010	08-31-25
Wyoming	State	8TMS-Q	05-31-25

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Laboratory Report Reviewed: 400-263931-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/26/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			4-Bromofluorobenzene surrogate in 400-263931-3 MSD was out of criteria, low biased. Matrix spikes are quality control samples and do not require qualification. No qualification of data was required.
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.		X		

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW6D-ROX-100824 MS/MSD	VOCs	Acetone	**38/40**	7	43-150/30
MW6D-ROX-100824 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW6D-ROX-100824 MS/MSD	VOCs	2-Hexanone	**61**/66	7	65-140/30
MW6D-ROX-100824 MS/MSD	SVOCs	2,4-Dinitrophenol	**167/159**	5	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	1,4-Dioxane	**26/23**	12	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	Hexachlorocyclopentadiene	**242/239**	1	50-150/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**	
		Pass	**Fail[1]**	**N/A**		

MW6D-ROX-100824 MS/MSD	SVOCs	N-Nitrosodimethylamine	**42/35**	20	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	Phenol	50/**49**	2	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	Pyridine	**17/15**	8	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	Aniline	56/**45**	21	50-150/40
MW6D-ROX-100824 MS/MSD	SVOCs	Benzoic acid	77/**11**	**150**	50-150/40

Analytical data that required qualification based on MS/MSD data are referenced 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Method 8260D (VOCs)
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.

2-Chloroethyl vinyl ether, acetone, and 2-hexanone in sample MW6D-ROX-100824 were qualified as estimated (UJ).

Method 8270E (SVOCs)
1,4-Dioxane, n-nitrosodimethylamine, phenol, aniline, and benzoic acid in sample MW6D-ROX-100824 were qualified as estimated (UJ).

Pyridine in sample MW6D-ROX-100824 was qualified due to LCS/LCSD recoveries outside of evaluation criteria. No further qualification is required.

Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-688036/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**215/230**	7	10-124/40
LCS/LCSD 400-688036/2-A/3-A	SVOCs	2,4-Dimethylphenol	128/**133**	4	38-132/40
LCS/LCSD 400-688036/2-A/3-A	SVOCs	2,4-Dinitrophenol	142/**163**	14	15-150/40
LCS/LCSD 400-688036/2-A/3-A	SVOCs	Pyridine	15/**8**	**64**	10-82/40
LCS 400-687965/2-A/	PAHs	2-Methylnaphthalene	**46**	NA	50-150

Analytical data that required qualification based on LCS/LCSD data are referenced below. Analytical data reported as non-detect and associated with LCS/LCSD recoveries above evaluation criteria, indicating a possible high bias,

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
did not require qualification. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. **Method 8270E (SVOCs)** Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples MW6D-ROX-1000824, MW6C-ROX-100824, and MW6B-ROX-100824 was qualified as estimated (UJ). **Method 8270E (PAHs)** 2-Methylnaphthalene in samples MW6D-ROX-1000824, MW6C-ROX-100824, and MW6B-ROX-100824 was qualified as estimated (UJ).					
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method	X			Analytical data reported as non-detect and associated with ICV/CCV %D recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.				Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.				
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/21/2024 1:48:10 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-263931-1

Reviewed 11/27/2024
AN

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
10/21/2024 1:48:10 PM

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

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Job Narrative
400-263931-1

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 10/9/2024 9:35 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.2°C and 2.0°C.

GC/MS VOA
Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-688093 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-688093 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 400-688093 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-100824-8260 (400-263931-1), MW6D-ROX-100824 (400-263931-3), MW6C-ROX-100824 (400-263931-4) and MW6B-ROX-100824 (400-263931-5). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688036 and analytical batch 400-688448 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688036 and analytical batch 400-688448 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688036 and analytical batch 400-688448 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-688036 and analytical batch 400-688448 recovered outside control limits for the following analytes: Pyridine.

Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-688036 and analytical batch 400-688448 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 400-688036 and analytical batch 400-688448 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688448 recovered above the upper control limit for 4-Nitrophenol, 2,4,5-Trichlorophenol, 4,6-Dinitro-ortho-cresol, 2,4-Dinitrophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, Hexachlorocyclopentadiene and 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688448 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E_QQQ: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-687965 and analytical batch 400-687993: 2-Methylnaphthalene. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

GC Semi VOA
Method 8011: Surrogate recovery for the following sample was outside control limits: MW6D-ROX-100824 (400-263931-3[MSD]). 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-263931-1	TB-ROX-100824-8260	Water	10/08/24 12:00	10/09/24 09:35
400-263931-2	TB-ROX-100824-8011	Water	10/08/24 12:00	10/09/24 09:35
400-263931-3	MW6D-ROX-100824	Water	10/08/24 10:20	10/09/24 09:35
400-263931-4	MW6C-ROX-100824	Water	10/08/24 11:45	10/09/24 09:35
400-263931-5	MW6B-ROX-100824	Water	10/08/24 13:15	10/09/24 09:35

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: TB-ROX-100824-8260 — Lab Sample ID: 400-263931-1

No Detections.

Client Sample ID: TB-ROX-100824-8011 — Lab Sample ID: 400-263931-2

No Detections.

Client Sample ID: MW6D-ROX-100824 — Lab Sample ID: 400-263931-3

No Detections.

Client Sample ID: MW6C-ROX-100824 — Lab Sample ID: 400-263931-4

No Detections.

Client Sample ID: MW6B-ROX-100824 — Lab Sample ID: 400-263931-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.35	J	1.0	0.22	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: TB-ROX-100824-8260
Date Collected: 10/08/24 12:00
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-1
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			10/16/24 15:19	1
Acrolein	ND		20	3.3	ug/L			10/16/24 15:19	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 15:19	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 15:19	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 15:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 15:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 15:19	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 15:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 15:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 15:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 15:19	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 15:19	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 15:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 15:19	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 15:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 15:19	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 15:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 15:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 15:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 15:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 15:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 15:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 15:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 15:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 15:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 15:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 15:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 15:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 15:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 15:19	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 15:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 15:19	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 15:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 15:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 15:19	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 15:19	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 15:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 15:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 15:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 15:19	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 15:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 15:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 15:19	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: TB-ROX-100824-8260
Date Collected: 10/08/24 12:00
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-1
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			10/16/24 15:19	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 15:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 15:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 15:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 15:19	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 15:19	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 15:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 15:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 15:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 15:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 15:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 15:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 15:19	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 15:19	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 15:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 15:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 15:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 15:19	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 15:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 15:19	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*10/16/24 15:19*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/16/24 15:19*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*10/16/24 15:19*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: TB-ROX-100824-8011
Date Collected: 10/08/24 12:00
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-2
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		10/10/24 09:56	10/10/24 19:55	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/10/24 09:56	10/10/24 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/10/24 09:56*	*10/10/24 19:55*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: MW6D-ROX-100824
Date Collected: 10/08/24 10:20
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/16/24 13:33	1
Acrolein	ND		20	3.3	ug/L			10/16/24 13:33	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 13:33	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 13:33	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 13:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 13:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 13:33	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 13:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 13:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 13:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 13:33	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 13:33	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 13:33	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/16/24 13:33	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 13:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 13:33	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 13:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 13:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 13:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 13:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 13:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 13:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 13:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 13:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 13:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 13:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 13:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 13:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 13:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 13:33	1
2-Hexanone	ND	F1 UJ	25	4.3	ug/L			10/16/24 13:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 13:33	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 13:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 13:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 13:33	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 13:33	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 13:33	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 13:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 13:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 13:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 13:33	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 13:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 13:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 13:33	1

Client Sample ID: MW6D-ROX-100824
Date Collected: 10/08/24 10:20
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-3
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			10/16/24 13:33	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 13:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 13:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 13:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 13:33	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 13:33	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 13:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 13:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 13:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 13:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 13:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 13:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 13:33	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 13:33	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 13:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 13:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 13:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 13:33	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 13:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 13:33	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 13:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/16/24 13:33*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*10/16/24 13:33*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/16/24 13:33*	*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	8.4	ug/L		10/15/24 17:36	10/18/24 20:23	1
Benzenethiol	ND		9.7	9.6	ug/L		10/15/24 17:36	10/18/24 20:23	1
Benzoic acid	ND	F1 F2 UJ	29	23	ug/L		10/15/24 17:36	10/18/24 20:23	1
Benzyl alcohol	ND		9.7	7.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		10/15/24 17:36	10/18/24 20:23	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		10/15/24 17:36	10/18/24 20:23	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		10/15/24 17:36	10/18/24 20:23	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Chloroaniline	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		10/15/24 17:36	10/18/24 20:23	1
2-Chlorophenol	ND		9.7	4.0	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		10/15/24 17:36	10/18/24 20:23	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		10/15/24 17:36	10/18/24 20:23	1
Dibenzofuran	ND		9.7	3.9	ug/L		10/15/24 17:36	10/18/24 20:23	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		10/15/24 17:36	10/18/24 20:23	1
Diethyl phthalate	ND		9.7	4.3	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		10/15/24 17:36	10/18/24 20:23	1

Client Sample ID: MW6D-ROX-100824
Date Collected: 10/08/24 10:20
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.7	4.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4-Dinitrophenol	ND	F1	29	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		10/15/24 17:36	10/18/24 20:23	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		10/15/24 17:36	10/18/24 20:23	1
1,4-Dioxane	ND	F1 UJ	9.7	4.2	ug/L		10/15/24 17:36	10/18/24 20:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		10/15/24 17:36	10/18/24 20:23	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		10/15/24 17:36	10/18/24 20:23	1
Hexachlorocyclopentadiene	ND	*+ F1	19	4.4	ug/L		10/15/24 17:36	10/18/24 20:23	1
Hexachloroethane	ND		9.7	5.0	ug/L		10/15/24 17:36	10/18/24 20:23	1
Indene	ND		9.7	3.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
Isophorone	ND		9.7	5.0	ug/L		10/15/24 17:36	10/18/24 20:23	1
2-Methylphenol	ND		9.7	3.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
2-Nitroaniline	ND		9.7	4.8	ug/L		10/15/24 17:36	10/18/24 20:23	1
3-Nitroaniline	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Nitroaniline	ND		9.7	4.0	ug/L		10/15/24 17:36	10/18/24 20:23	1
Nitrobenzene	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
2-Nitrophenol	ND		9.7	4.5	ug/L		10/15/24 17:36	10/18/24 20:23	1
4-Nitrophenol	ND		9.7	3.2	ug/L		10/15/24 17:36	10/18/24 20:23	1
N-Nitrosodimethylamine	ND	F1 UJ	9.7	2.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		10/15/24 17:36	10/18/24 20:23	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		10/15/24 17:36	10/18/24 20:23	1
Pentachlorophenol	ND		19	12	ug/L		10/15/24 17:36	10/18/24 20:23	1
Phenol	ND	F1 UJ	9.7	4.1	ug/L		10/15/24 17:36	10/18/24 20:23	1
Pyridine	ND	F1 UJ	9.7	9.7	ug/L		10/15/24 17:36	10/18/24 20:23	1
Quinoline	ND		9.7	2.3	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		10/15/24 17:36	10/18/24 20:23	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/15/24 17:36	10/18/24 20:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/15/24 17:36*	*10/18/24 20:23*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/15/24 17:36*	*10/18/24 20:23*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*10/15/24 17:36*	*10/18/24 20:23*	*1*
Phenol-d5	*34*		*10 - 129*	*10/15/24 17:36*	*10/18/24 20:23*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/15/24 17:36*	*10/18/24 20:23*	*1*
2,4,6-Tribromophenol	*84*		*10 - 150*	*10/15/24 17:36*	*10/18/24 20:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/15/24 11:09	10/15/24 17:10	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/15/24 11:09	10/15/24 17:10	1
Anthracene	ND		0.20	0.073	ug/L		10/15/24 11:09	10/15/24 17:10	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:10	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/15/24 11:09	10/15/24 17:10	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/15/24 11:09	10/15/24 17:10	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/15/24 11:09	10/15/24 17:10	1

Client Sample ID: MW6D-ROX-100824
Date Collected: 10/08/24 10:20
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:10	1
Chrysene	ND		0.20	0.039	ug/L		10/15/24 11:09	10/15/24 17:10	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 17:10	1
Fluoranthene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 17:10	1
Fluorene	ND		0.20	0.087	ug/L		10/15/24 11:09	10/15/24 17:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 17:10	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/15/24 11:09	10/15/24 17:10	1
2-Methylnaphthalene	ND	*-UJ	0.20	0.077	ug/L		10/15/24 11:09	10/15/24 17:10	1
Phenanthrene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 17:10	1
Pyrene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:10*	*1*
Nitrobenzene-d5	*100*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:10*	*1*
Terphenyl-d14	*77*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.035	0.020	ug/L		10/10/24 09:56	10/10/24 20:16	1
1,2-Dibromoethane	ND		0.023	0.018	ug/L		10/10/24 09:56	10/10/24 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*58*		*51 - 149*	*10/10/24 09:56*	*10/10/24 20:16*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Client Sample ID: MW6C-ROX-100824
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-4
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			10/16/24 16:38	1
Acrolein	ND		20	3.3	ug/L			10/16/24 16:38	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 16:38	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 16:38	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 16:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 16:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 16:38	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 16:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 16:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 16:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 16:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 16:38	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 16:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 16:38	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 16:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 16:38	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 16:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 16:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 16:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 16:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 16:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 16:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 16:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 16:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 16:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 16:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 16:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 16:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 16:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 16:38	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 16:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 16:38	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 16:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 16:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 16:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 16:38	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 16:38	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 16:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 16:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 16:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 16:38	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 16:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 16:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 16:38	1

Client Sample ID: MW6C-ROX-100824
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-4
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			10/16/24 16:38	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 16:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 16:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 16:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 16:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 16:38	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 16:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 16:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 16:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 16:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 16:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 16:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 16:38	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 16:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 16:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 16:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 16:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 16:38	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 16:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 16:38	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/16/24 16:38*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*10/16/24 16:38*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/16/24 16:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
Benzenethiol	ND		9.4	9.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
Benzoic acid	ND		28	22	ug/L		10/15/24 17:36	10/18/24 20:45	1
Benzyl alcohol	ND		9.4	6.8	ug/L		10/15/24 17:36	10/18/24 20:45	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
Bis(2-chloroethyl)ether	ND		9.4	3.6	ug/L		10/15/24 17:36	10/18/24 20:45	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/15/24 17:36	10/18/24 20:45	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Bromophenyl phenyl ether	ND		9.4	8.0	ug/L		10/15/24 17:36	10/18/24 20:45	1
Butyl benzyl phthalate	ND		9.4	5.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/15/24 17:36	10/18/24 20:45	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/15/24 17:36	10/18/24 20:45	1
2-Chlorophenol	ND		9.4	3.8	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/15/24 17:36	10/18/24 20:45	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/15/24 17:36	10/18/24 20:45	1
Dibenzofuran	ND		9.4	3.7	ug/L		10/15/24 17:36	10/18/24 20:45	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/15/24 17:36	10/18/24 20:45	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/15/24 17:36	10/18/24 20:45	1

Client Sample ID: MW6C-ROX-100824
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/15/24 17:36	10/18/24 20:45	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,6-Dinitrotoluene	ND		9.4	3.6	ug/L		10/15/24 17:36	10/18/24 20:45	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/15/24 17:36	10/18/24 20:45	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/15/24 17:36	10/18/24 20:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/15/24 17:36	10/18/24 20:45	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/15/24 17:36	10/18/24 20:45	1
Indene	ND		9.4	3.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
Isophorone	ND		9.4	4.9	ug/L		10/15/24 17:36	10/18/24 20:45	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/15/24 17:36	10/18/24 20:45	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/15/24 17:36	10/18/24 20:45	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Nitroaniline	ND		9.4	3.8	ug/L		10/15/24 17:36	10/18/24 20:45	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/15/24 17:36	10/18/24 20:45	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/15/24 17:36	10/18/24 20:45	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/15/24 17:36	10/18/24 20:45	1
Pentachlorophenol	ND		19	11	ug/L		10/15/24 17:36	10/18/24 20:45	1
Phenol	ND		9.4	3.9	ug/L		10/15/24 17:36	10/18/24 20:45	1
Pyridine	ND	UJ	9.4	9.4	ug/L		10/15/24 17:36	10/18/24 20:45	1
Quinoline	ND		9.4	2.2	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4,5-Trichlorophenol	ND		9.4	3.7	ug/L		10/15/24 17:36	10/18/24 20:45	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/15/24 17:36	10/18/24 20:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*10/15/24 17:36*	*10/18/24 20:45*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/15/24 17:36*	*10/18/24 20:45*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/15/24 17:36*	*10/18/24 20:45*	*1*
Phenol-d5	*35*		*10 - 129*	*10/15/24 17:36*	*10/18/24 20:45*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/15/24 17:36*	*10/18/24 20:45*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/15/24 17:36*	*10/18/24 20:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/15/24 11:09	10/15/24 17:41	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/15/24 11:09	10/15/24 17:41	1
Anthracene	ND		0.20	0.073	ug/L		10/15/24 11:09	10/15/24 17:41	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:41	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/15/24 11:09	10/15/24 17:41	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/15/24 11:09	10/15/24 17:41	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/15/24 11:09	10/15/24 17:41	1

Client Sample ID: MW6C-ROX-100824
Date Collected: 10/08/24 11:45
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:41	1
Chrysene	ND		0.20	0.039	ug/L		10/15/24 11:09	10/15/24 17:41	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 17:41	1
Fluoranthene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 17:41	1
Fluorene	ND		0.20	0.086	ug/L		10/15/24 11:09	10/15/24 17:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 17:41	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/15/24 11:09	10/15/24 17:41	1
2-Methylnaphthalene	ND	*- UJ	0.20	0.076	ug/L		10/15/24 11:09	10/15/24 17:41	1
Phenanthrene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 17:41	1
Pyrene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:41*	*1*
Nitrobenzene-d5	*99*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:41*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/15/24 11:09*	*10/15/24 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/10/24 09:56	10/10/24 21:20	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/10/24 09:56	10/10/24 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*10/10/24 09:56*	*10/10/24 21:20*	*1*

Client Sample ID: MW6B-ROX-100824
Date Collected: 10/08/24 13:15
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-5
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			10/16/24 17:05	1
Acrolein	ND		20	3.3	ug/L			10/16/24 17:05	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 17:05	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 17:05	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 17:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 17:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 17:05	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 17:05	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 17:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 17:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 17:05	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 17:05	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 17:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 17:05	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 17:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 17:05	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 17:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 17:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 17:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 17:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 17:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 17:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 17:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 17:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 17:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 17:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 17:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 17:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 17:05	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 17:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 17:05	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 17:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 17:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 17:05	1
Methyl tert-butyl ether	**0.35**	**J**	1.0	0.22	ug/L			10/16/24 17:05	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:05	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 17:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 17:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 17:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 17:05	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 17:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 17:05	1

Client Sample ID: MW6B-ROX-100824
Date Collected: 10/08/24 13:15
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-5
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			10/16/24 17:05	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 17:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 17:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 17:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 17:05	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 17:05	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 17:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 17:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 17:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 17:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 17:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 17:05	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 17:05	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 17:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 17:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 17:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 17:05	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 17:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 17:05	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*10/16/24 17:05*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/16/24 17:05*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/16/24 17:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	8.3	ug/L		10/15/24 17:36	10/18/24 21:07	1
Benzenethiol	ND		9.5	9.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
Benzoic acid	ND		29	23	ug/L		10/15/24 17:36	10/18/24 21:07	1
Benzyl alcohol	ND		9.5	7.0	ug/L		10/15/24 17:36	10/18/24 21:07	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		10/15/24 17:36	10/18/24 21:07	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		10/15/24 17:36	10/18/24 21:07	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		10/15/24 17:36	10/18/24 21:07	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Chloroaniline	ND		9.5	4.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		10/15/24 17:36	10/18/24 21:07	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		10/15/24 17:36	10/18/24 21:07	1
2-Chlorophenol	ND		9.5	3.9	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		10/15/24 17:36	10/18/24 21:07	1
Dibenzofuran	ND		9.5	3.8	ug/L		10/15/24 17:36	10/18/24 21:07	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		10/15/24 17:36	10/18/24 21:07	1
Diethyl phthalate	ND		9.5	4.2	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4-Dimethylphenol	ND		9.5	5.0	ug/L		10/15/24 17:36	10/18/24 21:07	1

Client Sample ID: MW6B-ROX-100824
Date Collected: 10/08/24 13:15
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	4.0	ug/L		10/15/24 17:36	10/18/24 21:07	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		10/15/24 17:36	10/18/24 21:07	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		10/15/24 17:36	10/18/24 21:07	1
1,4-Dioxane	ND		9.5	4.1	ug/L		10/15/24 17:36	10/18/24 21:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.2	ug/L		10/15/24 17:36	10/18/24 21:07	1
Hexachlorobenzene	ND		9.5	9.3	ug/L		10/15/24 17:36	10/18/24 21:07	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/15/24 17:36	10/18/24 21:07	1
Hexachloroethane	ND		9.5	5.0	ug/L		10/15/24 17:36	10/18/24 21:07	1
Indene	ND		9.5	3.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
Isophorone	ND		9.5	5.0	ug/L		10/15/24 17:36	10/18/24 21:07	1
2-Methylphenol	ND		9.5	3.1	ug/L		10/15/24 17:36	10/18/24 21:07	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
2-Nitroaniline	ND		9.5	4.8	ug/L		10/15/24 17:36	10/18/24 21:07	1
3-Nitroaniline	ND		9.5	4.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Nitroaniline	ND		9.5	3.9	ug/L		10/15/24 17:36	10/18/24 21:07	1
Nitrobenzene	ND		9.5	4.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
2-Nitrophenol	ND		9.5	4.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
4-Nitrophenol	ND		9.5	3.2	ug/L		10/15/24 17:36	10/18/24 21:07	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		10/15/24 17:36	10/18/24 21:07	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		10/15/24 17:36	10/18/24 21:07	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
Pentachlorophenol	ND		19	11	ug/L		10/15/24 17:36	10/18/24 21:07	1
Phenol	ND		9.5	4.0	ug/L		10/15/24 17:36	10/18/24 21:07	1
Pyridine	ND	UJ	9.5	9.5	ug/L		10/15/24 17:36	10/18/24 21:07	1
Quinoline	ND		9.5	2.3	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		10/15/24 17:36	10/18/24 21:07	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/15/24 17:36	10/18/24 21:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*10/15/24 17:36*	*10/18/24 21:07*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/15/24 17:36*	*10/18/24 21:07*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/15/24 17:36*	*10/18/24 21:07*	*1*
Phenol-d5	*37*		*10 - 129*	*10/15/24 17:36*	*10/18/24 21:07*	*1*
Terphenyl-d14	*75*		*13 - 150*	*10/15/24 17:36*	*10/18/24 21:07*	*1*
2,4,6-Tribromophenol	*88*		*10 - 150*	*10/15/24 17:36*	*10/18/24 21:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/15/24 11:09	10/15/24 18:11	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/15/24 11:09	10/15/24 18:11	1
Anthracene	ND		0.20	0.073	ug/L		10/15/24 11:09	10/15/24 18:11	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 18:11	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/15/24 11:09	10/15/24 18:11	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/15/24 11:09	10/15/24 18:11	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/15/24 11:09	10/15/24 18:11	1

Client Sample ID: MW6B-ROX-100824
Date Collected: 10/08/24 13:15
Date Received: 10/09/24 09:35

Lab Sample ID: 400-263931-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 18:11	1
Chrysene	ND		0.20	0.039	ug/L		10/15/24 11:09	10/15/24 18:11	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 18:11	1
Fluoranthene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 18:11	1
Fluorene	ND		0.20	0.087	ug/L		10/15/24 11:09	10/15/24 18:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/15/24 11:09	10/15/24 18:11	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/15/24 11:09	10/15/24 18:11	1
2-Methylnaphthalene	ND	*- UJ	0.20	0.077	ug/L		10/15/24 11:09	10/15/24 18:11	1
Phenanthrene	ND		0.20	0.044	ug/L		10/15/24 11:09	10/15/24 18:11	1
Pyrene	ND		0.20	0.040	ug/L		10/15/24 11:09	10/15/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/15/24 11:09*	*10/15/24 18:11*	*1*
Nitrobenzene-d5	*102*		*50 - 150*	*10/15/24 11:09*	*10/15/24 18:11*	*1*
Terphenyl-d14	*81*		*50 - 150*	*10/15/24 11:09*	*10/15/24 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.035	0.020	ug/L		10/10/24 09:56	10/10/24 22:02	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/10/24 09:56	10/10/24 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*10/10/24 09:56*	*10/10/24 22:02*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

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)
400-263931-1	TB-ROX-100824-8260	100	104	100
400-263931-3	MW6D-ROX-100824	101	103	98
400-263931-3 MS	MW6D-ROX-100824	98	104	100
400-263931-3 MSD	MW6D-ROX-100824	98	104	99
400-263931-4	MW6C-ROX-100824	101	108	98
400-263931-5	MW6B-ROX-100824	100	106	97
LCS 400-688093/1002	Lab Control Sample	98	103	98
MB 400-688093/4	Method Blank	102	104	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)
400-263931-3	MW6D-ROX-100824	63	45	56	34	78	84
400-263931-3 MS	MW6D-ROX-100824	73	58	69	51	79	101
400-263931-3 MSD	MW6D-ROX-100824	68	57	65	49	72	96
400-263931-4	MW6C-ROX-100824	67	48	58	35	78	83
400-263931-5	MW6B-ROX-100824	65	48	58	37	75	88
LCS 400-688036/24-A	Lab Control Sample	61	50	61	38	80	82
LCS 400-688036/2-A	Lab Control Sample	67	55	66	46	72	95
LCSD 400-688036/25-A	Lab Control Sample Dup	72	67	66	58	85	83
LCSD 400-688036/3-A	Lab Control Sample Dup	68	56	67	47	76	98
MB 400-688036/1-A	Method Blank	52	45	53	32	68	70

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-263931-3	MW6D-ROX-100824	76	100	77
400-263931-3 MS	MW6D-ROX-100824	74	98	77
400-263931-3 MSD	MW6D-ROX-100824	73	99	79
400-263931-4	MW6C-ROX-100824	72	99	79
400-263931-5	MW6B-ROX-100824	76	102	81
LCS 400-687965/2-A	Lab Control Sample	67	98	80

Surrogate Summary

Client: AECOM
Job ID: 400-263931-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
MB 400-687965/1-A	Method Blank	66	93	78

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-263931-2	TB-ROX-100824-8011	65
400-263931-3	MW6D-ROX-100824	58
400-263931-3 MS	MW6D-ROX-100824	63
400-263931-3 MSD	MW6D-ROX-100824	46 S1-
400-263931-4	MW6C-ROX-100824	82
400-263931-5	MW6B-ROX-100824	75
LCS 400-687416/2-A	Lab Control Sample	112
LCSD 400-687416/3-A	Lab Control Sample Dup	124
MB 400-687416/1-A	Method Blank	110

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-263931-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-263931-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-100824-8260
Lab Sample ID: 400-263931-1
Date Collected: 10/08/24 12:00
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 15:19	IMC	EET PEN

Client Sample ID: TB-ROX-100824-8011
Lab Sample ID: 400-263931-2
Date Collected: 10/08/24 12:00
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			30.2 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 19:55	KR	EET PEN

Client Sample ID: MW6D-ROX-100824
Lab Sample ID: 400-263931-3
Date Collected: 10/08/24 10:20
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 13:33	IMC	EET PEN
Total/NA	Prep	3511			30.1 mL	2 mL	687965	10/15/24 11:09	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 17:10	DS	EET PEN
Total/NA	Prep	3510C			258.4 mL	1 mL	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 20:23	S1B	EET PEN
Total/NA	Prep	8011			29.8 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 20:16	KR	EET PEN

Client Sample ID: MW6C-ROX-100824
Lab Sample ID: 400-263931-4
Date Collected: 10/08/24 11:45
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 16:38	IMC	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	687965	10/15/24 11:09	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 17:41	DS	EET PEN
Total/NA	Prep	3510C			267.2 mL	1 mL	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 20:45	S1B	EET PEN
Total/NA	Prep	8011			32.7 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 21:20	KR	EET PEN

Client Sample ID: MW6B-ROX-100824
Lab Sample ID: 400-263931-5
Date Collected: 10/08/24 13:15
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 17:05	IMC	EET PEN
Total/NA	Prep	3511			30 mL	2 mL	687965	10/15/24 11:09	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 18:11	DS	EET PEN

Client Sample ID: MW6B-ROX-100824
Lab Sample ID: 400-263931-5

Date Collected: 10/08/24 13:15
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			261.8 mL	1 mL	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 21:07	S1B	EET PEN
Total/NA	Prep	8011			30.2 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 22:02	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687416/1-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:18	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687965/1-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	3511			30 mL	2 mL	687965	10/15/24 11:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 15:07	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688036/1-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	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 17:45	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688093/4

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	688093	10/16/24 12:14	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687416/2-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 14:39	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687965/2-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	3511			30 mL	2 mL	687965	10/15/24 11:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 15:38	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688036/24-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	688036	10/15/24 17:38	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 18:53	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688036/2-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	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 18:08	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688093/1002
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	688093	10/16/24 11:09	IMC	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687416/3-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	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 15:00	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688036/25-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	688036	10/15/24 17:38	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 19:15	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-263931-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688036/3-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	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 18:30	S1B	EET PEN

Client Sample ID: MW6D-ROX-100824
Lab Sample ID: 400-263931-3 MS
Date Collected: 10/08/24 10:20
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 14:00	IMC	EET PEN
Total/NA	Prep	3511			30 mL	2 mL	687965	10/15/24 11:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 16:09	DS	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 19:38	S1B	EET PEN
Total/NA	Prep	8011			31.8 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 20:38	KR	EET PEN

Client Sample ID: MW6D-ROX-100824
Lab Sample ID: 400-263931-3 MSD
Date Collected: 10/08/24 10:20
Matrix: Water
Date Received: 10/09/24 09:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 14:26	IMC	EET PEN
Total/NA	Prep	3511			29.8 mL	2 mL	687965	10/15/24 11:09	RAW	EET PEN
Total/NA	Analysis	8270E		1			687993	10/15/24 16:39	DS	EET PEN
Total/NA	Prep	3510C			261.4 mL	1 mL	688036	10/15/24 17:36	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688448	10/18/24 20:00	S1B	EET PEN
Total/NA	Prep	8011			31.5 mL	35 mL	687416	10/10/24 09:56	KR	EET PEN
Total/NA	Analysis	8011		1			687442	10/10/24 20:58	KR	EET PEN

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

QC Association Summary

Client: AECOM
Job ID: 400-263931-1
Project/Site: ROXANA QUARTERLY GW

GC/MS VOA

Analysis Batch: 688093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-1	TB-ROX-100824-8260	Total/NA	Water	8260D	
400-263931-3	MW6D-ROX-100824	Total/NA	Water	8260D	
400-263931-4	MW6C-ROX-100824	Total/NA	Water	8260D	
400-263931-5	MW6B-ROX-100824	Total/NA	Water	8260D	
MB 400-688093/4	Method Blank	Total/NA	Water	8260D	
LCS 400-688093/1002	Lab Control Sample	Total/NA	Water	8260D	
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	8260D	
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 687965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-3	MW6D-ROX-100824	Total/NA	Water	3511	
400-263931-4	MW6C-ROX-100824	Total/NA	Water	3511	
400-263931-5	MW6B-ROX-100824	Total/NA	Water	3511	
MB 400-687965/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-687965/2-A	Lab Control Sample	Total/NA	Water	3511	
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	3511	
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	3511	

Analysis Batch: 687993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-3	MW6D-ROX-100824	Total/NA	Water	8270E	687965
400-263931-4	MW6C-ROX-100824	Total/NA	Water	8270E	687965
400-263931-5	MW6B-ROX-100824	Total/NA	Water	8270E	687965
MB 400-687965/1-A	Method Blank	Total/NA	Water	8270E	687965
LCS 400-687965/2-A	Lab Control Sample	Total/NA	Water	8270E	687965
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	8270E	687965
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	8270E	687965

Prep Batch: 688036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-3	MW6D-ROX-100824	Total/NA	Water	3510C	
400-263931-4	MW6C-ROX-100824	Total/NA	Water	3510C	
400-263931-5	MW6B-ROX-100824	Total/NA	Water	3510C	
MB 400-688036/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688036/24-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688036/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688036/25-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688036/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	3510C	
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	3510C	

Analysis Batch: 688448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-3	MW6D-ROX-100824	Total/NA	Water	8270E	688036
400-263931-4	MW6C-ROX-100824	Total/NA	Water	8270E	688036
400-263931-5	MW6B-ROX-100824	Total/NA	Water	8270E	688036
MB 400-688036/1-A	Method Blank	Total/NA	Water	8270E	688036
LCS 400-688036/24-A	Lab Control Sample	Total/NA	Water	8270E	688036

GC/MS Semi VOA (Continued)

Analysis Batch: 688448 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-688036/2-A	Lab Control Sample	Total/NA	Water	8270E	688036
LCSD 400-688036/25-A	Lab Control Sample Dup	Total/NA	Water	8270E	688036
LCSD 400-688036/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688036
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	8270E	688036
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	8270E	688036

GC Semi VOA

Prep Batch: 687416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-2	TB-ROX-100824-8011	Total/NA	Water	8011	
400-263931-3	MW6D-ROX-100824	Total/NA	Water	8011	
400-263931-4	MW6C-ROX-100824	Total/NA	Water	8011	
400-263931-5	MW6B-ROX-100824	Total/NA	Water	8011	
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	8011	
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	8011	

Analysis Batch: 687442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-263931-2	TB-ROX-100824-8011	Total/NA	Water	8011	687416
400-263931-3	MW6D-ROX-100824	Total/NA	Water	8011	687416
400-263931-4	MW6C-ROX-100824	Total/NA	Water	8011	687416
400-263931-5	MW6B-ROX-100824	Total/NA	Water	8011	687416
MB 400-687416/1-A	Method Blank	Total/NA	Water	8011	687416
LCS 400-687416/2-A	Lab Control Sample	Total/NA	Water	8011	687416
LCSD 400-687416/3-A	Lab Control Sample Dup	Total/NA	Water	8011	687416
400-263931-3 MS	MW6D-ROX-100824	Total/NA	Water	8011	687416
400-263931-3 MSD	MW6D-ROX-100824	Total/NA	Water	8011	687416

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

Lab Sample ID: MB 400-688093/4
Matrix: Water
Analysis Batch: 688093

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			10/16/24 12:14	1
Acrolein	ND		20	3.3	ug/L			10/16/24 12:14	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 12:14	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 12:14	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 12:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 12:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 12:14	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 12:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 12:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 12:14	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 12:14	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 12:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 12:14	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 12:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 12:14	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 12:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 12:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 12:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 12:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 12:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 12:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 12:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 12:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 12:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 12:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 12:14	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 12:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 12:14	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 12:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 12:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 12:14	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 12:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 12:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 12:14	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 12:14	1

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

Lab Sample ID: MB 400-688093/4
Matrix: Water
Analysis Batch: 688093

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			10/16/24 12:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/16/24 12:14	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 12:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 12:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 12:14	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 12:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 12:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 12:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 12:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 12:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 12:14	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 12:14	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 12:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 12:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 12:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 12:14	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 12:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*10/16/24 12:14*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/16/24 12:14*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/16/24 12:14*	*1*

Lab Sample ID: LCS 400-688093/1002
Matrix: Water
Analysis Batch: 688093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	193		ug/L		97	43 - 150
Acrolein	500	463		ug/L		93	38 - 150
Acrylonitrile	500	417		ug/L		83	64 - 142
Benzene	50.0	44.7		ug/L		89	70 - 130
Bromobenzene	50.0	47.6		ug/L		95	70 - 132
Bromochloromethane	50.0	46.8		ug/L		94	70 - 130
Bromodichloromethane	50.0	45.8		ug/L		92	67 - 133
Bromoform	50.0	42.9		ug/L		86	57 - 140
Bromomethane	50.0	45.0		ug/L		90	10 - 150
2-Butanone (MEK)	200	200		ug/L		100	61 - 145
Carbon disulfide	50.0	40.9		ug/L		82	61 - 137
Carbon tetrachloride	50.0	46.4		ug/L		93	61 - 137
Chlorobenzene	50.0	46.5		ug/L		93	70 - 130
Chloroethane	50.0	42.3		ug/L		85	55 - 141
2-Chloroethyl vinyl ether	50.0	25.8		ug/L		52	10 - 150

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

Lab Sample ID: LCS 400-688093/1002
Matrix: Water
Analysis Batch: 688093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.1		ug/L		92	69 - 130
1-Chlorohexane	50.0	49.4		ug/L		99	69 - 130
Chloromethane	50.0	40.9		ug/L		82	58 - 137
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	45.4		ug/L		91	69 - 132
Dibromochloromethane	50.0	45.5		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	39.7		ug/L		79	41 - 146
1,1-Dichloroethane	50.0	44.1		ug/L		88	70 - 130
1,2-Dichloroethane	50.0	46.4		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	44.7		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	45.1		ug/L		90	70 - 130
1,3-Dichloropropane	50.0	44.8		ug/L		90	70 - 130
2,2-Dichloropropane	50.0	44.1		ug/L		88	52 - 135
1,1-Dichloropropene	50.0	45.6		ug/L		91	70 - 130
Ethylbenzene	50.0	47.8		ug/L		96	70 - 130
Ethyl methacrylate	50.0	42.4		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	56.6		ug/L		113	53 - 140
2-Hexanone	200	197		ug/L		99	65 - 137
Isopropylbenzene	50.0	48.9		ug/L		98	70 - 130
Methylene bromide	50.0	45.5		ug/L		91	70 - 130
Methylene Chloride	50.0	46.1		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	41.9		ug/L		84	66 - 130
m-Xylene & p-Xylene	50.0	48.4		ug/L		97	70 - 130
Naphthalene	50.0	45.5		ug/L		91	47 - 149
n-Butylbenzene	50.0	52.6		ug/L		105	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	48.2		ug/L		96	70 - 130
o-Xylene	50.0	47.8		ug/L		96	70 - 130
p-Chlorotoluene	50.0	49.0		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	52.2		ug/L		104	65 - 130
sec-Butylbenzene	50.0	51.8		ug/L		104	66 - 130
Styrene	50.0	47.3		ug/L		95	70 - 130
tert-Butylbenzene	50.0	49.4		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.9		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.4		ug/L		85	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	44.9		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	44.6		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	45.1		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	48.0		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	49.9		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	46.3		ug/L		93	70 - 130
Trichlorofluoromethane	50.0	45.8		ug/L		92	65 - 138

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

Lab Sample ID: LCS 400-688093/1002
Matrix: Water
Analysis Batch: 688093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	43.4		ug/L		87	70 - 130
1,2,4-Trimethylbenzene	50.0	51.2		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	49.5		ug/L		99	69 - 130
Vinyl acetate	100	83.6		ug/L		84	26 - 150
Vinyl chloride	50.0	41.2		ug/L		82	59 - 136
Xylenes, Total	100	96.2		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 688093

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	75.2	F1	ug/L		38	43 - 150
Acrolein	ND		500	542		ug/L		108	38 - 150
Acrylonitrile	ND		500	428		ug/L		86	62 - 149
Benzene	ND		50.0	45.2		ug/L		90	56 - 142
Bromobenzene	ND		50.0	46.4		ug/L		93	59 - 136
Bromochloromethane	ND		50.0	48.0		ug/L		96	64 - 140
Bromodichloromethane	ND		50.0	47.7		ug/L		95	59 - 143
Bromoform	ND		50.0	42.5		ug/L		85	50 - 140
Bromomethane	ND		50.0	51.4		ug/L		103	10 - 150
2-Butanone (MEK)	ND		200	114		ug/L		57	55 - 150
Carbon disulfide	ND		50.0	40.8		ug/L		82	48 - 150
Carbon tetrachloride	ND		50.0	47.8		ug/L		96	55 - 145
Chlorobenzene	ND		50.0	47.2		ug/L		94	64 - 130
Chloroethane	ND		50.0	49.0		ug/L		98	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	47.5		ug/L		95	60 - 141
1-Chlorohexane	ND		50.0	50.7		ug/L		101	56 - 136
Chloromethane	ND		50.0	43.4		ug/L		87	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.2		ug/L		92	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.4		ug/L		93	57 - 140
Dibromochloromethane	ND		50.0	46.8		ug/L		94	56 - 143
1,2-Dichlorobenzene	ND		50.0	49.5		ug/L		99	52 - 137
1,3-Dichlorobenzene	ND		50.0	49.2		ug/L		98	54 - 135
1,4-Dichlorobenzene	ND		50.0	48.5		ug/L		97	53 - 135
Dichlorodifluoromethane	ND		50.0	44.8		ug/L		90	16 - 150
1,1-Dichloroethane	ND		50.0	44.4		ug/L		89	61 - 144
1,2-Dichloroethane	ND		50.0	49.0		ug/L		98	60 - 141
1,1-Dichloroethene	ND		50.0	43.9		ug/L		88	54 - 147
1,2-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 137
1,3-Dichloropropane	ND		50.0	46.8		ug/L		94	66 - 133
2,2-Dichloropropane	ND		50.0	44.3		ug/L		89	42 - 144

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

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 688093

Client Sample ID: MW6D-ROX-100824
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	46.4		ug/L		93	65 - 136
Ethylbenzene	ND		50.0	48.4		ug/L		97	58 - 131
Ethyl methacrylate	ND		50.0	43.3		ug/L		87	64 - 130
Hexachlorobutadiene	ND		50.0	54.2		ug/L		108	31 - 149
2-Hexanone	ND	F1	200	123	F1	ug/L		61	65 - 140
Isopropylbenzene	ND		50.0	49.5		ug/L		99	56 - 133
Methylene bromide	ND		50.0	47.2		ug/L		94	63 - 138
Methylene Chloride	ND		50.0	46.2		ug/L		92	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	169		ug/L		84	63 - 146
Methyl tert-butyl ether	ND		50.0	43.3		ug/L		87	59 - 137
m-Xylene & p-Xylene	ND		50.0	48.7		ug/L		97	57 - 130
Naphthalene	ND		50.0	43.2		ug/L		86	25 - 150
n-Butylbenzene	ND		50.0	52.4		ug/L		105	41 - 142
N-Propylbenzene	ND		50.0	50.3		ug/L		101	51 - 138
o-Chlorotoluene	ND		50.0	49.7		ug/L		99	53 - 134
o-Xylene	ND		50.0	48.6		ug/L		97	61 - 130
p-Chlorotoluene	ND		50.0	48.2		ug/L		96	54 - 133
p-Isopropyltoluene	ND		50.0	51.1		ug/L		102	48 - 139
sec-Butylbenzene	ND		50.0	51.4		ug/L		103	50 - 138
Styrene	ND		50.0	47.7		ug/L		95	58 - 131
tert-Butylbenzene	ND		50.0	49.8		ug/L		100	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	47.6		ug/L		95	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	43.3		ug/L		87	66 - 135
Tetrachloroethene	ND		50.0	46.4		ug/L		93	52 - 133
Toluene	ND		50.0	45.1		ug/L		90	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.0		ug/L		88	61 - 143
trans-1,3-Dichloropropene	ND		50.0	45.9		ug/L		92	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.0		ug/L		92	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	48.0		ug/L		96	39 - 148
1,1,1-Trichloroethane	ND		50.0	47.2		ug/L		94	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.4		ug/L		93	66 - 131
Trichloroethene	ND		50.0	46.8		ug/L		94	64 - 136
Trichlorofluoromethane	ND		50.0	53.9		ug/L		108	54 - 150
1,2,3-Trichloropropane	ND		50.0	44.8		ug/L		90	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	50.5		ug/L		101	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	49.1		ug/L		98	52 - 135
Vinyl acetate	ND		100	98.7		ug/L		99	26 - 150
Vinyl chloride	ND		50.0	44.8		ug/L		90	46 - 150
Xylenes, Total	ND		100	97.2		ug/L		97	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*100*		*64 - 132*

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

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 688093

Client Sample ID: MW6D-ROX-100824
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	7	30
Acrolein	ND		500	498		ug/L		100	38 - 150	8	31
Acrylonitrile	ND		500	458		ug/L		92	62 - 149	7	30
Benzene	ND		50.0	46.5		ug/L		93	56 - 142	3	30
Bromobenzene	ND		50.0	47.2		ug/L		94	59 - 136	2	30
Bromochloromethane	ND		50.0	50.8		ug/L		102	64 - 140	6	30
Bromodichloromethane	ND		50.0	49.3		ug/L		99	59 - 143	3	30
Bromoform	ND		50.0	45.2		ug/L		90	50 - 140	6	30
Bromomethane	ND		50.0	45.2		ug/L		90	10 - 150	13	50
2-Butanone (MEK)	ND		200	122		ug/L		61	55 - 150	7	30
Carbon disulfide	ND		50.0	42.5		ug/L		85	48 - 150	4	30
Carbon tetrachloride	ND		50.0	48.6		ug/L		97	55 - 145	2	30
Chlorobenzene	ND		50.0	47.4		ug/L		95	64 - 130	0	30
Chloroethane	ND		50.0	44.2		ug/L		88	50 - 150	10	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	49.1		ug/L		98	60 - 141	3	30
1-Chlorohexane	ND		50.0	47.4		ug/L		95	56 - 136	7	30
Chloromethane	ND		50.0	39.9		ug/L		80	49 - 148	8	31
cis-1,2-Dichloroethene	ND		50.0	49.0		ug/L		98	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	48.1		ug/L		96	57 - 140	4	30
Dibromochloromethane	ND		50.0	49.6		ug/L		99	56 - 143	6	30
1,2-Dichlorobenzene	ND		50.0	49.3		ug/L		99	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	48.2		ug/L		96	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	47.5		ug/L		95	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	41.2		ug/L		82	16 - 150	8	31
1,1-Dichloroethane	ND		50.0	46.9		ug/L		94	61 - 144	5	30
1,2-Dichloroethane	ND		50.0	51.5		ug/L		103	60 - 141	5	30
1,1-Dichloroethene	ND		50.0	46.9		ug/L		94	54 - 147	6	30
1,2-Dichloropropane	ND		50.0	49.0		ug/L		98	66 - 137	6	30
1,3-Dichloropropane	ND		50.0	49.1		ug/L		98	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	46.8		ug/L		94	42 - 144	6	31
1,1-Dichloropropene	ND		50.0	47.6		ug/L		95	65 - 136	3	30
Ethylbenzene	ND		50.0	47.2		ug/L		94	58 - 131	3	30
Ethyl methacrylate	ND		50.0	47.5		ug/L		95	64 - 130	9	30
Hexachlorobutadiene	ND		50.0	47.5		ug/L		95	31 - 149	13	36
2-Hexanone	ND	F1	200	131		ug/L		66	65 - 140	7	30
Isopropylbenzene	ND		50.0	47.2		ug/L		94	56 - 133	5	30
Methylene bromide	ND		50.0	49.8		ug/L		100	63 - 138	5	30
Methylene Chloride	ND		50.0	49.5		ug/L		99	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	178		ug/L		89	63 - 146	5	30
Methyl tert-butyl ether	ND		50.0	46.9		ug/L		94	59 - 137	8	30
m-Xylene & p-Xylene	ND		50.0	47.3		ug/L		95	57 - 130	3	30
Naphthalene	ND		50.0	47.0		ug/L		94	25 - 150	8	30
n-Butylbenzene	ND		50.0	45.2		ug/L		90	41 - 142	15	31
N-Propylbenzene	ND		50.0	46.9		ug/L		94	51 - 138	7	30
o-Chlorotoluene	ND		50.0	46.3		ug/L		93	53 - 134	7	30
o-Xylene	ND		50.0	47.9		ug/L		96	61 - 130	1	30
p-Chlorotoluene	ND		50.0	46.0		ug/L		92	54 - 133	5	30

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

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 688093

Client Sample ID: MW6D-ROX-100824
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	46.5		ug/L		93	48 - 139	9	30
sec-Butylbenzene	ND		50.0	46.7		ug/L		93	50 - 138	10	30
Styrene	ND		50.0	47.7		ug/L		95	58 - 131	0	30
tert-Butylbenzene	ND		50.0	45.9		ug/L		92	54 - 146	8	30
1,1,1,2-Tetrachloroethane	ND		50.0	49.4		ug/L		99	59 - 137	4	30
1,1,2,2-Tetrachloroethane	ND		50.0	46.2		ug/L		92	66 - 135	6	30
Tetrachloroethene	ND		50.0	45.5		ug/L		91	52 - 133	2	30
Toluene	ND		50.0	45.6		ug/L		91	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	45.9		ug/L		92	61 - 143	4	30
trans-1,3-Dichloropropene	ND		50.0	47.9		ug/L		96	53 - 133	4	30
1,2,3-Trichlorobenzene	ND		50.0	48.7		ug/L		97	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	48.6		ug/L		97	39 - 148	1	30
1,1,1-Trichloroethane	ND		50.0	49.0		ug/L		98	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	48.8		ug/L		98	66 - 131	5	30
Trichloroethene	ND		50.0	46.9		ug/L		94	64 - 136	0	30
Trichlorofluoromethane	ND		50.0	46.9		ug/L		94	54 - 150	14	30
1,2,3-Trichloropropane	ND		50.0	47.5		ug/L		95	65 - 133	6	30
1,2,4-Trimethylbenzene	ND		50.0	47.7		ug/L		95	50 - 139	6	30
1,3,5-Trimethylbenzene	ND		50.0	46.3		ug/L		93	52 - 135	6	30
Vinyl acetate	ND		100	90.6		ug/L		91	26 - 150	9	33
Vinyl chloride	ND		50.0	41.2		ug/L		82	46 - 150	8	30
Xylenes, Total	ND		100	95.1		ug/L		95	59 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: MB 400-688036/1-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
Benzenethiol	ND		10	9.9	ug/L		10/15/24 17:36	10/18/24 17:45	1
Benzoic acid	ND		30	24	ug/L		10/15/24 17:36	10/18/24 17:45	1
Benzyl alcohol	ND		10	7.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/15/24 17:36	10/18/24 17:45	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/15/24 17:36	10/18/24 17:45	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/15/24 17:36	10/18/24 17:45	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/15/24 17:36	10/18/24 17:45	1
4-Chloroaniline	ND		10	4.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/15/24 17:36	10/18/24 17:45	1
2-Chlorophenol	ND		10	4.1	ug/L		10/15/24 17:36	10/18/24 17:45	1

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

Lab Sample ID: MB 400-688036/1-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688036

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/15/24 17:36	10/18/24 17:45	1
Dibenzofuran	ND		10	4.0	ug/L		10/15/24 17:36	10/18/24 17:45	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
Diethyl phthalate	ND		10	4.4	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/15/24 17:36	10/18/24 17:45	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/15/24 17:36	10/18/24 17:45	1
1,4-Dioxane	ND		10	4.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/15/24 17:36	10/18/24 17:45	1
Hexachloroethane	ND		10	5.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
Indene	ND		10	3.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
Isophorone	ND		10	5.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
2-Methylphenol	ND		10	3.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
2-Nitroaniline	ND		10	5.0	ug/L		10/15/24 17:36	10/18/24 17:45	1
3-Nitroaniline	ND		10	4.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
4-Nitroaniline	ND		10	4.1	ug/L		10/15/24 17:36	10/18/24 17:45	1
Nitrobenzene	ND		10	4.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
2-Nitrophenol	ND		10	4.6	ug/L		10/15/24 17:36	10/18/24 17:45	1
4-Nitrophenol	ND		10	3.3	ug/L		10/15/24 17:36	10/18/24 17:45	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/15/24 17:36	10/18/24 17:45	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/15/24 17:36	10/18/24 17:45	1
Pentachlorophenol	ND		20	12	ug/L		10/15/24 17:36	10/18/24 17:45	1
Phenol	ND		10	4.2	ug/L		10/15/24 17:36	10/18/24 17:45	1
Pyridine	ND		10	10	ug/L		10/15/24 17:36	10/18/24 17:45	1
Quinoline	ND		10	2.4	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/15/24 17:36	10/18/24 17:45	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/15/24 17:36	10/18/24 17:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*21 - 114*	*10/15/24 17:36*	*10/18/24 17:45*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/15/24 17:36*	*10/18/24 17:45*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*10/15/24 17:36*	*10/18/24 17:45*	*1*
Phenol-d5	*32*		*10 - 129*	*10/15/24 17:36*	*10/18/24 17:45*	*1*
Terphenyl-d14	*68*		*13 - 150*	*10/15/24 17:36*	*10/18/24 17:45*	*1*
2,4,6-Tribromophenol	*70*		*10 - 150*	*10/15/24 17:36*	*10/18/24 17:45*	*1*

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

Lab Sample ID: LCS 400-688036/24-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688036

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	106		ug/L		88	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*61*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*80*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCS 400-688036/2-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688036

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline			120	50.7		ug/L		42	10 - 127		
Benzoic acid			493	273		ug/L		55	19 - 126		
Benzyl alcohol			120	72.2		ug/L		60	17 - 109		
Bis(2-chloroethoxy)methane			120	76.3		ug/L		64	24 - 125		
Bis(2-chloroethyl)ether			120	68.0		ug/L		57	10 - 121		
bis (2-chloroisopropyl) ether			120	68.9		ug/L		57	14 - 123		
Bis(2-ethylhexyl) phthalate			120	92.8		ug/L		77	16 - 150		
4-Bromophenyl phenyl ether			120	95.5		ug/L		80	17 - 150		
Butyl benzyl phthalate			120	91.1		ug/L		76	21 - 150		
4-Chloroaniline			120	69.8		ug/L		58	10 - 124		
4-Chloro-3-methylphenol			120	94.3		ug/L		79	37 - 131		
2-Chloronaphthalene			120	84.3		ug/L		70	24 - 132		
2-Chlorophenol			120	82.5		ug/L		69	27 - 124		
4-Chlorophenyl phenyl ether			120	91.1		ug/L		76	27 - 147		
Dibenz[a,h]acridine			59.9	62.9		ug/L		105	40 - 140		
Dibenzofuran			120	84.6		ug/L		70	30 - 135		
3,3'-Dichlorobenzidine			160	120		ug/L		75	10 - 150		
2,4-Dichlorophenol			120	90.0		ug/L		75	33 - 132		
Diethyl phthalate			120	94.5		ug/L		79	37 - 145		
2,4-Dimethylphenol			120	154		ug/L		128	38 - 132		
Dimethyl phthalate			120	112		ug/L		93	32 - 137		
Di-n-butyl phthalate			120	99.9		ug/L		83	27 - 150		
4,6-Dinitro-ortho-cresol			240	259		ug/L		108	14 - 150		
2,4-Dinitrophenol			240	341		ug/L		142	15 - 150		
2,4-Dinitrotoluene			120	95.9		ug/L		80	35 - 136		
2,6-Dinitrotoluene			120	93.1		ug/L		78	29 - 140		
Di-n-octyl phthalate			120	94.2		ug/L		78	26 - 150		
1,4-Dioxane			120	40.2		ug/L		34	10 - 87		
1,2-Diphenylhydrazine (as Azobenzene)			120	81.7		ug/L		68	23 - 138		
Hexachlorobenzene			120	96.2		ug/L		80	10 - 150		
Hexachlorocyclopentadiene			120	258	*+	ug/L		215	10 - 124		
Hexachloroethane			120	59.4		ug/L		49	10 - 127		

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

Lab Sample ID: LCS 400-688036/2-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688036

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indene			120	83.5		ug/L		70	18 - 150		
Isophorone			120	77.2		ug/L		64	28 - 127		
2-Methylphenol			120	85.7		ug/L		71	34 - 124		
3 & 4 Methylphenol			120	80.6		ug/L		67	32 - 122		
2-Nitroaniline			120	82.1		ug/L		68	24 - 139		
3-Nitroaniline			120	63.5		ug/L		53	10 - 128		
4-Nitroaniline			120	87.1		ug/L		73	28 - 118		
Nitrobenzene			120	69.0		ug/L		58	29 - 120		
2-Nitrophenol			120	87.6		ug/L		73	25 - 148		
4-Nitrophenol			240	187		ug/L		78	12 - 129		
N-Nitrosodimethylamine			120	43.6		ug/L		36	10 - 115		
N-Nitrosodi-n-propylamine			120	76.7		ug/L		64	24 - 142		
N-Nitrosodiphenylamine			119	90.6		ug/L		76	29 - 138		
Pentachlorophenol			240	208		ug/L		87	19 - 150		
Phenol			120	55.0		ug/L		46	11 - 95		
Pyridine			240	36.0		ug/L		15	10 - 82		
Quinoline			59.9	40.9		ug/L		68	10 - 141		
2,4,5-Trichlorophenol			120	94.0		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	91.5		ug/L		76	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*55*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*46*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCSD 400-688036/25-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688036

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	113		ug/L		94	10 - 140	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*72*		*21 - 114*
2-Fluorophenol	*67*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*58*		*10 - 129*
Terphenyl-d14	*85*		*13 - 150*
2,4,6-Tribromophenol	*83*		*10 - 150*

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

Lab Sample ID: LCSD 400-688036/3-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688036

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	42.2		ug/L		35	10 - 127	18	40
Benzoic acid	493	302		ug/L		61	19 - 126	10	40
Benzyl alcohol	120	76.1		ug/L		63	17 - 109	5	40
Bis(2-chloroethoxy)methane	120	78.8		ug/L		66	24 - 125	3	40
Bis(2-chloroethyl)ether	120	65.3		ug/L		54	10 - 121	4	40
bis (2-chloroisopropyl) ether	120	72.1		ug/L		60	14 - 123	5	40
Bis(2-ethylhexyl) phthalate	120	97.1		ug/L		81	16 - 150	5	40
4-Bromophenyl phenyl ether	120	106		ug/L		88	17 - 150	10	40
Butyl benzyl phthalate	120	97.4		ug/L		81	21 - 150	7	40
4-Chloroaniline	120	74.4		ug/L		62	10 - 124	6	40
4-Chloro-3-methylphenol	120	101		ug/L		84	37 - 131	7	40
2-Chloronaphthalene	120	90.3		ug/L		75	24 - 132	7	40
2-Chlorophenol	120	87.1		ug/L		73	27 - 124	5	40
4-Chlorophenyl phenyl ether	120	97.7		ug/L		81	27 - 147	7	40
Dibenz[a,h]acridine	59.9	66.6		ug/L		111	40 - 140	6	40
Dibenzofuran	120	90.6		ug/L		75	30 - 135	7	40
3,3'-Dichlorobenzidine	160	130		ug/L		81	10 - 150	8	40
2,4-Dichlorophenol	120	95.2		ug/L		79	33 - 132	6	40
Diethyl phthalate	120	99.5		ug/L		83	37 - 145	5	40
2,4-Dimethylphenol	120	160	*+	ug/L		133	38 - 132	4	40
Dimethyl phthalate	120	118		ug/L		98	32 - 137	5	40
Di-n-butyl phthalate	120	100		ug/L		83	27 - 150	0	40
4,6-Dinitro-ortho-cresol	240	281		ug/L		117	14 - 150	8	40
2,4-Dinitrophenol	240	392	*+	ug/L		163	15 - 150	14	40
2,4-Dinitrotoluene	120	102		ug/L		85	35 - 136	6	40
2,6-Dinitrotoluene	120	98.5		ug/L		82	29 - 140	6	40
Di-n-octyl phthalate	120	98.9		ug/L		82	26 - 150	5	40
1,4-Dioxane	120	40.1		ug/L		33	10 - 87	0	40
1,2-Diphenylhydrazine (as Azobenzene)	120	87.1		ug/L		73	23 - 138	6	40
Hexachlorobenzene	120	104		ug/L		87	10 - 150	8	40
Hexachlorocyclopentadiene	120	276	*+	ug/L		230	10 - 124	7	40
Hexachloroethane	120	59.9		ug/L		50	10 - 127	1	40
Indene	120	86.9		ug/L		72	18 - 150	4	40
Isophorone	120	80.2		ug/L		67	28 - 127	4	40
2-Methylphenol	120	89.8		ug/L		75	34 - 124	5	40
3 & 4 Methylphenol	120	85.1		ug/L		71	32 - 122	5	40
2-Nitroaniline	120	88.7		ug/L		74	24 - 139	8	40
3-Nitroaniline	120	69.9		ug/L		58	10 - 128	10	40
4-Nitroaniline	120	96.4		ug/L		80	28 - 118	10	40
Nitrobenzene	120	71.8		ug/L		60	29 - 120	4	40
2-Nitrophenol	120	92.5		ug/L		77	25 - 148	5	40
4-Nitrophenol	240	206		ug/L		86	12 - 129	9	40
N-Nitrosodimethylamine	120	45.8		ug/L		38	10 - 115	5	40
N-Nitrosodi-n-propylamine	120	81.9		ug/L		68	24 - 142	7	40
N-Nitrosodiphenylamine	119	98.7		ug/L		83	29 - 138	9	40
Pentachlorophenol	240	227		ug/L		95	19 - 150	9	40
Phenol	120	57.3		ug/L		48	11 - 95	4	40
Pyridine	240	18.5	*- *1	ug/L		8	10 - 82	64	40

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

Lab Sample ID: LCSD 400-688036/3-A
Matrix: Water
Analysis Batch: 688448

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688036

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			59.9	39.5		ug/L		66	10 - 141	3	40
2,4,5-Trichlorophenol			120	102		ug/L		85	30 - 144	8	40
2,4,6-Trichlorophenol			120	98.3		ug/L		82	27 - 147	7	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*56*		*10 - 105*
Nitrobenzene-d5	*67*		*16 - 127*
Phenol-d5	*47*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*
2,4,6-Tribromophenol	*98*		*10 - 150*

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 688448

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 688036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	ND	F1	115	64.2		ug/L		56	50 - 150
Benzoic acid	ND	F1 F2	470	361		ug/L		77	50 - 150
Benzyl alcohol	ND		115	73.3		ug/L		64	50 - 150
Bis(2-chloroethoxy)methane	ND		115	74.0		ug/L		65	50 - 150
Bis(2-chloroethyl)ether	ND		115	61.5		ug/L		54	50 - 150
bis (2-chloroisopropyl) ether	ND		115	68.2		ug/L		59	50 - 150
Bis(2-ethylhexyl) phthalate	ND		115	92.9		ug/L		81	50 - 150
4-Bromophenyl phenyl ether	ND		115	98.5		ug/L		86	50 - 150
Butyl benzyl phthalate	ND		115	94.3		ug/L		82	50 - 150
4-Chloroaniline	ND		115	75.0		ug/L		65	50 - 150
4-Chloro-3-methylphenol	ND		115	98.2		ug/L		86	50 - 150
2-Chloronaphthalene	ND		115	84.5		ug/L		74	50 - 150
2-Chlorophenol	ND		115	82.0		ug/L		72	50 - 150
4-Chlorophenyl phenyl ether	ND		115	93.6		ug/L		82	50 - 150
Dibenz[a,h]acridine	ND		57.2	63.2		ug/L		111	50 - 150
Dibenzofuran	ND		115	88.9		ug/L		78	50 - 150
3,3'-Dichlorobenzidine	ND		153	119		ug/L		78	50 - 150
2,4-Dichlorophenol	ND		115	90.0		ug/L		79	50 - 150
Diethyl phthalate	ND		115	97.5		ug/L		85	50 - 150
2,4-Dimethylphenol	ND		115	153		ug/L		134	50 - 150
Dimethyl phthalate	ND		115	113		ug/L		99	50 - 150
Di-n-butyl phthalate	ND		115	97.1		ug/L		85	50 - 150
4,6-Dinitro-ortho-cresol	ND		229	269		ug/L		118	50 - 150
2,4-Dinitrophenol	ND	F1	229	382	F1	ug/L		167	50 - 150
2,4-Dinitrotoluene	ND		115	98.4		ug/L		86	50 - 150
2,6-Dinitrotoluene	ND		115	95.1		ug/L		83	50 - 150
Di-n-octyl phthalate	ND		115	94.6		ug/L		83	50 - 150
1,4-Dioxane	ND	F1	115	29.4	F1	ug/L		26	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	84.1		ug/L		73	50 - 150
Hexachlorobenzene	ND		115	99.3		ug/L		87	50 - 150
Hexachlorocyclopentadiene	ND	*+ F1	115	277	F1	ug/L		242	50 - 150

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

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 688448

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 688036

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachloroethane	ND		115	61.2		ug/L		53	50 - 150
Indene	ND		115	81.8		ug/L		71	50 - 150
Isophorone	ND		115	75.5		ug/L		66	50 - 150
2-Methylphenol	ND		115	85.1		ug/L		74	50 - 150
3 & 4 Methylphenol	ND		115	81.4		ug/L		71	50 - 150
2-Nitroaniline	ND		115	83.8		ug/L		73	50 - 150
3-Nitroaniline	ND		115	70.5		ug/L		62	50 - 150
4-Nitroaniline	ND		115	95.1		ug/L		83	50 - 150
Nitrobenzene	ND		115	68.0		ug/L		59	50 - 150
2-Nitrophenol	ND		115	87.1		ug/L		76	50 - 150
4-Nitrophenol	ND		229	203		ug/L		88	50 - 150
N-Nitrosodimethylamine	ND	F1	115	48.7	F1	ug/L		42	50 - 150
N-Nitrosodi-n-propylamine	ND		115	76.8		ug/L		67	50 - 150
N-Nitrosodiphenylamine	ND		114	92.2		ug/L		81	50 - 150
Pentachlorophenol	ND		229	219		ug/L		96	50 - 150
Phenol	ND	F1	115	57.4		ug/L		50	50 - 150
Pyridine	ND	F1	229	38.3	F1	ug/L		17	50 - 150
Quinoline	ND		57.2	48.7		ug/L		85	50 - 150
2,4,5-Trichlorophenol	ND		115	97.4		ug/L		85	50 - 150
2,4,6-Trichlorophenol	ND		115	94.4		ug/L		82	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*21 - 114*
2-Fluorophenol	*58*		*10 - 105*
Nitrobenzene-d5	*69*		*16 - 127*
Phenol-d5	*51*		*10 - 129*
Terphenyl-d14	*79*		*13 - 150*
2,4,6-Tribromophenol	*101*		*10 - 150*

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 688448

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 688036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F1	115	51.9	F1	ug/L		45	50 - 150	21	40
Benzoic acid	ND	F1 F2	471	51.7	F1 F2	ug/L		11	50 - 150	150	40
Benzyl alcohol	ND		115	71.2		ug/L		62	50 - 150	3	40
Bis(2-chloroethoxy)methane	ND		115	72.5		ug/L		63	50 - 150	2	40
Bis(2-chloroethyl)ether	ND		115	65.2		ug/L		57	50 - 150	6	40
bis (2-chloroisopropyl) ether	ND		115	67.9		ug/L		59	50 - 150	0	40
Bis(2-ethylhexyl) phthalate	ND		115	87.8		ug/L		76	50 - 150	6	40
4-Bromophenyl phenyl ether	ND		115	89.7		ug/L		78	50 - 150	9	40
Butyl benzyl phthalate	ND		115	88.9		ug/L		77	50 - 150	6	40
4-Chloroaniline	ND		115	70.8		ug/L		62	50 - 150	6	40
4-Chloro-3-methylphenol	ND		115	93.7		ug/L		82	50 - 150	5	40
2-Chloronaphthalene	ND		115	82.2		ug/L		72	50 - 150	3	40
2-Chlorophenol	ND		115	81.8		ug/L		71	50 - 150	0	40
4-Chlorophenyl phenyl ether	ND		115	89.6		ug/L		78	50 - 150	4	40

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

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 688448

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 688036

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dibenz[a,h]acridine	ND		57.2	60.1		ug/L		105	50 - 150	5	40
Dibenzofuran	ND		115	85.6		ug/L		75	50 - 150	4	40
3,3'-Dichlorobenzidine	ND		153	107		ug/L		70	50 - 150	11	40
2,4-Dichlorophenol	ND		115	88.0		ug/L		77	50 - 150	2	40
Diethyl phthalate	ND		115	94.2		ug/L		82	50 - 150	3	40
2,4-Dimethylphenol	ND		115	148		ug/L		129	50 - 150	4	40
Dimethyl phthalate	ND		115	108		ug/L		94	50 - 150	4	40
Di-n-butyl phthalate	ND		115	95.5		ug/L		83	50 - 150	2	40
4,6-Dinitro-ortho-cresol	ND		230	254		ug/L		111	50 - 150	6	40
2,4-Dinitrophenol	ND	F1	230	365	F1	ug/L		159	50 - 150	5	40
2,4-Dinitrotoluene	ND		115	93.9		ug/L		82	50 - 150	5	40
2,6-Dinitrotoluene	ND		115	89.2		ug/L		78	50 - 150	6	40
Di-n-octyl phthalate	ND		115	89.9		ug/L		78	50 - 150	5	40
1,4-Dioxane	ND	F1	115	26.0	F1	ug/L		23	50 - 150	12	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	79.7		ug/L		69	50 - 150	5	40
Hexachlorobenzene	ND		115	93.8		ug/L		82	50 - 150	6	40
Hexachlorocyclopentadiene	ND	*+ F1	115	274	F1	ug/L		239	50 - 150	1	40
Hexachloroethane	ND		115	59.7		ug/L		52	50 - 150	2	40
Indene	ND		115	82.0		ug/L		71	50 - 150	0	40
Isophorone	ND		115	73.9		ug/L		64	50 - 150	2	40
2-Methylphenol	ND		115	84.1		ug/L		73	50 - 150	1	40
3 & 4 Methylphenol	ND		115	80.4		ug/L		70	50 - 150	1	40
2-Nitroaniline	ND		115	79.7		ug/L		69	50 - 150	5	40
3-Nitroaniline	ND		115	65.7		ug/L		57	50 - 150	7	40
4-Nitroaniline	ND		115	88.8		ug/L		77	50 - 150	7	40
Nitrobenzene	ND		115	66.9		ug/L		58	50 - 150	2	40
2-Nitrophenol	ND		115	84.3		ug/L		73	50 - 150	3	40
4-Nitrophenol	ND		230	187		ug/L		81	50 - 150	8	40
N-Nitrosodimethylamine	ND	F1	115	39.6	F1	ug/L		35	50 - 150	20	40
N-Nitrosodi-n-propylamine	ND		115	76.1		ug/L		66	50 - 150	1	40
N-Nitrosodiphenylamine	ND		114	84.0		ug/L		74	50 - 150	9	40
Pentachlorophenol	ND		230	208		ug/L		91	50 - 150	5	40
Phenol	ND	F1	115	56.3	F1	ug/L		49	50 - 150	2	40
Pyridine	ND	F1	230	35.4	F1	ug/L		15	50 - 150	8	40
Quinoline	ND		57.2	45.8		ug/L		80	50 - 150	6	40
2,4,5-Trichlorophenol	ND		115	92.4		ug/L		81	50 - 150	5	40
2,4,6-Trichlorophenol	ND		115	89.2		ug/L		78	50 - 150	6	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*57*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*49*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*96*		*10 - 150*

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

Lab Sample ID: MB 400-687965/1-A
Matrix: Water
Analysis Batch: 687993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/15/24 11:08	10/15/24 15:07	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/15/24 11:08	10/15/24 15:07	1
Anthracene	ND		0.20	0.073	ug/L		10/15/24 11:08	10/15/24 15:07	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/15/24 11:08	10/15/24 15:07	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/15/24 11:08	10/15/24 15:07	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/15/24 11:08	10/15/24 15:07	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/15/24 11:08	10/15/24 15:07	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/15/24 11:08	10/15/24 15:07	1
Chrysene	ND		0.20	0.039	ug/L		10/15/24 11:08	10/15/24 15:07	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/15/24 11:08	10/15/24 15:07	1
Fluoranthene	ND		0.20	0.032	ug/L		10/15/24 11:08	10/15/24 15:07	1
Fluorene	ND		0.20	0.087	ug/L		10/15/24 11:08	10/15/24 15:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/15/24 11:08	10/15/24 15:07	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/15/24 11:08	10/15/24 15:07	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/15/24 11:08	10/15/24 15:07	1
Phenanthrene	ND		0.20	0.044	ug/L		10/15/24 11:08	10/15/24 15:07	1
Pyrene	ND		0.20	0.040	ug/L		10/15/24 11:08	10/15/24 15:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*50 - 150*	*10/15/24 11:08*	*10/15/24 15:07*	*1*
Nitrobenzene-d5	*93*		*50 - 150*	*10/15/24 11:08*	*10/15/24 15:07*	*1*
Terphenyl-d14	*78*		*50 - 150*	*10/15/24 11:08*	*10/15/24 15:07*	*1*

Lab Sample ID: LCS 400-687965/2-A
Matrix: Water
Analysis Batch: 687993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.13		ug/L		64	50 - 150
Acenaphthylene	3.34	2.33		ug/L		70	50 - 150
Anthracene	3.34	2.22		ug/L		67	50 - 150
Benzo[a]anthracene	3.34	2.67		ug/L		80	50 - 150
Benzo[a]pyrene	3.34	2.40		ug/L		72	50 - 150
Benzo[b]fluoranthene	3.34	2.37		ug/L		71	50 - 150
Benzo[g,h,i]perylene	3.34	2.22		ug/L		67	50 - 150
Benzo[k]fluoranthene	3.34	2.26		ug/L		68	50 - 150
Chrysene	3.34	2.37		ug/L		71	50 - 150
Dibenz(a,h)anthracene	3.34	2.15		ug/L		64	50 - 150
Fluoranthene	3.34	2.24		ug/L		67	50 - 150
Fluorene	3.34	2.25		ug/L		68	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.19		ug/L		66	50 - 150
1-Methylnaphthalene	3.34	1.83		ug/L		55	50 - 150
2-Methylnaphthalene	3.34	1.55	*-	ug/L		46	50 - 150
Phenanthrene	3.34	2.24		ug/L		67	50 - 150
Pyrene	3.34	2.18		ug/L		65	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*50 - 150*

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

Lab Sample ID: LCS 400-687965/2-A
Matrix: Water
Analysis Batch: 687993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687965

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	98		50 - 150
Terphenyl-d14	80		50 - 150

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 687993

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 687965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		3.34	2.75		ug/L		82	50 - 150
Acenaphthylene	ND		3.34	2.79		ug/L		84	50 - 150
Anthracene	ND		3.34	2.77		ug/L		83	50 - 150
Benzo[a]anthracene	ND		3.34	2.97		ug/L		89	50 - 150
Benzo[a]pyrene	ND		3.34	2.56		ug/L		77	50 - 150
Benzo[b]fluoranthene	ND		3.34	2.47		ug/L		74	50 - 150
Benzo[g,h,i]perylene	ND		3.34	2.24		ug/L		67	50 - 150
Benzo[k]fluoranthene	ND		3.34	2.51		ug/L		75	50 - 150
Chrysene	ND		3.34	2.60		ug/L		78	50 - 150
Dibenz(a,h)anthracene	ND		3.34	2.15		ug/L		64	50 - 150
Fluoranthene	ND		3.34	2.77		ug/L		83	50 - 150
Fluorene	ND		3.34	2.70		ug/L		81	50 - 150
Indeno[1,2,3-cd]pyrene	ND		3.34	2.23		ug/L		67	50 - 150
1-Methylnaphthalene	ND		3.34	2.57		ug/L		77	50 - 150
2-Methylnaphthalene	ND	*-	3.34	2.31		ug/L		69	50 - 150
Phenanthrene	ND		3.34	2.63		ug/L		79	50 - 150
Pyrene	ND		3.34	2.69		ug/L		81	50 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	74		50 - 150
Nitrobenzene-d5	98		50 - 150
Terphenyl-d14	77		50 - 150

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 687993

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 687965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		3.36	2.77		ug/L		83	50 - 150	1	40
Acenaphthylene	ND		3.36	3.00		ug/L		89	50 - 150	7	40
Anthracene	ND		3.36	2.76		ug/L		82	50 - 150	0	40
Benzo[a]anthracene	ND		3.36	3.13		ug/L		93	50 - 150	5	40
Benzo[a]pyrene	ND		3.36	2.56		ug/L		76	50 - 150	0	40
Benzo[b]fluoranthene	ND		3.36	2.71		ug/L		81	50 - 150	10	40
Benzo[g,h,i]perylene	ND		3.36	2.40		ug/L		71	50 - 150	7	40
Benzo[k]fluoranthene	ND		3.36	2.40		ug/L		72	50 - 150	5	40
Chrysene	ND		3.36	2.74		ug/L		82	50 - 150	5	40
Dibenz(a,h)anthracene	ND		3.36	2.20		ug/L		65	50 - 150	2	40
Fluoranthene	ND		3.36	2.75		ug/L		82	50 - 150	1	40
Fluorene	ND		3.36	2.87		ug/L		85	50 - 150	6	40

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

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 687993

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 687965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	ND		3.36	2.29		ug/L		68	50 - 150	3	40
1-Methylnaphthalene	ND		3.36	2.67		ug/L		80	50 - 150	4	40
2-Methylnaphthalene	ND	*-	3.36	2.31		ug/L		69	50 - 150	0	40
Phenanthrene	ND		3.36	2.82		ug/L		84	50 - 150	7	40
Pyrene	ND		3.36	2.68		ug/L		80	50 - 150	1	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*50 - 150*
Nitrobenzene-d5	*99*		*50 - 150*
Terphenyl-d14	*79*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-687416/1-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687416

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		10/10/24 09:56	10/10/24 14:18	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/10/24 09:56	10/10/24 14:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*		*51 - 149*	*10/10/24 09:56*	*10/10/24 14:18*	*1*

Lab Sample ID: LCS 400-687416/2-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687416

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.100		ug/L		100	60 - 140		
1,2-Dibromoethane			0.100	0.118		ug/L		118	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*112*		*51 - 149*

Lab Sample ID: LCSD 400-687416/3-A
Matrix: Water
Analysis Batch: 687442

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687416

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0987		ug/L		98	60 - 140	2	30
1,2-Dibromoethane			0.100	0.103		ug/L		103	60 - 140	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*124*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-263931-3 MS
Matrix: Water
Analysis Batch: 687442

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 687416

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.111	0.0856		ug/L		77	10 - 150		
1,2-Dibromoethane	ND		0.110	0.0759		ug/L		69	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*63*		*51 - 149*

Lab Sample ID: 400-263931-3 MSD
Matrix: Water
Analysis Batch: 687442

Client Sample ID: MW6D-ROX-100824
Prep Type: Total/NA
Prep Batch: 687416

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		0.112	0.0761		ug/L		68	10 - 150	12	20
1,2-Dibromoethane	ND		0.111	0.0682		ug/L		61	39 - 150	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*46*	*S1-*	*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/8/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-100824-8260	10/8/2024	0000	Water	2					2	X			
	TB-ROX-100824-8011	10/8/2024	0000	Water	2					2		X		
	MW6D-ROX-100824	10/8/2024	1020	Water	6			4		10	X	X	X	X
	MW6D-ROX-100824-MS	10/8/2024	1020	Water	6			4		10	X	X	X	X
	MW6D-ROX-100824-MSD	10/8/2024	1020	Water	6			4		10	X	X	X	X
	MW6C-ROX-100824	10/8/2024	1145	Water	6			4		10	X	X	X	X
	MW6B-ROX-100824	10/8/2024	1315	Water	6			4		10	X	X	X	X

400-263931 COC

CMcDavid 10-08-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0546 9942, 7252 0546 9931	10/8/2024	1600
	BP	10/9/24	935

CUSTODY SEALS: 1599936, 1599937, 1599938, 1599939

1.2°C 2.0°C ER11

Version: 19Sept24

10/21/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-263931-1

Login Number: 263931
List Number: 1
Creator: Beecher (Roberts), Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2°C, 2.0°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-263931-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264037-1-Rev.1

Site Name: Roxana

Prepared By and Date: Adelina Gita 11/27/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/04/2024

Stage 2A Validation

Item Reviewed	Acceptable Criteria	Quality Condition			Comments
		Pass	Fail[1]	N/A	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-687801/1002	VOCs	Acetone	**193**	NA	43-150
LCS 400-687801/1002	VOCs	2-Butanone (MEK)	**183**	NA	61 - 145
LCS 400-687584/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**224/230**	2	10-124/40
LCS 400-687584/2-A/3-A	SVOCs	Pyridine	**11/8**	33	10-82/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Method 8270E (SVOCs) Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples MW6A-ROX-100924, MW14-ROX-100924, and MW2-ROX-100924 was qualified as estimated (UJ).					
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8270E (SVOCs) The continuing calibration verification (CCV) for 3-nitroaniline was outside evaluation criteria, biased low. The associated results for samples MW6A-ROX-100924, MW14-ROX-100924, and MW2-ROX-100924 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples	X			

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	were within the applicable acceptance limits.				
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/21/2024 2:12:17 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264037-1

Reviewed 11/27/2024
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

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Authorized for release by
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Job Narrative
400-264037-1

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 10/10/2024 9:12 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 5.1°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-687801 recovered outside acceptance criteria, low biased, for Chloroethane, Chloromethane and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: TB-ROX-100924-8260 (400-264037-1). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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: MW6A-ROX-100924 (400-264037-3), MW14-ROX-100924 (400-264037-4) and MW2-ROX-100924 (400-264037-5). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-687801 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 above the reporting limit in the associated samples; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-687801 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects above the reporting limit for the affected analytes; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample duplicate (LCSD) for preparation batch 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-687584 and analytical batch 400-687921 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 400-687921 recovered outside acceptance criteria, low biased, for 3-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-687921 recovered above the upper control

limit for 4,6-Dinitro-ortho-cresol, Di-n-butyl phthalate, Hexachlorobenzene and Hexachloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration curve analyzed in batch 400-687921 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

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 400-688235 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264037-1	TB-ROX-100924-8260	Water	10/09/24 00:00	10/10/24 09:12
400-264037-2	TB-ROX-100924-8011	Water	10/09/24 00:00	10/10/24 09:12
400-264037-3	MW6A-ROX-100924	Water	10/09/24 09:45	10/10/24 09:12
400-264037-4	MW14-ROX-100924	Water	10/09/24 11:45	10/10/24 09:12
400-264037-5	MW2-ROX-100924	Water	10/09/24 13:30	10/10/24 09:12

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: TB-ROX-100924-8260 — Lab Sample ID: 400-264037-1

No Detections.

Client Sample ID: TB-ROX-100924-8011 — Lab Sample ID: 400-264037-2

No Detections.

Client Sample ID: MW6A-ROX-100924 — Lab Sample ID: 400-264037-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.31	J	1.0	0.22	ug/L	1		8260D	Total/NA
Phenol	6.4	J	9.8	4.1	ug/L	1		8270E	Total/NA
Benzo[b]fluoranthene	0.046	J	0.20	0.042	ug/L	1		8270E	Total/NA
Chrysene	0.055	J	0.20	0.039	ug/L	1		8270E	Total/NA
Fluoranthene	0.041	J	0.20	0.032	ug/L	1		8270E	Total/NA
Phenanthrene	0.046	J	0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.062	J	0.20	0.040	ug/L	1		8270E	Total/NA

Client Sample ID: MW14-ROX-100924 — Lab Sample ID: 400-264037-4

No Detections.

Client Sample ID: MW2-ROX-100924 — Lab Sample ID: 400-264037-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	25	10	ug/L	1		8260D	Total/NA
Benzene	0.89	J	1.0	0.24	ug/L	1		8260D	Total/NA
2-Butanone (MEK)	6.4	J	25	2.6	ug/L	1		8260D	Total/NA
Ethylbenzene	13		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	30		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	5.0		5.0	3.0	ug/L	1		8260D	Total/NA
Naphthalene	4.5	J	5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	2.5		1.0	0.76	ug/L	1		8260D	Total/NA
N-Propylbenzene	48		1.0	0.69	ug/L	1		8260D	Total/NA
p-Isopropyltoluene	2.5		1.0	0.71	ug/L	1		8260D	Total/NA
sec-Butylbenzene	4.9		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.63	J	1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	1.5		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	3.7		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	6.6		1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	6.0	J	10	6.0	ug/L	1		8260D	Total/NA
1-Methylnaphthalene	5.6		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	5.7		0.20	0.076	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: TB-ROX-100924-8260
Date Collected: 10/09/24 00:00
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-1
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			10/14/24 15:38	1
Acrolein	ND		20	3.3	ug/L			10/14/24 15:38	1
Acrylonitrile	ND		10	2.8	ug/L			10/14/24 15:38	1
Benzene	ND		1.0	0.24	ug/L			10/14/24 15:38	1
Bromobenzene	ND		1.0	0.54	ug/L			10/14/24 15:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/14/24 15:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
Bromoform	ND		5.0	0.25	ug/L			10/14/24 15:38	1
Bromomethane	ND		1.0	0.98	ug/L			10/14/24 15:38	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/14/24 15:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/14/24 15:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/14/24 15:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/14/24 15:38	1
Chloroethane	ND		1.0	0.76	ug/L			10/14/24 15:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/14/24 15:38	1
Chloroform	ND		1.0	0.90	ug/L			10/14/24 15:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/14/24 15:38	1
Chloromethane	ND		1.0	0.40	ug/L			10/14/24 15:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/14/24 15:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/14/24 15:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/14/24 15:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/14/24 15:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/14/24 15:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/14/24 15:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/14/24 15:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/14/24 15:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/14/24 15:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/14/24 15:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/14/24 15:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/14/24 15:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/14/24 15:38	1
2-Hexanone	ND		25	4.3	ug/L			10/14/24 15:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/14/24 15:38	1
Methylene bromide	ND		5.0	0.22	ug/L			10/14/24 15:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/14/24 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/14/24 15:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/14/24 15:38	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/14/24 15:38	1
Naphthalene	ND		5.0	3.0	ug/L			10/14/24 15:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/14/24 15:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/14/24 15:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/14/24 15:38	1
o-Xylene	ND		5.0	3.0	ug/L			10/14/24 15:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/14/24 15:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/14/24 15:38	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: TB-ROX-100924-8260
Date Collected: 10/09/24 00:00
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-1
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			10/14/24 15:38	1
Styrene	ND		1.0	1.0	ug/L			10/14/24 15:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/14/24 15:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/14/24 15:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/14/24 15:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/14/24 15:38	1
Toluene	ND		1.0	0.90	ug/L			10/14/24 15:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/14/24 15:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/14/24 15:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/14/24 15:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/14/24 15:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/14/24 15:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/14/24 15:38	1
Trichloroethene	ND		1.0	0.15	ug/L			10/14/24 15:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/14/24 15:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/14/24 15:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/14/24 15:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/14/24 15:38	1
Vinyl acetate	ND		25	0.93	ug/L			10/14/24 15:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/14/24 15:38	1
Xylenes, Total	ND		10	6.0	ug/L			10/14/24 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/14/24 15:38*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*10/14/24 15:38*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/14/24 15:38*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: TB-ROX-100924-8011
Date Collected: 10/09/24 00:00
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-2
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		10/17/24 09:02	10/17/24 17:49	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		10/17/24 09:02	10/17/24 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*10/17/24 09:02*	*10/17/24 17:49*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW6A-ROX-100924
Date Collected: 10/09/24 09:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-3
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			10/16/24 17:31	1
Acrolein	ND		20	3.3	ug/L			10/16/24 17:31	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 17:31	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 17:31	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 17:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 17:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 17:31	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 17:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 17:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 17:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 17:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 17:31	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 17:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 17:31	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 17:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 17:31	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 17:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 17:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 17:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 17:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 17:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 17:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 17:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 17:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 17:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 17:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 17:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 17:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 17:31	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 17:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 17:31	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 17:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 17:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 17:31	1
Methyl tert-butyl ether	**0.31**	**J**	1.0	0.22	ug/L			10/16/24 17:31	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:31	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 17:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 17:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 17:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 17:31	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 17:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 17:31	1

Client Sample ID: MW6A-ROX-100924
Date Collected: 10/09/24 09:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-3
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			10/16/24 17:31	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 17:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 17:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 17:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 17:31	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 17:31	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 17:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 17:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 17:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 17:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 17:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 17:31	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 17:31	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 17:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 17:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 17:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 17:31	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 17:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 17:31	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*10/16/24 17:31*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*10/16/24 17:31*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/16/24 17:31*	*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		10/11/24 11:30	10/15/24 17:17	1
Benzenethiol	ND		9.8	9.7	ug/L		10/11/24 11:30	10/15/24 17:17	1
Benzoic acid	ND		29	24	ug/L		10/11/24 11:30	10/15/24 17:17	1
Benzyl alcohol	ND		9.8	7.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		10/11/24 11:30	10/15/24 17:17	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		10/11/24 11:30	10/15/24 17:17	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		10/11/24 11:30	10/15/24 17:17	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Chloroaniline	ND		9.8	4.6	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		10/11/24 11:30	10/15/24 17:17	1
2-Chlorophenol	ND		9.8	4.0	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		10/11/24 11:30	10/15/24 17:17	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		10/11/24 11:30	10/15/24 17:17	1
Dibenzofuran	ND		9.8	3.9	ug/L		10/11/24 11:30	10/15/24 17:17	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
Diethyl phthalate	ND		9.8	4.3	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4-Dimethylphenol	ND		9.8	5.1	ug/L		10/11/24 11:30	10/15/24 17:17	1

Client Sample ID: MW6A-ROX-100924
Date Collected: 10/09/24 09:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.8	4.1	ug/L		10/11/24 11:30	10/15/24 17:17	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4-Dinitrophenol	ND		29	4.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		10/11/24 11:30	10/15/24 17:17	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		10/11/24 11:30	10/15/24 17:17	1
1,4-Dioxane	ND		9.8	4.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
Hexachlorocyclopentadiene	ND	*+	20	4.4	ug/L		10/11/24 11:30	10/15/24 17:17	1
Hexachloroethane	ND		9.8	5.1	ug/L		10/11/24 11:30	10/15/24 17:17	1
Indene	ND		9.8	3.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
Isophorone	ND		9.8	5.1	ug/L		10/11/24 11:30	10/15/24 17:17	1
2-Methylphenol	ND		9.8	3.1	ug/L		10/11/24 11:30	10/15/24 17:17	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
2-Nitroaniline	ND		9.8	4.9	ug/L		10/11/24 11:30	10/15/24 17:17	1
3-Nitroaniline	ND	UJ	9.8	4.6	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Nitroaniline	ND		9.8	4.0	ug/L		10/11/24 11:30	10/15/24 17:17	1
Nitrobenzene	ND		9.8	4.6	ug/L		10/11/24 11:30	10/15/24 17:17	1
2-Nitrophenol	ND		9.8	4.5	ug/L		10/11/24 11:30	10/15/24 17:17	1
4-Nitrophenol	ND		9.8	3.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
N-Nitrosodimethylamine	ND		9.8	2.2	ug/L		10/11/24 11:30	10/15/24 17:17	1
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		10/11/24 11:30	10/15/24 17:17	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		10/11/24 11:30	10/15/24 17:17	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 17:17	1
Phenol	**6.4**	**J**	9.8	4.1	ug/L		10/11/24 11:30	10/15/24 17:17	1
Pyridine	ND	*- UJ	9.8	9.8	ug/L		10/11/24 11:30	10/15/24 17:17	1
Quinoline	ND		9.8	2.4	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		10/11/24 11:30	10/15/24 17:17	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		10/11/24 11:30	10/15/24 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*10/11/24 11:30*	*10/15/24 17:17*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/11/24 11:30*	*10/15/24 17:17*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*10/11/24 11:30*	*10/15/24 17:17*	*1*
Phenol-d5	*33*		*10 - 129*	*10/11/24 11:30*	*10/15/24 17:17*	*1*
Terphenyl-d14	*74*		*13 - 150*	*10/11/24 11:30*	*10/15/24 17:17*	*1*
2,4,6-Tribromophenol	*90*		*10 - 150*	*10/11/24 11:30*	*10/15/24 17:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/16/24 10:23	10/16/24 15:18	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/16/24 10:23	10/16/24 15:18	1
Anthracene	ND		0.20	0.073	ug/L		10/16/24 10:23	10/16/24 15:18	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:18	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/16/24 10:23	10/16/24 15:18	1
Benzo[b]fluoranthene	**0.046**	**J**	0.20	0.042	ug/L		10/16/24 10:23	10/16/24 15:18	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/16/24 10:23	10/16/24 15:18	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW6A-ROX-100924
Date Collected: 10/09/24 09:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:18	1
Chrysene	**0.055**	**J**	0.20	0.039	ug/L		10/16/24 10:23	10/16/24 15:18	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 15:18	1
Fluoranthene	**0.041**	**J**	0.20	0.032	ug/L		10/16/24 10:23	10/16/24 15:18	1
Fluorene	ND		0.20	0.086	ug/L		10/16/24 10:23	10/16/24 15:18	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 15:18	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/16/24 10:23	10/16/24 15:18	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/16/24 10:23	10/16/24 15:18	1
Phenanthrene	**0.046**	**J**	0.20	0.044	ug/L		10/16/24 10:23	10/16/24 15:18	1
Pyrene	**0.062**	**J**	0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:18*	*1*
Nitrobenzene-d5	*124*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:18*	*1*
Terphenyl-d14	*95*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:18*	*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		10/17/24 09:02	10/17/24 18:10	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/17/24 09:02	10/17/24 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*10/17/24 09:02*	*10/17/24 18:10*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW14-ROX-100924
Date Collected: 10/09/24 11:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-4
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			10/16/24 17:58	1
Acrolein	ND		20	3.3	ug/L			10/16/24 17:58	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 17:58	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 17:58	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 17:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 17:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 17:58	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 17:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 17:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 17:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 17:58	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 17:58	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 17:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 17:58	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 17:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 17:58	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 17:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 17:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 17:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 17:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 17:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 17:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 17:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 17:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 17:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 17:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 17:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 17:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 17:58	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 17:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 17:58	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 17:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 17:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 17:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 17:58	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:58	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 17:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 17:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 17:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 17:58	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 17:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 17:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 17:58	1

Client Sample ID: MW14-ROX-100924
Date Collected: 10/09/24 11:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-4
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			10/16/24 17:58	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 17:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 17:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 17:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 17:58	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 17:58	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 17:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 17:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 17:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 17:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 17:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 17:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 17:58	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 17:58	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 17:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 17:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 17:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 17:58	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 17:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 17:58	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 130*		*10/16/24 17:58*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/16/24 17:58*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/16/24 17:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	8.3	ug/L		10/11/24 11:30	10/15/24 17:40	1
Benzenethiol	ND		9.5	9.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
Benzoic acid	ND		29	23	ug/L		10/11/24 11:30	10/15/24 17:40	1
Benzyl alcohol	ND		9.5	7.0	ug/L		10/11/24 11:30	10/15/24 17:40	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		10/11/24 11:30	10/15/24 17:40	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		10/11/24 11:30	10/15/24 17:40	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Bromophenyl phenyl ether	ND		9.5	8.2	ug/L		10/11/24 11:30	10/15/24 17:40	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Chloroaniline	ND		9.5	4.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Chloro-3-methylphenol	ND		9.5	5.1	ug/L		10/11/24 11:30	10/15/24 17:40	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		10/11/24 11:30	10/15/24 17:40	1
2-Chlorophenol	ND		9.5	3.9	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
Dibenz[a,h]acridine	ND		9.5	2.7	ug/L		10/11/24 11:30	10/15/24 17:40	1
Dibenzofuran	ND		9.5	3.8	ug/L		10/11/24 11:30	10/15/24 17:40	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		10/11/24 11:30	10/15/24 17:40	1
Diethyl phthalate	ND		9.5	4.2	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4-Dimethylphenol	ND		9.5	5.0	ug/L		10/11/24 11:30	10/15/24 17:40	1

Client Sample ID: MW14-ROX-100924
Date Collected: 10/09/24 11:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	4.0	ug/L		10/11/24 11:30	10/15/24 17:40	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4-Dinitrophenol	ND		29	4.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4-Dinitrotoluene	ND		9.5	4.9	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		10/11/24 11:30	10/15/24 17:40	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		10/11/24 11:30	10/15/24 17:40	1
1,4-Dioxane	ND		9.5	4.1	ug/L		10/11/24 11:30	10/15/24 17:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.2	ug/L		10/11/24 11:30	10/15/24 17:40	1
Hexachlorobenzene	ND		9.5	9.3	ug/L		10/11/24 11:30	10/15/24 17:40	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/11/24 11:30	10/15/24 17:40	1
Hexachloroethane	ND		9.5	5.0	ug/L		10/11/24 11:30	10/15/24 17:40	1
Indene	ND		9.5	3.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
Isophorone	ND		9.5	5.0	ug/L		10/11/24 11:30	10/15/24 17:40	1
2-Methylphenol	ND		9.5	3.1	ug/L		10/11/24 11:30	10/15/24 17:40	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
2-Nitroaniline	ND		9.5	4.8	ug/L		10/11/24 11:30	10/15/24 17:40	1
3-Nitroaniline	ND	UJ	9.5	4.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Nitroaniline	ND		9.5	3.9	ug/L		10/11/24 11:30	10/15/24 17:40	1
Nitrobenzene	ND		9.5	4.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
2-Nitrophenol	ND		9.5	4.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
4-Nitrophenol	ND		9.5	3.2	ug/L		10/11/24 11:30	10/15/24 17:40	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		10/11/24 11:30	10/15/24 17:40	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		10/11/24 11:30	10/15/24 17:40	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
Pentachlorophenol	ND		19	11	ug/L		10/11/24 11:30	10/15/24 17:40	1
Phenol	ND		9.5	4.0	ug/L		10/11/24 11:30	10/15/24 17:40	1
Pyridine	ND	*- UJ	9.5	9.5	ug/L		10/11/24 11:30	10/15/24 17:40	1
Quinoline	ND		9.5	2.3	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		10/11/24 11:30	10/15/24 17:40	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/11/24 11:30	10/15/24 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*21 - 114*	*10/11/24 11:30*	*10/15/24 17:40*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/11/24 11:30*	*10/15/24 17:40*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*10/11/24 11:30*	*10/15/24 17:40*	*1*
Phenol-d5	*32*		*10 - 129*	*10/11/24 11:30*	*10/15/24 17:40*	*1*
Terphenyl-d14	*75*		*13 - 150*	*10/11/24 11:30*	*10/15/24 17:40*	*1*
2,4,6-Tribromophenol	*81*		*10 - 150*	*10/11/24 11:30*	*10/15/24 17:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/16/24 10:23	10/16/24 15:49	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/16/24 10:23	10/16/24 15:49	1
Anthracene	ND		0.20	0.073	ug/L		10/16/24 10:23	10/16/24 15:49	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:49	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/16/24 10:23	10/16/24 15:49	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/16/24 10:23	10/16/24 15:49	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/16/24 10:23	10/16/24 15:49	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW14-ROX-100924
Date Collected: 10/09/24 11:45
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:49	1
Chrysene	ND		0.20	0.039	ug/L		10/16/24 10:23	10/16/24 15:49	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 15:49	1
Fluoranthene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 15:49	1
Fluorene	ND		0.20	0.087	ug/L		10/16/24 10:23	10/16/24 15:49	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 15:49	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/16/24 10:23	10/16/24 15:49	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/16/24 10:23	10/16/24 15:49	1
Phenanthrene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 15:49	1
Pyrene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:49*	*1*
Nitrobenzene-d5	*124*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:49*	*1*
Terphenyl-d14	*90*		*50 - 150*	*10/16/24 10:23*	*10/16/24 15:49*	*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		10/17/24 09:02	10/17/24 18:31	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/17/24 09:02	10/17/24 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*10/17/24 09:02*	*10/17/24 18:31*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW2-ROX-100924
Date Collected: 10/09/24 13:30
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11**	**J**	25	10	ug/L			10/16/24 18:24	1
Acrolein	ND		20	3.3	ug/L			10/16/24 18:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 18:24	1
Benzene	**0.89**	**J**	1.0	0.24	ug/L			10/16/24 18:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 18:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 18:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 18:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 18:24	1
2-Butanone (MEK)	**6.4**	**J**	25	2.6	ug/L			10/16/24 18:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 18:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 18:24	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 18:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 18:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 18:24	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 18:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 18:24	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 18:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 18:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 18:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 18:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 18:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 18:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 18:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 18:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 18:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 18:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/16/24 18:24	1
Ethylbenzene	**13**		1.0	0.50	ug/L			10/16/24 18:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 18:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 18:24	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 18:24	1
Isopropylbenzene	**30**		1.0	0.53	ug/L			10/16/24 18:24	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 18:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 18:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 18:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 18:24	1
m-Xylene & p-Xylene	**5.0**		5.0	3.0	ug/L			10/16/24 18:24	1
Naphthalene	**4.5**	**J**	5.0	3.0	ug/L			10/16/24 18:24	1
n-Butylbenzene	**2.5**		1.0	0.76	ug/L			10/16/24 18:24	1
N-Propylbenzene	**48**		1.0	0.69	ug/L			10/16/24 18:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 18:24	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 18:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 18:24	1
p-Isopropyltoluene	**2.5**		1.0	0.71	ug/L			10/16/24 18:24	1

Client Sample ID: MW2-ROX-100924
Date Collected: 10/09/24 13:30
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-5
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	**4.9**		1.0	0.70	ug/L			10/16/24 18:24	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 18:24	1
tert-Butylbenzene	**0.63**	**J**	1.0	0.63	ug/L			10/16/24 18:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 18:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 18:24	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 18:24	1
Toluene	**1.5**		1.0	0.90	ug/L			10/16/24 18:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 18:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 18:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 18:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 18:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 18:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 18:24	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 18:24	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 18:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 18:24	1
1,2,4-Trimethylbenzene	**3.7**		1.0	0.82	ug/L			10/16/24 18:24	1
1,3,5-Trimethylbenzene	**6.6**		1.0	0.56	ug/L			10/16/24 18:24	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 18:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 18:24	1
Xylenes, Total	**6.0**	**J**	10	6.0	ug/L			10/16/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 130*		*10/16/24 18:24*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*10/16/24 18:24*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*10/16/24 18:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.2	ug/L		10/11/24 11:30	10/15/24 18:02	1
Benzenethiol	ND		9.4	9.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
Benzoic acid	ND		28	23	ug/L		10/11/24 11:30	10/15/24 18:02	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/11/24 11:30	10/15/24 18:02	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/11/24 11:30	10/15/24 18:02	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/11/24 11:30	10/15/24 18:02	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/11/24 11:30	10/15/24 18:02	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/11/24 11:30	10/15/24 18:02	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/11/24 11:30	10/15/24 18:02	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/11/24 11:30	10/15/24 18:02	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/11/24 11:30	10/15/24 18:02	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
Diethyl phthalate	ND		9.4	4.2	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/11/24 11:30	10/15/24 18:02	1

Client Sample ID: MW2-ROX-100924
Date Collected: 10/09/24 13:30
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/11/24 11:30	10/15/24 18:02	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/11/24 11:30	10/15/24 18:02	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/11/24 11:30	10/15/24 18:02	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		10/11/24 11:30	10/15/24 18:02	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/11/24 11:30	10/15/24 18:02	1
Indene	ND		9.4	3.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
Isophorone	ND		9.4	4.9	ug/L		10/11/24 11:30	10/15/24 18:02	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/11/24 11:30	10/15/24 18:02	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/11/24 11:30	10/15/24 18:02	1
3-Nitroaniline	ND	UJ	9.4	4.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/11/24 11:30	10/15/24 18:02	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/11/24 11:30	10/15/24 18:02	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/11/24 11:30	10/15/24 18:02	1
Pentachlorophenol	ND		19	11	ug/L		10/11/24 11:30	10/15/24 18:02	1
Phenol	ND		9.4	4.0	ug/L		10/11/24 11:30	10/15/24 18:02	1
Pyridine	ND	*- UJ	9.4	9.4	ug/L		10/11/24 11:30	10/15/24 18:02	1
Quinoline	ND		9.4	2.3	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/11/24 11:30	10/15/24 18:02	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/11/24 11:30	10/15/24 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*21 - 114*	*10/11/24 11:30*	*10/15/24 18:02*	*1*
2-Fluorophenol	*37*		*10 - 105*	*10/11/24 11:30*	*10/15/24 18:02*	*1*
Nitrobenzene-d5	*46*		*16 - 127*	*10/11/24 11:30*	*10/15/24 18:02*	*1*
Phenol-d5	*27*		*10 - 129*	*10/11/24 11:30*	*10/15/24 18:02*	*1*
Terphenyl-d14	*63*		*13 - 150*	*10/11/24 11:30*	*10/15/24 18:02*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*10/11/24 11:30*	*10/15/24 18:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/16/24 10:23	10/16/24 16:20	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/16/24 10:23	10/16/24 16:20	1
Anthracene	ND		0.20	0.073	ug/L		10/16/24 10:23	10/16/24 16:20	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 16:20	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/16/24 10:23	10/16/24 16:20	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/16/24 10:23	10/16/24 16:20	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/16/24 10:23	10/16/24 16:20	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Client Sample ID: MW2-ROX-100924
Date Collected: 10/09/24 13:30
Date Received: 10/10/24 09:12

Lab Sample ID: 400-264037-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 16:20	1
Chrysene	ND		0.20	0.039	ug/L		10/16/24 10:23	10/16/24 16:20	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 16:20	1
Fluoranthene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 16:20	1
Fluorene	ND		0.20	0.086	ug/L		10/16/24 10:23	10/16/24 16:20	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 16:20	1
1-Methylnaphthalene	**5.6**		0.20	0.066	ug/L		10/16/24 10:23	10/16/24 16:20	1
2-Methylnaphthalene	**5.7**		0.20	0.076	ug/L		10/16/24 10:23	10/16/24 16:20	1
Phenanthrene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 16:20	1
Pyrene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*50 - 150*	*10/16/24 10:23*	*10/16/24 16:20*	*1*
Nitrobenzene-d5	*131*		*50 - 150*	*10/16/24 10:23*	*10/16/24 16:20*	*1*
Terphenyl-d14	*104*		*50 - 150*	*10/16/24 10:23*	*10/16/24 16:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/17/24 09:02	10/17/24 18:52	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/17/24 09:02	10/17/24 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*10/17/24 09:02*	*10/17/24 18:52*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	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.

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

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)
400-264037-1	TB-ROX-100924-8260	94	110	98
400-264037-3	MW6A-ROX-100924	102	108	98
400-264037-4	MW14-ROX-100924	105	106	98
400-264037-5	MW2-ROX-100924	108	105	99
LCS 400-687801/1002	Lab Control Sample	100	98	94
LCS 400-688093/1002	Lab Control Sample	98	103	98
MB 400-687801/5	Method Blank	95	115	97
MB 400-688093/4	Method Blank	102	104	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)
400-264037-3	MW6A-ROX-100924	65	44	57	33	74	90
400-264037-4	MW14-ROX-100924	60	44	55	32	75	81
400-264037-5	MW2-ROX-100924	50	37	46	27	63	76
LCS 400-687584/2-A	Lab Control Sample	68	54	64	44	72	95
LCS 400-687584/4-A	Lab Control Sample	60	50	62	38	76	82
LCSD 400-687584/3-A	Lab Control Sample Dup	67	54	65	44	70	95
LCSD 400-687584/5-A	Lab Control Sample Dup	63	50	59	38	74	79
MB 400-687584/1-A	Method Blank	63	49	65	35	78	83

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264037-3	MW6A-ROX-100924	85	124	95
400-264037-4	MW14-ROX-100924	89	124	90
400-264037-5	MW2-ROX-100924	85	131	104
LCS 400-688103/2-A	Lab Control Sample	90	117	93
MB 400-688103/1-A	Method Blank	66	96	78

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	BFB2 (51-149)									
400-264037-2	TB-ROX-100924-8011	77									
400-264037-3	MW6A-ROX-100924	75									
400-264037-4	MW14-ROX-100924	86									
400-264037-5	MW2-ROX-100924	81									
LCS 400-688242/2-A	Lab Control Sample	114									
LCSD 400-688242/3-A	Lab Control Sample Dup	116									
MB 400-688242/1-A	Method Blank	113									

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-100924-8260
Lab Sample ID: 400-264037-1
Date Collected: 10/09/24 00:00
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	687801	10/14/24 15:38	BPO	EET PEN

Client Sample ID: TB-ROX-100924-8011
Lab Sample ID: 400-264037-2
Date Collected: 10/09/24 00:00
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 17:49	KR	EET PEN

Client Sample ID: MW6A-ROX-100924
Lab Sample ID: 400-264037-3
Date Collected: 10/09/24 09:45
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 17:31	IMC	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	688103	10/16/24 10:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688108	10/16/24 15:18	DS	EET PEN
Total/NA	Prep	3510C			255.2 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 17:17	VC1	EET PEN
Total/NA	Prep	8011			32.5 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 18:10	KR	EET PEN

Client Sample ID: MW14-ROX-100924
Lab Sample ID: 400-264037-4
Date Collected: 10/09/24 11:45
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 17:58	IMC	EET PEN
Total/NA	Prep	3511			30.1 mL	2 mL	688103	10/16/24 10:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688108	10/16/24 15:49	DS	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 17:40	VC1	EET PEN
Total/NA	Prep	8011			32.7 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 18:31	KR	EET PEN

Client Sample ID: MW2-ROX-100924
Lab Sample ID: 400-264037-5
Date Collected: 10/09/24 13:30
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688093	10/16/24 18:24	IMC	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	688103	10/16/24 10:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688108	10/16/24 16:20	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW2-ROX-100924
Lab Sample ID: 400-264037-5

Date Collected: 10/09/24 13:30
Matrix: Water
Date Received: 10/10/24 09:12

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			264.6 mL	1 mL	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 18:02	VC1	EET PEN
Total/NA	Prep	8011			32.9 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 18:52	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687584/1-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 11:40	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-687801/5

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	687801	10/14/24 13:04	BPO	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688093/4

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	688093	10/16/24 12:14	IMC	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688103/1-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	3511			30 mL	2 mL	688103	10/16/24 10:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688108	10/16/24 13:46	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688242/1-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 13:58	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/2-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:03	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687584/4-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:48	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-687801/1002
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	687801	10/14/24 11:49	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688093/1002
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	688093	10/16/24 11:09	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688103/2-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	3511			30 mL	2 mL	688103	10/16/24 10:23	RAW	EET PEN
Total/NA	Analysis	8270E		1	0 mL	1.0 mL	688108	10/16/24 14:17	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688242/2-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 14:19	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264037-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/3-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 12:25	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-687584/5-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	687584	10/11/24 11:30	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	687921	10/15/24 13:10	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688242/3-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 14:40	KR	EET PEN

Laboratory References:

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

GC/MS VOA

Analysis Batch: 687801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-1	TB-ROX-100924-8260	Total/NA	Water	8260D	
MB 400-687801/5	Method Blank	Total/NA	Water	8260D	
LCS 400-687801/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 688093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-3	MW6A-ROX-100924	Total/NA	Water	8260D	
400-264037-4	MW14-ROX-100924	Total/NA	Water	8260D	
400-264037-5	MW2-ROX-100924	Total/NA	Water	8260D	
MB 400-688093/4	Method Blank	Total/NA	Water	8260D	
LCS 400-688093/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 687584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-3	MW6A-ROX-100924	Total/NA	Water	3510C	
400-264037-4	MW14-ROX-100924	Total/NA	Water	3510C	
400-264037-5	MW2-ROX-100924	Total/NA	Water	3510C	
MB 400-687584/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 687921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-3	MW6A-ROX-100924	Total/NA	Water	8270E	687584
400-264037-4	MW14-ROX-100924	Total/NA	Water	8270E	687584
400-264037-5	MW2-ROX-100924	Total/NA	Water	8270E	687584
MB 400-687584/1-A	Method Blank	Total/NA	Water	8270E	687584
LCS 400-687584/2-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCS 400-687584/4-A	Lab Control Sample	Total/NA	Water	8270E	687584
LCSD 400-687584/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584
LCSD 400-687584/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	687584

Prep Batch: 688103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-3	MW6A-ROX-100924	Total/NA	Water	3511	
400-264037-4	MW14-ROX-100924	Total/NA	Water	3511	
400-264037-5	MW2-ROX-100924	Total/NA	Water	3511	
MB 400-688103/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688103/2-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 688108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-3	MW6A-ROX-100924	Total/NA	Water	8270E	688103
400-264037-4	MW14-ROX-100924	Total/NA	Water	8270E	688103
400-264037-5	MW2-ROX-100924	Total/NA	Water	8270E	688103
MB 400-688103/1-A	Method Blank	Total/NA	Water	8270E	688103
LCS 400-688103/2-A	Lab Control Sample	Total/NA	Water	8270E	688103

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264037-1

GC Semi VOA

Analysis Batch: 688235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-2	TB-ROX-100924-8011	Total/NA	Water	8011	688242
400-264037-3	MW6A-ROX-100924	Total/NA	Water	8011	688242
400-264037-4	MW14-ROX-100924	Total/NA	Water	8011	688242
400-264037-5	MW2-ROX-100924	Total/NA	Water	8011	688242
MB 400-688242/1-A	Method Blank	Total/NA	Water	8011	688242
LCS 400-688242/2-A	Lab Control Sample	Total/NA	Water	8011	688242
LCSD 400-688242/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688242

Prep Batch: 688242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264037-2	TB-ROX-100924-8011	Total/NA	Water	8011	
400-264037-3	MW6A-ROX-100924	Total/NA	Water	8011	
400-264037-4	MW14-ROX-100924	Total/NA	Water	8011	
400-264037-5	MW2-ROX-100924	Total/NA	Water	8011	
MB 400-688242/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688242/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688242/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

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

Lab Sample ID: MB 400-687801/5
Matrix: Water
Analysis Batch: 687801

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			10/14/24 13:04	1
Acrolein	ND		20	3.3	ug/L			10/14/24 13:04	1
Acrylonitrile	ND		10	2.8	ug/L			10/14/24 13:04	1
Benzene	ND		1.0	0.24	ug/L			10/14/24 13:04	1
Bromobenzene	ND		1.0	0.54	ug/L			10/14/24 13:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/14/24 13:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
Bromoform	ND		5.0	0.25	ug/L			10/14/24 13:04	1
Bromomethane	ND		1.0	0.98	ug/L			10/14/24 13:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/14/24 13:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/14/24 13:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/14/24 13:04	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/14/24 13:04	1
Chloroethane	ND		1.0	0.76	ug/L			10/14/24 13:04	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/14/24 13:04	1
Chloroform	ND		1.0	0.90	ug/L			10/14/24 13:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/14/24 13:04	1
Chloromethane	ND		1.0	0.40	ug/L			10/14/24 13:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/14/24 13:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/14/24 13:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/14/24 13:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/14/24 13:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/14/24 13:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/14/24 13:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/14/24 13:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/14/24 13:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/14/24 13:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/14/24 13:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/14/24 13:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/14/24 13:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/14/24 13:04	1
2-Hexanone	ND		25	4.3	ug/L			10/14/24 13:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/14/24 13:04	1
Methylene bromide	ND		5.0	0.22	ug/L			10/14/24 13:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/14/24 13:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/14/24 13:04	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/14/24 13:04	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/14/24 13:04	1
Naphthalene	ND		5.0	3.0	ug/L			10/14/24 13:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/14/24 13:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/14/24 13:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/14/24 13:04	1
o-Xylene	ND		5.0	3.0	ug/L			10/14/24 13:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/14/24 13:04	1

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

Lab Sample ID: MB 400-687801/5
Matrix: Water
Analysis Batch: 687801

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			10/14/24 13:04	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/14/24 13:04	1
Styrene	ND		1.0	1.0	ug/L			10/14/24 13:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/14/24 13:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/14/24 13:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/14/24 13:04	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/14/24 13:04	1
Toluene	ND		1.0	0.90	ug/L			10/14/24 13:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/14/24 13:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/14/24 13:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/14/24 13:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/14/24 13:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/14/24 13:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/14/24 13:04	1
Trichloroethene	ND		1.0	0.15	ug/L			10/14/24 13:04	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/14/24 13:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/14/24 13:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/14/24 13:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/14/24 13:04	1
Vinyl acetate	ND		25	0.93	ug/L			10/14/24 13:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/14/24 13:04	1
Xylenes, Total	ND		10	6.0	ug/L			10/14/24 13:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/14/24 13:04*	*1*
Dibromofluoromethane	*115*		*75 - 126*		*10/14/24 13:04*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/14/24 13:04*	*1*

Lab Sample ID: LCS 400-687801/1002
Matrix: Water
Analysis Batch: 687801

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	387	*+	ug/L		193	43 - 150
Acrolein	200	172		ug/L		86	38 - 150
Acrylonitrile	500	445		ug/L		89	64 - 142
Benzene	50.0	49.8		ug/L		100	70 - 130
Bromobenzene	50.0	48.3		ug/L		97	70 - 132
Bromochloromethane	50.0	49.8		ug/L		100	70 - 130
Bromodichloromethane	50.0	46.1		ug/L		92	67 - 133
Bromoform	50.0	43.9		ug/L		88	57 - 140
Bromomethane	20.0	18.0		ug/L		90	10 - 150
2-Butanone (MEK)	200	365	*+	ug/L		183	61 - 145
Carbon disulfide	50.0	53.7		ug/L		107	61 - 137
Carbon tetrachloride	50.0	48.7		ug/L		97	61 - 137
Chlorobenzene	50.0	48.8		ug/L		98	70 - 130
Chloroethane	20.0	13.3		ug/L		67	55 - 141
2-Chloroethyl vinyl ether	20.0	13.5		ug/L		68	10 - 150

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

Lab Sample ID: LCS 400-687801/1002
Matrix: Water
Analysis Batch: 687801

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.7		ug/L		93	69 - 130
1-Chlorohexane	50.0	43.1		ug/L		86	69 - 130
Chloromethane	20.0	15.7		ug/L		78	58 - 137
cis-1,2-Dichloroethene	50.0	49.2		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	48.6		ug/L		97	69 - 132
Dibromochloromethane	50.0	44.0		ug/L		88	67 - 135
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	50.4		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.5		ug/L		99	70 - 130
Dichlorodifluoromethane	20.0	18.2		ug/L		91	41 - 146
1,1-Dichloroethane	50.0	50.3		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	42.9		ug/L		86	69 - 130
1,1-Dichloroethene	50.0	57.6		ug/L		115	63 - 134
1,2-Dichloropropane	50.0	52.2		ug/L		104	70 - 130
1,3-Dichloropropane	50.0	44.4		ug/L		89	70 - 130
2,2-Dichloropropane	50.0	45.9		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	50.9		ug/L		102	70 - 130
Ethylbenzene	50.0	48.0		ug/L		96	70 - 130
Ethyl methacrylate	50.0	46.1		ug/L		92	68 - 130
Hexachlorobutadiene	50.0	58.7		ug/L		117	53 - 140
2-Hexanone	200	234		ug/L		117	65 - 137
Isopropylbenzene	50.0	44.6		ug/L		89	70 - 130
Methylene bromide	50.0	48.6		ug/L		97	70 - 130
Methylene Chloride	50.0	56.7		ug/L		113	66 - 135
4-Methyl-2-pentanone (MIBK)	200	180		ug/L		90	69 - 138
Methyl tert-butyl ether	50.0	46.9		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	47.6		ug/L		95	70 - 130
Naphthalene	50.0	46.1		ug/L		92	47 - 149
n-Butylbenzene	50.0	52.6		ug/L		105	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	49.1		ug/L		98	70 - 130
o-Xylene	50.0	45.7		ug/L		91	70 - 130
p-Chlorotoluene	50.0	49.8		ug/L		100	70 - 130
p-Isopropyltoluene	50.0	54.7		ug/L		109	65 - 130
sec-Butylbenzene	50.0	52.4		ug/L		105	66 - 130
Styrene	50.0	46.7		ug/L		93	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.9		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.5		ug/L		87	70 - 131
Tetrachloroethene	50.0	46.3		ug/L		93	65 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	54.5		ug/L		109	70 - 130
trans-1,3-Dichloropropene	50.0	41.8		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	51.3		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	53.8		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	46.8		ug/L		94	68 - 130
1,1,2-Trichloroethane	50.0	43.7		ug/L		87	70 - 130
Trichloroethene	50.0	51.8		ug/L		104	70 - 130
Trichlorofluoromethane	20.0	17.9		ug/L		89	65 - 138

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

Lab Sample ID: LCS 400-687801/1002
Matrix: Water
Analysis Batch: 687801

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	42.7		ug/L		85	70 - 130
1,2,4-Trimethylbenzene	50.0	52.0		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	50.0	51.3		ug/L		103	69 - 130
Vinyl acetate	40.0	36.0		ug/L		90	26 - 150
Vinyl chloride	20.0	15.5		ug/L		77	59 - 136
Xylenes, Total	100	93.3		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

Lab Sample ID: MB 400-688093/4
Matrix: Water
Analysis Batch: 688093

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			10/16/24 12:14	1
Acrolein	ND		20	3.3	ug/L			10/16/24 12:14	1
Acrylonitrile	ND		10	2.8	ug/L			10/16/24 12:14	1
Benzene	ND		1.0	0.24	ug/L			10/16/24 12:14	1
Bromobenzene	ND		1.0	0.54	ug/L			10/16/24 12:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/16/24 12:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Bromoform	ND		5.0	0.25	ug/L			10/16/24 12:14	1
Bromomethane	ND		1.0	0.98	ug/L			10/16/24 12:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/16/24 12:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/16/24 12:14	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/16/24 12:14	1
Chloroethane	ND		1.0	0.76	ug/L			10/16/24 12:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/16/24 12:14	1
Chloroform	ND		1.0	0.90	ug/L			10/16/24 12:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/16/24 12:14	1
Chloromethane	ND		1.0	0.40	ug/L			10/16/24 12:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/16/24 12:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/16/24 12:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/16/24 12:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/16/24 12:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/16/24 12:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/16/24 12:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/16/24 12:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/16/24 12:14	1

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

Lab Sample ID: MB 400-688093/4
Matrix: Water
Analysis Batch: 688093

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			10/16/24 12:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/16/24 12:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/16/24 12:14	1
2-Hexanone	ND		25	4.3	ug/L			10/16/24 12:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/16/24 12:14	1
Methylene bromide	ND		5.0	0.22	ug/L			10/16/24 12:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/16/24 12:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/16/24 12:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/16/24 12:14	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
Naphthalene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/16/24 12:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/16/24 12:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/16/24 12:14	1
o-Xylene	ND		5.0	3.0	ug/L			10/16/24 12:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/16/24 12:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/16/24 12:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/16/24 12:14	1
Styrene	ND		1.0	1.0	ug/L			10/16/24 12:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/16/24 12:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/16/24 12:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/16/24 12:14	1
Toluene	ND		1.0	0.90	ug/L			10/16/24 12:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/16/24 12:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/16/24 12:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/16/24 12:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/16/24 12:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/16/24 12:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/16/24 12:14	1
Trichloroethene	ND		1.0	0.15	ug/L			10/16/24 12:14	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/16/24 12:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/16/24 12:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/16/24 12:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/16/24 12:14	1
Vinyl acetate	ND		25	0.93	ug/L			10/16/24 12:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/16/24 12:14	1
Xylenes, Total	ND		10	6.0	ug/L			10/16/24 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*10/16/24 12:14*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/16/24 12:14*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/16/24 12:14*	*1*

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

Lab Sample ID: LCS 400-688093/1002
Matrix: Water
Analysis Batch: 688093

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	193		ug/L		97	43 - 150
Acrolein	500	463		ug/L		93	38 - 150
Acrylonitrile	500	417		ug/L		83	64 - 142
Benzene	50.0	44.7		ug/L		89	70 - 130
Bromobenzene	50.0	47.6		ug/L		95	70 - 132
Bromochloromethane	50.0	46.8		ug/L		94	70 - 130
Bromodichloromethane	50.0	45.8		ug/L		92	67 - 133
Bromoform	50.0	42.9		ug/L		86	57 - 140
Bromomethane	50.0	45.0		ug/L		90	10 - 150
2-Butanone (MEK)	200	200		ug/L		100	61 - 145
Carbon disulfide	50.0	40.9		ug/L		82	61 - 137
Carbon tetrachloride	50.0	46.4		ug/L		93	61 - 137
Chlorobenzene	50.0	46.5		ug/L		93	70 - 130
Chloroethane	50.0	42.3		ug/L		85	55 - 141
2-Chloroethyl vinyl ether	50.0	25.8		ug/L		52	10 - 150
Chloroform	50.0	46.1		ug/L		92	69 - 130
1-Chlorohexane	50.0	49.4		ug/L		99	69 - 130
Chloromethane	50.0	40.9		ug/L		82	58 - 137
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	45.4		ug/L		91	69 - 132
Dibromochloromethane	50.0	45.5		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	50.0		ug/L		100	70 - 130
Dichlorodifluoromethane	50.0	39.7		ug/L		79	41 - 146
1,1-Dichloroethane	50.0	44.1		ug/L		88	70 - 130
1,2-Dichloroethane	50.0	46.4		ug/L		93	69 - 130
1,1-Dichloroethene	50.0	44.7		ug/L		89	63 - 134
1,2-Dichloropropane	50.0	45.1		ug/L		90	70 - 130
1,3-Dichloropropane	50.0	44.8		ug/L		90	70 - 130
2,2-Dichloropropane	50.0	44.1		ug/L		88	52 - 135
1,1-Dichloropropene	50.0	45.6		ug/L		91	70 - 130
Ethylbenzene	50.0	47.8		ug/L		96	70 - 130
Ethyl methacrylate	50.0	42.4		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	56.6		ug/L		113	53 - 140
2-Hexanone	200	197		ug/L		99	65 - 137
Isopropylbenzene	50.0	48.9		ug/L		98	70 - 130
Methylene bromide	50.0	45.5		ug/L		91	70 - 130
Methylene Chloride	50.0	46.1		ug/L		92	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		86	69 - 138
Methyl tert-butyl ether	50.0	41.9		ug/L		84	66 - 130
m-Xylene & p-Xylene	50.0	48.4		ug/L		97	70 - 130
Naphthalene	50.0	45.5		ug/L		91	47 - 149
n-Butylbenzene	50.0	52.6		ug/L		105	67 - 130
N-Propylbenzene	50.0	51.7		ug/L		103	70 - 130
o-Chlorotoluene	50.0	48.2		ug/L		96	70 - 130
o-Xylene	50.0	47.8		ug/L		96	70 - 130
p-Chlorotoluene	50.0	49.0		ug/L		98	70 - 130

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

Lab Sample ID: LCS 400-688093/1002
Matrix: Water
Analysis Batch: 688093

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	52.2		ug/L		104	65 - 130
sec-Butylbenzene	50.0	51.8		ug/L		104	66 - 130
Styrene	50.0	47.3		ug/L		95	70 - 130
tert-Butylbenzene	50.0	49.4		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.9		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.4		ug/L		85	70 - 131
Tetrachloroethene	50.0	47.6		ug/L		95	65 - 130
Toluene	50.0	44.9		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	44.6		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	45.1		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	48.0		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	49.9		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	43.9		ug/L		88	70 - 130
Trichloroethene	50.0	46.3		ug/L		93	70 - 130
Trichlorofluoromethane	50.0	45.8		ug/L		92	65 - 138
1,2,3-Trichloropropane	50.0	43.4		ug/L		87	70 - 130
1,2,4-Trimethylbenzene	50.0	51.2		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	49.5		ug/L		99	69 - 130
Vinyl acetate	100	83.6		ug/L		84	26 - 150
Vinyl chloride	50.0	41.2		ug/L		82	59 - 136
Xylenes, Total	100	96.2		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzenethiol	ND		10	9.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzoic acid	ND		30	24	ug/L		10/11/24 11:30	10/15/24 11:40	1
Benzyl alcohol	ND		10	7.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Chlorophenol	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1

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

Lab Sample ID: MB 400-687584/1-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 687584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dibenzofuran	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Diethyl phthalate	ND		10	4.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/11/24 11:30	10/15/24 11:40	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,4-Dioxane	ND		10	4.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
Hexachloroethane	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Indene	ND		10	3.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
Isophorone	ND		10	5.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Methylphenol	ND		10	3.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitroaniline	ND		10	5.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
3-Nitroaniline	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitroaniline	ND		10	4.1	ug/L		10/11/24 11:30	10/15/24 11:40	1
Nitrobenzene	ND		10	4.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
2-Nitrophenol	ND		10	4.6	ug/L		10/11/24 11:30	10/15/24 11:40	1
4-Nitrophenol	ND		10	3.3	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/11/24 11:30	10/15/24 11:40	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/11/24 11:30	10/15/24 11:40	1
Pentachlorophenol	ND		20	12	ug/L		10/11/24 11:30	10/15/24 11:40	1
Phenol	ND		10	4.2	ug/L		10/11/24 11:30	10/15/24 11:40	1
Pyridine	ND		10	10	ug/L		10/11/24 11:30	10/15/24 11:40	1
Quinoline	ND		10	2.4	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/11/24 11:30	10/15/24 11:40	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/11/24 11:30	10/15/24 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Nitrobenzene-d5	*65*		*16 - 127*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Phenol-d5	*35*		*10 - 129*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/11/24 11:30*	*10/15/24 11:40*	*1*

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

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	35.0		ug/L		29	10 - 127
Benzoic acid	493	257		ug/L		52	19 - 126
Benzyl alcohol	120	71.7		ug/L		60	17 - 109
Bis(2-chloroethoxy)methane	120	72.5		ug/L		60	24 - 125
Bis(2-chloroethyl)ether	120	66.1		ug/L		55	10 - 121
bis (2-chloroisopropyl) ether	120	69.0		ug/L		58	14 - 123
Bis(2-ethylhexyl) phthalate	120	91.9		ug/L		77	16 - 150
4-Bromophenyl phenyl ether	120	88.4		ug/L		74	17 - 150
Butyl benzyl phthalate	120	89.8		ug/L		75	21 - 150
4-Chloroaniline	120	62.9		ug/L		52	10 - 124
4-Chloro-3-methylphenol	120	95.6		ug/L		80	37 - 131
2-Chloronaphthalene	120	84.2		ug/L		70	24 - 132
2-Chlorophenol	120	78.9		ug/L		66	27 - 124
4-Chlorophenyl phenyl ether	120	91.8		ug/L		76	27 - 147
Dibenz[a,h]acridine	59.9	64.9		ug/L		108	40 - 140
Dibenzofuran	120	87.5		ug/L		73	30 - 135
3,3'-Dichlorobenzidine	160	128		ug/L		80	10 - 150
2,4-Dichlorophenol	120	86.0		ug/L		72	33 - 132
Diethyl phthalate	120	99.7		ug/L		83	37 - 145
2,4-Dimethylphenol	120	151		ug/L		126	38 - 132
Dimethyl phthalate	120	96.2		ug/L		80	32 - 137
Di-n-butyl phthalate	120	102		ug/L		85	27 - 150
4,6-Dinitro-ortho-cresol	240	246		ug/L		103	14 - 150
2,4-Dinitrophenol	240	323		ug/L		135	15 - 150
2,4-Dinitrotoluene	120	97.8		ug/L		82	35 - 136
2,6-Dinitrotoluene	120	94.0		ug/L		78	29 - 140
Di-n-octyl phthalate	120	93.5		ug/L		78	26 - 150
1,4-Dioxane	120	39.7		ug/L		33	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	80.6		ug/L		67	23 - 138
Hexachlorobenzene	120	95.0		ug/L		79	10 - 150
Hexachlorocyclopentadiene	120	269	*+	ug/L		224	10 - 124
Hexachloroethane	120	56.8		ug/L		47	10 - 127
Indene	120	87.7		ug/L		73	18 - 150
Isophorone	120	79.3		ug/L		66	28 - 127
2-Methylphenol	120	81.7		ug/L		68	34 - 124
3 & 4 Methylphenol	120	76.6		ug/L		64	32 - 122
2-Nitroaniline	120	81.7		ug/L		68	24 - 139
3-Nitroaniline	120	63.3		ug/L		53	10 - 128
4-Nitroaniline	120	84.9		ug/L		71	28 - 118
Nitrobenzene	120	66.3		ug/L		55	29 - 120
2-Nitrophenol	120	81.9		ug/L		68	25 - 148
4-Nitrophenol	240	172		ug/L		72	12 - 129
N-Nitrosodimethylamine	120	43.9		ug/L		37	10 - 115
N-Nitrosodi-n-propylamine	120	75.4		ug/L		63	24 - 142
N-Nitrosodiphenylamine	119	83.1		ug/L		70	29 - 138
Pentachlorophenol	240	211		ug/L		88	19 - 150
Phenol	120	52.7		ug/L		44	11 - 95
Pyridine	240	27.1		ug/L		11	10 - 82

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

Lab Sample ID: LCS 400-687584/2-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			59.9	40.8		ug/L		68	10 - 141		
2,4,5-Trichlorophenol			120	93.4		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	91.3		ug/L		76	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*64*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCS 400-687584/4-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	96.0		ug/L		80	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*62*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	31.4		ug/L		26	10 - 127	11	40
Benzoic acid			493	275		ug/L		56	19 - 126	7	40
Benzyl alcohol			120	72.5		ug/L		60	17 - 109	1	40
Bis(2-chloroethoxy)methane			120	72.1		ug/L		60	24 - 125	1	40
Bis(2-chloroethyl)ether			120	60.5		ug/L		50	10 - 121	9	40
bis (2-chloroisopropyl) ether			120	68.5		ug/L		57	14 - 123	1	40
Bis(2-ethylhexyl) phthalate			120	88.5		ug/L		74	16 - 150	4	40
4-Bromophenyl phenyl ether			120	87.2		ug/L		73	17 - 150	1	40
Butyl benzyl phthalate			120	89.2		ug/L		74	21 - 150	1	40
4-Chloroaniline			120	60.6		ug/L		50	10 - 124	4	40
4-Chloro-3-methylphenol			120	94.8		ug/L		79	37 - 131	1	40
2-Chloronaphthalene			120	83.2		ug/L		69	24 - 132	1	40
2-Chlorophenol			120	79.4		ug/L		66	27 - 124	1	40
4-Chlorophenyl phenyl ether			120	89.6		ug/L		75	27 - 147	2	40
Dibenz[a,h]acridine			59.9	63.4		ug/L		106	40 - 140	2	40
Dibenzofuran			120	87.0		ug/L		73	30 - 135	1	40

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

Lab Sample ID: LCSD 400-687584/3-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			160	123		ug/L		77	10 - 150	4	40
2,4-Dichlorophenol			120	87.2		ug/L		73	33 - 132	1	40
Diethyl phthalate			120	96.9		ug/L		81	37 - 145	3	40
2,4-Dimethylphenol			120	148		ug/L		123	38 - 132	2	40
Dimethyl phthalate			120	93.4		ug/L		78	32 - 137	3	40
Di-n-butyl phthalate			120	97.6		ug/L		81	27 - 150	4	40
4,6-Dinitro-ortho-cresol			240	243		ug/L		101	14 - 150	1	40
2,4-Dinitrophenol			240	333		ug/L		139	15 - 150	3	40
2,4-Dinitrotoluene			120	96.1		ug/L		80	35 - 136	2	40
2,6-Dinitrotoluene			120	91.4		ug/L		76	29 - 140	3	40
Di-n-octyl phthalate			120	89.3		ug/L		74	26 - 150	5	40
1,4-Dioxane			120	42.6		ug/L		36	10 - 87	7	40
1,2-Diphenylhydrazine (as Azobenzene)			120	79.7		ug/L		66	23 - 138	1	40
Hexachlorobenzene			120	93.5		ug/L		78	10 - 150	2	40
Hexachlorocyclopentadiene			120	275	*+	ug/L		230	10 - 124	2	40
Hexachloroethane			120	57.0		ug/L		48	10 - 127	0	40
Indene			120	86.4		ug/L		72	18 - 150	1	40
Isophorone			120	77.2		ug/L		64	28 - 127	3	40
2-Methylphenol			120	81.1		ug/L		68	34 - 124	1	40
3 & 4 Methylphenol			120	77.5		ug/L		65	32 - 122	1	40
2-Nitroaniline			120	81.1		ug/L		68	24 - 139	1	40
3-Nitroaniline			120	63.2		ug/L		53	10 - 128	0	40
4-Nitroaniline			120	83.1		ug/L		69	28 - 118	2	40
Nitrobenzene			120	66.6		ug/L		56	29 - 120	0	40
2-Nitrophenol			120	83.8		ug/L		70	25 - 148	2	40
4-Nitrophenol			240	171		ug/L		71	12 - 129	1	40
N-Nitrosodimethylamine			120	46.6		ug/L		39	10 - 115	6	40
N-Nitrosodi-n-propylamine			120	77.3		ug/L		64	24 - 142	2	40
N-Nitrosodiphenylamine			119	83.2		ug/L		70	29 - 138	0	40
Pentachlorophenol			240	209		ug/L		87	19 - 150	1	40
Phenol			120	51.6		ug/L		43	11 - 95	2	40
Pyridine			240	19.5	*-	ug/L		8	10 - 82	33	40
Quinoline			59.9	33.2		ug/L		55	10 - 141	21	40
2,4,5-Trichlorophenol			120	92.3		ug/L		77	30 - 144	1	40
2,4,6-Trichlorophenol			120	89.8		ug/L		75	27 - 147	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*70*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

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

Lab Sample ID: LCSD 400-687584/5-A
Matrix: Water
Analysis Batch: 687921

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 687584

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	88.1		ug/L		73	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

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

Lab Sample ID: MB 400-688103/1-A
Matrix: Water
Analysis Batch: 688108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688103

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/16/24 10:23	10/16/24 13:46	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/16/24 10:23	10/16/24 13:46	1
Anthracene	ND		0.20	0.073	ug/L		10/16/24 10:23	10/16/24 13:46	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 13:46	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/16/24 10:23	10/16/24 13:46	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/16/24 10:23	10/16/24 13:46	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/16/24 10:23	10/16/24 13:46	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 13:46	1
Chrysene	ND		0.20	0.039	ug/L		10/16/24 10:23	10/16/24 13:46	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 13:46	1
Fluoranthene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 13:46	1
Fluorene	ND		0.20	0.087	ug/L		10/16/24 10:23	10/16/24 13:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/16/24 10:23	10/16/24 13:46	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/16/24 10:23	10/16/24 13:46	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/16/24 10:23	10/16/24 13:46	1
Phenanthrene	ND		0.20	0.044	ug/L		10/16/24 10:23	10/16/24 13:46	1
Pyrene	ND		0.20	0.040	ug/L		10/16/24 10:23	10/16/24 13:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*50 - 150*	*10/16/24 10:23*	*10/16/24 13:46*	*1*
Nitrobenzene-d5	*96*		*50 - 150*	*10/16/24 10:23*	*10/16/24 13:46*	*1*
Terphenyl-d14	*78*		*50 - 150*	*10/16/24 10:23*	*10/16/24 13:46*	*1*

Lab Sample ID: LCS 400-688103/2-A
Matrix: Water
Analysis Batch: 688108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688103

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			3.34	2.10		ug/L		63	50 - 150		
Acenaphthylene			3.34	2.40		ug/L		72	50 - 150		
Anthracene			3.34	2.42		ug/L		72	50 - 150		

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

Lab Sample ID: LCS 400-688103/2-A
Matrix: Water
Analysis Batch: 688108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688103

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]anthracene	3.34	2.77		ug/L		83	50 - 150
Benzo[a]pyrene	3.34	2.56		ug/L		77	50 - 150
Benzo[b]fluoranthene	3.34	2.55		ug/L		77	50 - 150
Benzo[g,h,i]perylene	3.34	2.39		ug/L		72	50 - 150
Benzo[k]fluoranthene	3.34	2.50		ug/L		75	50 - 150
Chrysene	3.34	2.43		ug/L		73	50 - 150
Dibenz(a,h)anthracene	3.34	2.31		ug/L		69	50 - 150
Fluoranthene	3.34	2.41		ug/L		72	50 - 150
Fluorene	3.34	2.32		ug/L		70	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.32		ug/L		70	50 - 150
1-Methylnaphthalene	3.34	2.02		ug/L		61	50 - 150
2-Methylnaphthalene	3.34	1.72		ug/L		51	50 - 150
Phenanthrene	3.34	2.36		ug/L		71	50 - 150
Pyrene	3.34	2.37		ug/L		71	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*50 - 150*
Nitrobenzene-d5	*117*		*50 - 150*
Terphenyl-d14	*93*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688242/1-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688242

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		10/17/24 09:02	10/17/24 13:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/17/24 09:02	10/17/24 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*10/17/24 09:02*	*10/17/24 13:58*	*1*

Lab Sample ID: LCS 400-688242/2-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.101	0.108		ug/L		107	60 - 140
1,2-Dibromoethane	0.100	0.139		ug/L		138	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-688242/3-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.111		ug/L		111	60 - 140	3	30
1,2-Dibromoethane			0.100	0.138		ug/L		138	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/9/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: melissa.remiger@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions | PHONE NO.: 314-802-1207 | E-MAIL: melissa.remiger@aecom.com | AECOM Other ID: Roxana 4Q24 Groundwater

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

- **Include "J" values on Reports.**
- **Provide sample receipt upon login.**
- **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 – 3.4.2

400-264037 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-100924-8260	10/9/2024	0000	Water	2					2	X			
	TB-ROX-100924-8011	10/9/2024	0000	Water	2					2		X		
	MW6A-ROX-100924	10/9/2024	0945	Water	6			4		10	X	X	X	X
	MW14-ROX-100924	10/9/2024	1145	Water	6			4		10	X	X	X	X
	MW2-ROX-100924	10/9/2024	1330	Water	6			4		10	X	X	X	X

C McDavid 10-09-24

		Date	Time
Relinquished by: (Signature) COURTNEY MCDAVID	Received by: (Signature) FEDEX: 7252 0546 9920, 7252 0546 9910	10/9/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/10/24	Time: 9:12

Version: 19Sept24

CUSTODY SEALS: 1599940, 1599941, 1599942, 1599943

S.PC 10/11

10/21/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264037-1

Login Number: 264037
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	5.1°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-264037-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264164-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/27/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-688325/2-A/3-A	SVOCs	2,4-Dinitrophenol	**157/155**	1	15-150/40
LCS/LCSD 400-688325/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**218/177**	20	10-124/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analyte at the specified frequency and appropriate concentrations.		X		

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	Organics The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method				
Method 8260D (VOCs) The continuing calibration verification (CCV) for vinyl acetate was outside evaluation criteria, biased low. The associated results for sample MW13-ROX-101024, P114R-ROX-101024 and MW3-ROX-101024 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated, and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/22/2024 3:01:09 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264164-1

Reviewed 11/27/2024
AN

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

my EOL

Job Notes

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

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

Authorization

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Authorized for release by
Leah Klingensmith, Senior Project Manager
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(615)301-5038

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Job Narrative
400-264164-1

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 10/11/2024 8:32 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 0.0°C, 0.1°C and 1.3°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-688578 recovered outside acceptance criteria, low biased, for Vinyl acetate. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101024-8260 (400-264164-1), MW13-ROX-101024 (400-264164-3), P114R-ROX-101024 (400-264164-4), MW3-ROX-101024-EB (400-264164-5) and MW3-ROX-101024 (400-264164-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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 400-688325 and analytical batch 400-688615 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and Hexachlorocyclopentadiene. 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 400-688615 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 4,6-Dinitro-ortho-cresol, 2-Nitrophenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688615 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The initial calibration curve analyzed in batch 400-688615 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

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 400-688235 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264164-1	TB-ROX-101024-8260	Water	10/10/24 00:00	10/11/24 08:32
400-264164-2	TB-ROX-101024-8011	Water	10/10/24 00:00	10/11/24 08:32
400-264164-3	MW13-ROX-101024	Water	10/10/24 09:50	10/11/24 08:32
400-264164-4	P114R-ROX-101024	Water	10/10/24 10:00	10/11/24 08:32
400-264164-5	MW3-ROX-101024-EB	Water	10/10/24 12:00	10/11/24 08:32
400-264164-6	MW3-ROX-101024	Water	10/10/24 13:15	10/11/24 08:32

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: TB-ROX-101024-8260 — Lab Sample ID: 400-264164-1

No Detections.

Client Sample ID: TB-ROX-101024-8011 — Lab Sample ID: 400-264164-2

No Detections.

Client Sample ID: MW13-ROX-101024 — Lab Sample ID: 400-264164-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.93	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: P114R-ROX-101024 — Lab Sample ID: 400-264164-4

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	0.39		0.20	0.083	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	0.094	J	0.20	0.064	ug/L	1		8270E	Total/NA

Client Sample ID: MW3-ROX-101024-EB — Lab Sample ID: 400-264164-5

No Detections.

Client Sample ID: MW3-ROX-101024 — Lab Sample ID: 400-264164-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.39	J	1.0	0.22	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: TB-ROX-101024-8260
Date Collected: 10/10/24 00:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-1
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			10/21/24 14:50	1
Acrolein	ND		20	3.3	ug/L			10/21/24 14:50	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 14:50	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 14:50	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 14:50	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 14:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 14:50	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 14:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 14:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 14:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 14:50	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 14:50	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 14:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 14:50	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 14:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 14:50	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 14:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 14:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 14:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 14:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 14:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 14:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 14:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 14:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 14:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 14:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 14:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 14:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 14:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 14:50	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 14:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 14:50	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 14:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 14:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 14:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/21/24 14:50	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 14:50	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 14:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 14:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 14:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 14:50	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 14:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 14:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/24 14:50	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: TB-ROX-101024-8260
Date Collected: 10/10/24 00:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-1
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			10/21/24 14:50	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 14:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 14:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 14:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 14:50	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 14:50	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 14:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 14:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 14:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 14:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 14:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 14:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 14:50	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 14:50	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 14:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 14:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 14:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 14:50	1
Vinyl acetate	ND		25	0.93	ug/L			10/21/24 14:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 14:50	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 14:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/21/24 14:50*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/21/24 14:50*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/21/24 14:50*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: TB-ROX-101024-8011
Date Collected: 10/10/24 00:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-2
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		10/17/24 09:02	10/17/24 19:14	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		10/17/24 09:02	10/17/24 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*76*		*51 - 149*	*10/17/24 09:02*	*10/17/24 19:14*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: MW13-ROX-101024
Date Collected: 10/10/24 09:50
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-3
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			10/21/24 19:40	1
Acrolein	ND		20	3.3	ug/L			10/21/24 19:40	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 19:40	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 19:40	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 19:40	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 19:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 19:40	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 19:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 19:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 19:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 19:40	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 19:40	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 19:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 19:40	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 19:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 19:40	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 19:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 19:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 19:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 19:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 19:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 19:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 19:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 19:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 19:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 19:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 19:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 19:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 19:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 19:40	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 19:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 19:40	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 19:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 19:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 19:40	1
Methyl tert-butyl ether	**0.93**	**J**	1.0	0.22	ug/L			10/21/24 19:40	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 19:40	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 19:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 19:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 19:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 19:40	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 19:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 19:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/24 19:40	1

Client Sample ID: MW13-ROX-101024
Date Collected: 10/10/24 09:50
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-3
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			10/21/24 19:40	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 19:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 19:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 19:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 19:40	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 19:40	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 19:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 19:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 19:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 19:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 19:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 19:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 19:40	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 19:40	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 19:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 19:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 19:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 19:40	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/21/24 19:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 19:40	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/21/24 19:40*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/21/24 19:40*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/21/24 19:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	8.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
Benzenethiol	ND		9.6	9.5	ug/L		10/17/24 15:51	10/21/24 21:29	1
Benzoic acid	ND		29	23	ug/L		10/17/24 15:51	10/21/24 21:29	1
Benzyl alcohol	ND		9.6	7.0	ug/L		10/17/24 15:51	10/21/24 21:29	1
Bis(2-chloroethoxy)methane	ND		9.6	4.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
Bis(2-chloroethyl)ether	ND		9.6	3.8	ug/L		10/17/24 15:51	10/21/24 21:29	1
bis (2-chloroisopropyl) ether	ND		9.6	1.7	ug/L		10/17/24 15:51	10/21/24 21:29	1
Bis(2-ethylhexyl) phthalate	ND		9.6	8.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Bromophenyl phenyl ether	ND		9.6	8.3	ug/L		10/17/24 15:51	10/21/24 21:29	1
Butyl benzyl phthalate	ND		9.6	5.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Chloroaniline	ND		9.6	4.5	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Chloro-3-methylphenol	ND		9.6	5.1	ug/L		10/17/24 15:51	10/21/24 21:29	1
2-Chloronaphthalene	ND		9.6	3.7	ug/L		10/17/24 15:51	10/21/24 21:29	1
2-Chlorophenol	ND		9.6	3.9	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Chlorophenyl phenyl ether	ND		9.6	3.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
Dibenz[a,h]acridine	ND		9.6	2.7	ug/L		10/17/24 15:51	10/21/24 21:29	1
Dibenzofuran	ND		9.6	3.9	ug/L		10/17/24 15:51	10/21/24 21:29	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4-Dichlorophenol	ND		9.6	4.1	ug/L		10/17/24 15:51	10/21/24 21:29	1
Diethyl phthalate	ND		9.6	4.2	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4-Dimethylphenol	ND		9.6	5.0	ug/L		10/17/24 15:51	10/21/24 21:29	1

Client Sample ID: MW13-ROX-101024
Date Collected: 10/10/24 09:50
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.6	4.0	ug/L		10/17/24 15:51	10/21/24 21:29	1
Di-n-butyl phthalate	ND		9.6	4.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
4,6-Dinitro-ortho-cresol	ND		9.6	9.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4-Dinitrophenol	ND	*+	29	4.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4-Dinitrotoluene	ND		9.6	4.9	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,6-Dinitrotoluene	ND		9.6	3.8	ug/L		10/17/24 15:51	10/21/24 21:29	1
Di-n-octyl phthalate	ND		9.6	5.8	ug/L		10/17/24 15:51	10/21/24 21:29	1
1,4-Dioxane	ND		9.6	4.1	ug/L		10/17/24 15:51	10/21/24 21:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	3.2	ug/L		10/17/24 15:51	10/21/24 21:29	1
Hexachlorobenzene	ND		9.6	9.3	ug/L		10/17/24 15:51	10/21/24 21:29	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/17/24 15:51	10/21/24 21:29	1
Hexachloroethane	ND		9.6	5.0	ug/L		10/17/24 15:51	10/21/24 21:29	1
Indene	ND		9.6	3.5	ug/L		10/17/24 15:51	10/21/24 21:29	1
Isophorone	ND		9.6	5.0	ug/L		10/17/24 15:51	10/21/24 21:29	1
2-Methylphenol	ND		9.6	3.1	ug/L		10/17/24 15:51	10/21/24 21:29	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
2-Nitroaniline	ND		9.6	4.8	ug/L		10/17/24 15:51	10/21/24 21:29	1
3-Nitroaniline	ND		9.6	4.5	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Nitroaniline	ND		9.6	3.9	ug/L		10/17/24 15:51	10/21/24 21:29	1
Nitrobenzene	ND		9.6	4.5	ug/L		10/17/24 15:51	10/21/24 21:29	1
2-Nitrophenol	ND		9.6	4.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
4-Nitrophenol	ND		9.6	3.2	ug/L		10/17/24 15:51	10/21/24 21:29	1
N-Nitrosodimethylamine	ND		9.6	2.1	ug/L		10/17/24 15:51	10/21/24 21:29	1
N-Nitrosodi-n-propylamine	ND		9.6	2.4	ug/L		10/17/24 15:51	10/21/24 21:29	1
N-Nitrosodiphenylamine	ND		9.6	3.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
Pentachlorophenol	ND		19	11	ug/L		10/17/24 15:51	10/21/24 21:29	1
Phenol	ND		9.6	4.0	ug/L		10/17/24 15:51	10/21/24 21:29	1
Pyridine	ND		9.6	9.6	ug/L		10/17/24 15:51	10/21/24 21:29	1
Quinoline	ND		9.6	2.3	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4,5-Trichlorophenol	ND		9.6	3.9	ug/L		10/17/24 15:51	10/21/24 21:29	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		10/17/24 15:51	10/21/24 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*10/17/24 15:51*	*10/21/24 21:29*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/17/24 15:51*	*10/21/24 21:29*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*10/17/24 15:51*	*10/21/24 21:29*	*1*
Phenol-d5	*32*		*10 - 129*	*10/17/24 15:51*	*10/21/24 21:29*	*1*
Terphenyl-d14	*68*		*13 - 150*	*10/17/24 15:51*	*10/21/24 21:29*	*1*
2,4,6-Tribromophenol	*91*		*10 - 150*	*10/17/24 15:51*	*10/21/24 21:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/17/24 11:24	10/17/24 17:07	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/17/24 11:24	10/17/24 17:07	1
Anthracene	ND		0.20	0.072	ug/L		10/17/24 11:24	10/17/24 17:07	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:07	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/17/24 11:24	10/17/24 17:07	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/17/24 11:24	10/17/24 17:07	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/17/24 11:24	10/17/24 17:07	1

Client Sample ID: MW13-ROX-101024
Date Collected: 10/10/24 09:50
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:07	1
Chrysene	ND		0.20	0.038	ug/L		10/17/24 11:24	10/17/24 17:07	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 17:07	1
Fluoranthene	ND		0.20	0.032	ug/L		10/17/24 11:24	10/17/24 17:07	1
Fluorene	ND		0.20	0.086	ug/L		10/17/24 11:24	10/17/24 17:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/17/24 11:24	10/17/24 17:07	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/17/24 11:24	10/17/24 17:07	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/17/24 11:24	10/17/24 17:07	1
Phenanthrene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 17:07	1
Pyrene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*50 - 150*	*10/17/24 11:24*	*10/17/24 17:07*	*1*
Nitrobenzene-d5	*86*		*50 - 150*	*10/17/24 11:24*	*10/17/24 17:07*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/17/24 11:24*	*10/17/24 17:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/17/24 09:02	10/17/24 19:35	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/17/24 09:02	10/17/24 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*10/17/24 09:02*	*10/17/24 19:35*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: P114R-ROX-101024
Date Collected: 10/10/24 10:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-4
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			10/21/24 20:06	1
Acrolein	ND		20	3.3	ug/L			10/21/24 20:06	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 20:06	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 20:06	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 20:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 20:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 20:06	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 20:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 20:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 20:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 20:06	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 20:06	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 20:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 20:06	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 20:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 20:06	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 20:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 20:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 20:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 20:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 20:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 20:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 20:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 20:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 20:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 20:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 20:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 20:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 20:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 20:06	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 20:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 20:06	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 20:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 20:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 20:06	1
Methyl tert-butyl ether	**1.1**		1.0	0.22	ug/L			10/21/24 20:06	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 20:06	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 20:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 20:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 20:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 20:06	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 20:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 20:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/24 20:06	1

Client Sample ID: P114R-ROX-101024
Date Collected: 10/10/24 10:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-4
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			10/21/24 20:06	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 20:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 20:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 20:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 20:06	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 20:06	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 20:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 20:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 20:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 20:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 20:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 20:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 20:06	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 20:06	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 20:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 20:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 20:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 20:06	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/21/24 20:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 20:06	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*10/21/24 20:06*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*10/21/24 20:06*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/21/24 20:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
Benzenethiol	ND		9.7	9.6	ug/L		10/17/24 15:51	10/21/24 21:51	1
Benzoic acid	ND		29	23	ug/L		10/17/24 15:51	10/21/24 21:51	1
Benzyl alcohol	ND		9.7	7.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
Bis(2-chloroethoxy)methane	ND		9.7	4.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		10/17/24 15:51	10/21/24 21:51	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		10/17/24 15:51	10/21/24 21:51	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		10/17/24 15:51	10/21/24 21:51	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Chloroaniline	ND		9.7	4.5	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		10/17/24 15:51	10/21/24 21:51	1
2-Chlorophenol	ND		9.7	4.0	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		10/17/24 15:51	10/21/24 21:51	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		10/17/24 15:51	10/21/24 21:51	1
Dibenzofuran	ND		9.7	3.9	ug/L		10/17/24 15:51	10/21/24 21:51	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		10/17/24 15:51	10/21/24 21:51	1
Diethyl phthalate	ND		9.7	4.3	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4-Dimethylphenol	ND		9.7	5.0	ug/L		10/17/24 15:51	10/21/24 21:51	1

Client Sample ID: P114R-ROX-101024
Date Collected: 10/10/24 10:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.7	4.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
Di-n-butyl phthalate	ND		9.7	4.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4-Dinitrophenol	ND	*+	29	4.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		10/17/24 15:51	10/21/24 21:51	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		10/17/24 15:51	10/21/24 21:51	1
1,4-Dioxane	ND		9.7	4.2	ug/L		10/17/24 15:51	10/21/24 21:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		10/17/24 15:51	10/21/24 21:51	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/17/24 15:51	10/21/24 21:51	1
Hexachloroethane	ND		9.7	5.0	ug/L		10/17/24 15:51	10/21/24 21:51	1
Indene	ND		9.7	3.5	ug/L		10/17/24 15:51	10/21/24 21:51	1
Isophorone	ND		9.7	5.0	ug/L		10/17/24 15:51	10/21/24 21:51	1
2-Methylphenol	ND		9.7	3.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
2-Nitroaniline	ND		9.7	4.8	ug/L		10/17/24 15:51	10/21/24 21:51	1
3-Nitroaniline	ND		9.7	4.5	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Nitroaniline	ND		9.7	4.0	ug/L		10/17/24 15:51	10/21/24 21:51	1
Nitrobenzene	ND		9.7	4.5	ug/L		10/17/24 15:51	10/21/24 21:51	1
2-Nitrophenol	ND		9.7	4.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
4-Nitrophenol	ND		9.7	3.2	ug/L		10/17/24 15:51	10/21/24 21:51	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		10/17/24 15:51	10/21/24 21:51	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		10/17/24 15:51	10/21/24 21:51	1
Pentachlorophenol	ND		19	11	ug/L		10/17/24 15:51	10/21/24 21:51	1
Phenol	ND		9.7	4.1	ug/L		10/17/24 15:51	10/21/24 21:51	1
Pyridine	ND		9.7	9.7	ug/L		10/17/24 15:51	10/21/24 21:51	1
Quinoline	ND		9.7	2.3	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		10/17/24 15:51	10/21/24 21:51	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/17/24 15:51	10/21/24 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*21 - 114*	*10/17/24 15:51*	*10/21/24 21:51*	*1*
2-Fluorophenol	*33*		*10 - 105*	*10/17/24 15:51*	*10/21/24 21:51*	*1*
Nitrobenzene-d5	*45*		*16 - 127*	*10/17/24 15:51*	*10/21/24 21:51*	*1*
Phenol-d5	*25*		*10 - 129*	*10/17/24 15:51*	*10/21/24 21:51*	*1*
Terphenyl-d14	*64*		*13 - 150*	*10/17/24 15:51*	*10/21/24 21:51*	*1*
2,4,6-Tribromophenol	*87*		*10 - 150*	*10/17/24 15:51*	*10/21/24 21:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.39**		0.20	0.083	ug/L		10/17/24 11:24	10/17/24 17:37	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/17/24 11:24	10/17/24 17:37	1
Anthracene	ND		0.20	0.071	ug/L		10/17/24 11:24	10/17/24 17:37	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:37	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/17/24 11:24	10/17/24 17:37	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/17/24 11:24	10/17/24 17:37	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/17/24 11:24	10/17/24 17:37	1

Client Sample ID: P114R-ROX-101024
Date Collected: 10/10/24 10:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:37	1
Chrysene	ND		0.20	0.038	ug/L		10/17/24 11:24	10/17/24 17:37	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 17:37	1
Fluoranthene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 17:37	1
Fluorene	ND		0.20	0.085	ug/L		10/17/24 11:24	10/17/24 17:37	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 17:37	1
1-Methylnaphthalene	**0.094**	**J**	0.20	0.064	ug/L		10/17/24 11:24	10/17/24 17:37	1
2-Methylnaphthalene	ND		0.20	0.075	ug/L		10/17/24 11:24	10/17/24 17:37	1
Phenanthrene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 17:37	1
Pyrene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*50 - 150*	*10/17/24 11:24*	*10/17/24 17:37*	*1*
Nitrobenzene-d5	*100*		*50 - 150*	*10/17/24 11:24*	*10/17/24 17:37*	*1*
Terphenyl-d14	*75*		*50 - 150*	*10/17/24 11:24*	*10/17/24 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		0.033	0.018	ug/L		10/17/24 09:02	10/17/24 19:55	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/17/24 09:02	10/17/24 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*10/17/24 09:02*	*10/17/24 19:55*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: MW3-ROX-101024-EB
Date Collected: 10/10/24 12:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-5
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			10/21/24 15:16	1
Acrolein	ND		20	3.3	ug/L			10/21/24 15:16	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 15:16	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 15:16	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 15:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 15:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 15:16	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 15:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 15:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 15:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 15:16	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 15:16	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 15:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 15:16	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 15:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 15:16	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 15:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 15:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 15:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 15:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 15:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 15:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 15:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 15:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 15:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 15:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 15:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 15:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 15:16	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 15:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 15:16	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 15:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 15:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 15:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/21/24 15:16	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 15:16	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 15:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 15:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 15:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 15:16	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 15:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 15:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/24 15:16	1

Client Sample ID: MW3-ROX-101024-EB
Date Collected: 10/10/24 12:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-5
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			10/21/24 15:16	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 15:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 15:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 15:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 15:16	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 15:16	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 15:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 15:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 15:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 15:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 15:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 15:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 15:16	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 15:16	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 15:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 15:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 15:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 15:16	1
Vinyl acetate	ND		25	0.93	ug/L			10/21/24 15:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 15:16	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 130*		*10/21/24 15:16*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/21/24 15:16*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/21/24 15:16*	*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		10/17/24 15:51	10/21/24 22:13	1
Benzenethiol	ND		9.4	9.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
Benzoic acid	ND		28	23	ug/L		10/17/24 15:51	10/21/24 22:13	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/17/24 15:51	10/21/24 22:13	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/17/24 15:51	10/21/24 22:13	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/17/24 15:51	10/21/24 22:13	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/17/24 15:51	10/21/24 22:13	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/17/24 15:51	10/21/24 22:13	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/17/24 15:51	10/21/24 22:13	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/17/24 15:51	10/21/24 22:13	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/17/24 15:51	10/21/24 22:13	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/17/24 15:51	10/21/24 22:13	1

Client Sample ID: MW3-ROX-101024-EB
Date Collected: 10/10/24 12:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/17/24 15:51	10/21/24 22:13	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/17/24 15:51	10/21/24 22:13	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/17/24 15:51	10/21/24 22:13	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/17/24 15:51	10/21/24 22:13	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/17/24 15:51	10/21/24 22:13	1
Indene	ND		9.4	3.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
Isophorone	ND		9.4	4.9	ug/L		10/17/24 15:51	10/21/24 22:13	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/17/24 15:51	10/21/24 22:13	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/17/24 15:51	10/21/24 22:13	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/17/24 15:51	10/21/24 22:13	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/17/24 15:51	10/21/24 22:13	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/17/24 15:51	10/21/24 22:13	1
Pentachlorophenol	ND		19	11	ug/L		10/17/24 15:51	10/21/24 22:13	1
Phenol	ND		9.4	4.0	ug/L		10/17/24 15:51	10/21/24 22:13	1
Pyridine	ND		9.4	9.4	ug/L		10/17/24 15:51	10/21/24 22:13	1
Quinoline	ND		9.4	2.3	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/17/24 15:51	10/21/24 22:13	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/17/24 15:51	10/21/24 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*21 - 114*	*10/17/24 15:51*	*10/21/24 22:13*	*1*
2-Fluorophenol	*38*		*10 - 105*	*10/17/24 15:51*	*10/21/24 22:13*	*1*
Nitrobenzene-d5	*50*		*16 - 127*	*10/17/24 15:51*	*10/21/24 22:13*	*1*
Phenol-d5	*29*		*10 - 129*	*10/17/24 15:51*	*10/21/24 22:13*	*1*
Terphenyl-d14	*68*		*13 - 150*	*10/17/24 15:51*	*10/21/24 22:13*	*1*
2,4,6-Tribromophenol	*79*		*10 - 150*	*10/17/24 15:51*	*10/21/24 22:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.083	ug/L		10/17/24 11:24	10/17/24 18:07	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/17/24 11:24	10/17/24 18:07	1
Anthracene	ND		0.20	0.071	ug/L		10/17/24 11:24	10/17/24 18:07	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 18:07	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/17/24 11:24	10/17/24 18:07	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/17/24 11:24	10/17/24 18:07	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/17/24 11:24	10/17/24 18:07	1

Client Sample ID: MW3-ROX-101024-EB
Date Collected: 10/10/24 12:00
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 18:07	1
Chrysene	ND		0.20	0.038	ug/L		10/17/24 11:24	10/17/24 18:07	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 18:07	1
Fluoranthene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 18:07	1
Fluorene	ND		0.20	0.085	ug/L		10/17/24 11:24	10/17/24 18:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 18:07	1
1-Methylnaphthalene	ND		0.20	0.064	ug/L		10/17/24 11:24	10/17/24 18:07	1
2-Methylnaphthalene	ND		0.20	0.075	ug/L		10/17/24 11:24	10/17/24 18:07	1
Phenanthrene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 18:07	1
Pyrene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*50 - 150*	*10/17/24 11:24*	*10/17/24 18:07*	*1*
Nitrobenzene-d5	*114*		*50 - 150*	*10/17/24 11:24*	*10/17/24 18:07*	*1*
Terphenyl-d14	*85*		*50 - 150*	*10/17/24 11:24*	*10/17/24 18:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/17/24 09:02	10/17/24 20:17	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/17/24 09:02	10/17/24 20:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*66*		*51 - 149*	*10/17/24 09:02*	*10/17/24 20:17*	*1*

Client Sample ID: MW3-ROX-101024
Date Collected: 10/10/24 13:15
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-6
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			10/21/24 20:33	1
Acrolein	ND		20	3.3	ug/L			10/21/24 20:33	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 20:33	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 20:33	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 20:33	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 20:33	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 20:33	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 20:33	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 20:33	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 20:33	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 20:33	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 20:33	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 20:33	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 20:33	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 20:33	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 20:33	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 20:33	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 20:33	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 20:33	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 20:33	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 20:33	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 20:33	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 20:33	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 20:33	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 20:33	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 20:33	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 20:33	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 20:33	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 20:33	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 20:33	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 20:33	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 20:33	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 20:33	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 20:33	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 20:33	1
Methyl tert-butyl ether	**0.39**	**J**	1.0	0.22	ug/L			10/21/24 20:33	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 20:33	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 20:33	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 20:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 20:33	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 20:33	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 20:33	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 20:33	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/21/24 20:33	1

Client Sample ID: MW3-ROX-101024
Date Collected: 10/10/24 13:15
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-6
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			10/21/24 20:33	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 20:33	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 20:33	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 20:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 20:33	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 20:33	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 20:33	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 20:33	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 20:33	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 20:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 20:33	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 20:33	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 20:33	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 20:33	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 20:33	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 20:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 20:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 20:33	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/21/24 20:33	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 20:33	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/21/24 20:33*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*10/21/24 20:33*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/21/24 20:33*	*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		10/17/24 15:51	10/21/24 22:36	1
Benzenethiol	ND		10	10	ug/L		10/17/24 15:51	10/21/24 22:36	1
Benzoic acid	ND		30	24	ug/L		10/17/24 15:51	10/21/24 22:36	1
Benzyl alcohol	ND		10	7.4	ug/L		10/17/24 15:51	10/21/24 22:36	1
Bis(2-chloroethoxy)methane	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
Bis(2-chloroethyl)ether	ND		10	4.0	ug/L		10/17/24 15:51	10/21/24 22:36	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
Bis(2-ethylhexyl) phthalate	ND		10	9.0	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Bromophenyl phenyl ether	ND		10	8.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
Butyl benzyl phthalate	ND		10	5.9	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Chloroaniline	ND		10	4.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Chloro-3-methylphenol	ND		10	5.4	ug/L		10/17/24 15:51	10/21/24 22:36	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
2-Chlorophenol	ND		10	4.2	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
Dibenzofuran	ND		10	4.1	ug/L		10/17/24 15:51	10/21/24 22:36	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4-Dichlorophenol	ND		10	4.4	ug/L		10/17/24 15:51	10/21/24 22:36	1
Diethyl phthalate	ND		10	4.5	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4-Dimethylphenol	ND		10	5.3	ug/L		10/17/24 15:51	10/21/24 22:36	1

Client Sample ID: MW3-ROX-101024
Date Collected: 10/10/24 13:15
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		10	4.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
Di-n-butyl phthalate	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4-Dinitrophenol	ND	*+	30	4.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4-Dinitrotoluene	ND		10	5.2	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,6-Dinitrotoluene	ND		10	4.0	ug/L		10/17/24 15:51	10/21/24 22:36	1
Di-n-octyl phthalate	ND		10	6.1	ug/L		10/17/24 15:51	10/21/24 22:36	1
1,4-Dioxane	ND		10	4.4	ug/L		10/17/24 15:51	10/21/24 22:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
Hexachlorobenzene	ND		10	9.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
Hexachlorocyclopentadiene	ND	*+	20	4.6	ug/L		10/17/24 15:51	10/21/24 22:36	1
Hexachloroethane	ND		10	5.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
Indene	ND		10	3.6	ug/L		10/17/24 15:51	10/21/24 22:36	1
Isophorone	ND		10	5.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
2-Methylphenol	ND		10	3.2	ug/L		10/17/24 15:51	10/21/24 22:36	1
3 & 4 Methylphenol	ND		20	4.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
2-Nitroaniline	ND		10	5.1	ug/L		10/17/24 15:51	10/21/24 22:36	1
3-Nitroaniline	ND		10	4.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Nitroaniline	ND		10	4.2	ug/L		10/17/24 15:51	10/21/24 22:36	1
Nitrobenzene	ND		10	4.8	ug/L		10/17/24 15:51	10/21/24 22:36	1
2-Nitrophenol	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
4-Nitrophenol	ND		10	3.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/17/24 15:51	10/21/24 22:36	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/17/24 15:51	10/21/24 22:36	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/17/24 15:51	10/21/24 22:36	1
Pentachlorophenol	ND		20	12	ug/L		10/17/24 15:51	10/21/24 22:36	1
Phenol	ND		10	4.3	ug/L		10/17/24 15:51	10/21/24 22:36	1
Pyridine	ND		10	10	ug/L		10/17/24 15:51	10/21/24 22:36	1
Quinoline	ND		10	2.4	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4,5-Trichlorophenol	ND		10	4.1	ug/L		10/17/24 15:51	10/21/24 22:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/17/24 15:51	10/21/24 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*10/17/24 15:51*	*10/21/24 22:36*	*1*
2-Fluorophenol	*42*		*10 - 105*	*10/17/24 15:51*	*10/21/24 22:36*	*1*
Nitrobenzene-d5	*52*		*16 - 127*	*10/17/24 15:51*	*10/21/24 22:36*	*1*
Phenol-d5	*32*		*10 - 129*	*10/17/24 15:51*	*10/21/24 22:36*	*1*
Terphenyl-d14	*68*		*13 - 150*	*10/17/24 15:51*	*10/21/24 22:36*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/17/24 15:51*	*10/21/24 22:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.083	ug/L		10/17/24 11:24	10/17/24 18:38	1
Acenaphthylene	ND		0.19	0.046	ug/L		10/17/24 11:24	10/17/24 18:38	1
Anthracene	ND		0.19	0.071	ug/L		10/17/24 11:24	10/17/24 18:38	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 18:38	1
Benzo[a]pyrene	ND		0.19	0.044	ug/L		10/17/24 11:24	10/17/24 18:38	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/17/24 11:24	10/17/24 18:38	1
Benzo[g,h,i]perylene	ND		0.19	0.051	ug/L		10/17/24 11:24	10/17/24 18:38	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Client Sample ID: MW3-ROX-101024

Date Collected: 10/10/24 13:15
Date Received: 10/11/24 08:32

Lab Sample ID: 400-264164-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 18:38	1
Chrysene	ND		0.19	0.038	ug/L		10/17/24 11:24	10/17/24 18:38	1
Dibenz(a,h)anthracene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 18:38	1
Fluoranthene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 18:38	1
Fluorene	ND		0.19	0.085	ug/L		10/17/24 11:24	10/17/24 18:38	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 18:38	1
1-Methylnaphthalene	ND		0.19	0.064	ug/L		10/17/24 11:24	10/17/24 18:38	1
2-Methylnaphthalene	ND		0.19	0.075	ug/L		10/17/24 11:24	10/17/24 18:38	1
Phenanthrene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 18:38	1
Pyrene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*50 - 150*	*10/17/24 11:24*	*10/17/24 18:38*	*1*
Nitrobenzene-d5	*114*		*50 - 150*	*10/17/24 11:24*	*10/17/24 18:38*	*1*
Terphenyl-d14	*80*		*50 - 150*	*10/17/24 11:24*	*10/17/24 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		10/17/24 09:02	10/17/24 20:38	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/17/24 09:02	10/17/24 20:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*57*		*51 - 149*	*10/17/24 09:02*	*10/17/24 20:38*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264164-1
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.
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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

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)
400-264164-1	TB-ROX-101024-8260	101	106	96
400-264164-3	MW13-ROX-101024	101	106	96
400-264164-4	P114R-ROX-101024	102	107	96
400-264164-5	MW3-ROX-101024-EB	102	106	96
400-264164-6	MW3-ROX-101024	101	107	97
LCS 400-688578/1002	Lab Control Sample	98	105	98
MB 400-688578/4	Method Blank	101	106	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)
400-264164-3	MW13-ROX-101024	61	44	55	32	68	91
400-264164-4	P114R-ROX-101024	49	33	45	25	64	87
400-264164-5	MW3-ROX-101024-EB	53	38	50	29	68	79
400-264164-6	MW3-ROX-101024	58	42	52	32	68	83
LCS 400-688325/2-A	Lab Control Sample	62	48	60	40	69	93
LCS 400-688325/4-A	Lab Control Sample	58	49	57	37	75	81
LCSD 400-688325/3-A	Lab Control Sample Dup	54	40	51	35	67	89
LCSD 400-688325/5-A	Lab Control Sample Dup	54	42	52	31	73	76
MB 400-688325/1-A	Method Blank	47	40	47	28	65	72

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264164-3	MW13-ROX-101024	70	86	79
400-264164-4	P114R-ROX-101024	72	100	75
400-264164-5	MW3-ROX-101024-EB	79	114	85
400-264164-6	MW3-ROX-101024	74	114	80
LCS 400-688277/2-A	Lab Control Sample	77	101	81
MB 400-688277/1-A	Method Blank	79	99	81

Surrogate Legend

FBP = 2-Fluorobiphenyl

Surrogate Summary

Client: AECOM
Job ID: 400-264164-1
Project/Site: ROXANA QUARTERLY GW

NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-264164-2	TB-ROX-101024-8011	76
400-264164-3	MW13-ROX-101024	96
400-264164-4	P114R-ROX-101024	105
400-264164-5	MW3-ROX-101024-EB	66
400-264164-6	MW3-ROX-101024	57
LCS 400-688242/2-A	Lab Control Sample	114
LCSD 400-688242/3-A	Lab Control Sample Dup	116
MB 400-688242/1-A	Method Blank	113

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264164-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101024-8260
Lab Sample ID: 400-264164-1
Date Collected: 10/10/24 00:00
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688578	10/21/24 14:50	IMC	EET PEN

Client Sample ID: TB-ROX-101024-8011
Lab Sample ID: 400-264164-2
Date Collected: 10/10/24 00:00
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31.3 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 19:14	KR	EET PEN

Client Sample ID: MW13-ROX-101024
Lab Sample ID: 400-264164-3
Date Collected: 10/10/24 09:50
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688578	10/21/24 19:40	IMC	EET PEN
Total/NA	Prep	3511			30.4 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 17:07	DS	EET PEN
Total/NA	Prep	3510C			259.6 mL	1 mL	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 21:29	S1B	EET PEN
Total/NA	Prep	8011			32.8 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 19:35	KR	EET PEN

Client Sample ID: P114R-ROX-101024
Lab Sample ID: 400-264164-4
Date Collected: 10/10/24 10:00
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688578	10/21/24 20:06	IMC	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 17:37	DS	EET PEN
Total/NA	Prep	3510C			258.8 mL	1 mL	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 21:51	S1B	EET PEN
Total/NA	Prep	8011			32.3 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 19:55	KR	EET PEN

Client Sample ID: MW3-ROX-101024-EB
Lab Sample ID: 400-264164-5
Date Collected: 10/10/24 12:00
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688578	10/21/24 15:16	IMC	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 18:07	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264164-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW3-ROX-101024-EB
Lab Sample ID: 400-264164-5
Date Collected: 10/10/24 12:00
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			265.2 mL	1 mL	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 22:13	S1B	EET PEN
Total/NA	Prep	8011			33 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 20:17	KR	EET PEN

Client Sample ID: MW3-ROX-101024
Lab Sample ID: 400-264164-6
Date Collected: 10/10/24 13:15
Matrix: Water
Date Received: 10/11/24 08:32

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688578	10/21/24 20:33	IMC	EET PEN
Total/NA	Prep	3511			30.8 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 18:38	DS	EET PEN
Total/NA	Prep	3510C			246.8 mL	1 mL	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 22:36	S1B	EET PEN
Total/NA	Prep	8011			33.1 mL	35 mL	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 20:38	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688242/1-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 13:58	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688277/1-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:05	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688325/1-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	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 19:36	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264164-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688578/4
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	688578	10/21/24 12:12	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688242/2-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 14:19	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688277/2-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:36	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688325/2-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	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 19:59	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688325/4-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	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 20:44	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688578/1002
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	688578	10/21/24 11:06	IMC	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264164-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688242/3-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	688242	10/17/24 09:02	KR	EET PEN
Total/NA	Analysis	8011		1			688235	10/17/24 14:40	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688325/3-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	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 20:21	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688325/5-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	688325	10/17/24 15:51	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 21:06	S1B	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 688578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-1	TB-ROX-101024-8260	Total/NA	Water	8260D	
400-264164-3	MW13-ROX-101024	Total/NA	Water	8260D	
400-264164-4	P114R-ROX-101024	Total/NA	Water	8260D	
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	8260D	
400-264164-6	MW3-ROX-101024	Total/NA	Water	8260D	
MB 400-688578/4	Method Blank	Total/NA	Water	8260D	
LCS 400-688578/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Analysis Batch: 688256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-3	MW13-ROX-101024	Total/NA	Water	8270E	688277
400-264164-4	P114R-ROX-101024	Total/NA	Water	8270E	688277
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	8270E	688277
400-264164-6	MW3-ROX-101024	Total/NA	Water	8270E	688277
MB 400-688277/1-A	Method Blank	Total/NA	Water	8270E	688277
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	8270E	688277

Prep Batch: 688277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-3	MW13-ROX-101024	Total/NA	Water	3511	
400-264164-4	P114R-ROX-101024	Total/NA	Water	3511	
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	3511	
400-264164-6	MW3-ROX-101024	Total/NA	Water	3511	
MB 400-688277/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	3511	

Prep Batch: 688325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-3	MW13-ROX-101024	Total/NA	Water	3510C	
400-264164-4	P114R-ROX-101024	Total/NA	Water	3510C	
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	3510C	
400-264164-6	MW3-ROX-101024	Total/NA	Water	3510C	
MB 400-688325/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688325/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688325/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688325/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688325/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 688615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-3	MW13-ROX-101024	Total/NA	Water	8270E	688325
400-264164-4	P114R-ROX-101024	Total/NA	Water	8270E	688325
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	8270E	688325
400-264164-6	MW3-ROX-101024	Total/NA	Water	8270E	688325
MB 400-688325/1-A	Method Blank	Total/NA	Water	8270E	688325
LCS 400-688325/2-A	Lab Control Sample	Total/NA	Water	8270E	688325
LCS 400-688325/4-A	Lab Control Sample	Total/NA	Water	8270E	688325
LCSD 400-688325/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688325
LCSD 400-688325/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	688325

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264164-1

GC Semi VOA

Analysis Batch: 688235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-2	TB-ROX-101024-8011	Total/NA	Water	8011	688242
400-264164-3	MW13-ROX-101024	Total/NA	Water	8011	688242
400-264164-4	P114R-ROX-101024	Total/NA	Water	8011	688242
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	8011	688242
400-264164-6	MW3-ROX-101024	Total/NA	Water	8011	688242
MB 400-688242/1-A	Method Blank	Total/NA	Water	8011	688242
LCS 400-688242/2-A	Lab Control Sample	Total/NA	Water	8011	688242
LCSD 400-688242/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688242

Prep Batch: 688242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264164-2	TB-ROX-101024-8011	Total/NA	Water	8011	
400-264164-3	MW13-ROX-101024	Total/NA	Water	8011	
400-264164-4	P114R-ROX-101024	Total/NA	Water	8011	
400-264164-5	MW3-ROX-101024-EB	Total/NA	Water	8011	
400-264164-6	MW3-ROX-101024	Total/NA	Water	8011	
MB 400-688242/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688242/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688242/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

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

Lab Sample ID: MB 400-688578/4
Matrix: Water
Analysis Batch: 688578

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			10/21/24 12:12	1
Acrolein	ND		20	3.3	ug/L			10/21/24 12:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/21/24 12:12	1
Benzene	ND		1.0	0.24	ug/L			10/21/24 12:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/21/24 12:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/21/24 12:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
Bromoform	ND		5.0	0.25	ug/L			10/21/24 12:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/21/24 12:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/21/24 12:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/21/24 12:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/21/24 12:12	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/21/24 12:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/21/24 12:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/21/24 12:12	1
Chloroform	ND		1.0	0.90	ug/L			10/21/24 12:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/21/24 12:12	1
Chloromethane	ND		1.0	0.40	ug/L			10/21/24 12:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/21/24 12:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/21/24 12:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/21/24 12:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/21/24 12:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/21/24 12:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/21/24 12:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/21/24 12:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/21/24 12:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 12:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/21/24 12:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/21/24 12:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/21/24 12:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/21/24 12:12	1
2-Hexanone	ND		25	4.3	ug/L			10/21/24 12:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/21/24 12:12	1
Methylene bromide	ND		5.0	0.22	ug/L			10/21/24 12:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/21/24 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/21/24 12:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/21/24 12:12	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/21/24 12:12	1
Naphthalene	ND		5.0	3.0	ug/L			10/21/24 12:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/21/24 12:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/21/24 12:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/21/24 12:12	1
o-Xylene	ND		5.0	3.0	ug/L			10/21/24 12:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/21/24 12:12	1

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

Lab Sample ID: MB 400-688578/4
Matrix: Water
Analysis Batch: 688578

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			10/21/24 12:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/21/24 12:12	1
Styrene	ND		1.0	1.0	ug/L			10/21/24 12:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/21/24 12:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/21/24 12:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/21/24 12:12	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/21/24 12:12	1
Toluene	ND		1.0	0.90	ug/L			10/21/24 12:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/21/24 12:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/21/24 12:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/21/24 12:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/21/24 12:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/21/24 12:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/21/24 12:12	1
Trichloroethene	ND		1.0	0.15	ug/L			10/21/24 12:12	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/21/24 12:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/21/24 12:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/21/24 12:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/21/24 12:12	1
Vinyl acetate	ND		25	0.93	ug/L			10/21/24 12:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/21/24 12:12	1
Xylenes, Total	ND		10	6.0	ug/L			10/21/24 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/21/24 12:12*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/21/24 12:12*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/21/24 12:12*	*1*

Lab Sample ID: LCS 400-688578/1002
Matrix: Water
Analysis Batch: 688578

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	187		ug/L		94	43 - 150
Acrolein	500	484		ug/L		97	38 - 150
Acrylonitrile	500	406		ug/L		81	64 - 142
Benzene	50.0	46.3		ug/L		93	70 - 130
Bromobenzene	50.0	47.8		ug/L		96	70 - 132
Bromochloromethane	50.0	48.5		ug/L		97	70 - 130
Bromodichloromethane	50.0	48.9		ug/L		98	67 - 133
Bromoform	50.0	42.3		ug/L		85	57 - 140
Bromomethane	50.0	40.2		ug/L		80	10 - 150
2-Butanone (MEK)	200	190		ug/L		95	61 - 145
Carbon disulfide	50.0	40.4		ug/L		81	61 - 137
Carbon tetrachloride	50.0	49.3		ug/L		99	61 - 137
Chlorobenzene	50.0	48.1		ug/L		96	70 - 130
Chloroethane	50.0	43.0		ug/L		86	55 - 141
2-Chloroethyl vinyl ether	50.0	25.5		ug/L		51	10 - 150

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

Lab Sample ID: LCS 400-688578/1002
Matrix: Water
Analysis Batch: 688578

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	48.9		ug/L		98	69 - 130
1-Chlorohexane	50.0	52.0		ug/L		104	69 - 130
Chloromethane	50.0	40.1		ug/L		80	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	47.6		ug/L		95	69 - 132
Dibromochloromethane	50.0	46.9		ug/L		94	67 - 135
1,2-Dichlorobenzene	50.0	49.9		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	50.7		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	43.4		ug/L		87	41 - 146
1,1-Dichloroethane	50.0	46.6		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	49.4		ug/L		99	69 - 130
1,1-Dichloroethene	50.0	46.7		ug/L		93	63 - 134
1,2-Dichloropropane	50.0	48.1		ug/L		96	70 - 130
1,3-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
2,2-Dichloropropane	50.0	46.4		ug/L		93	52 - 135
1,1-Dichloropropene	50.0	47.3		ug/L		95	70 - 130
Ethylbenzene	50.0	49.3		ug/L		99	70 - 130
Ethyl methacrylate	50.0	42.7		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	53.5		ug/L		107	53 - 140
2-Hexanone	200	193		ug/L		96	65 - 137
Isopropylbenzene	50.0	50.2		ug/L		100	70 - 130
Methylene bromide	50.0	47.0		ug/L		94	70 - 130
Methylene Chloride	50.0	48.1		ug/L		96	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		87	69 - 138
Methyl tert-butyl ether	50.0	43.2		ug/L		86	66 - 130
m-Xylene & p-Xylene	50.0	49.7		ug/L		99	70 - 130
Naphthalene	50.0	42.1		ug/L		84	47 - 149
n-Butylbenzene	50.0	53.8		ug/L		108	67 - 130
N-Propylbenzene	50.0	52.1		ug/L		104	70 - 130
o-Chlorotoluene	50.0	49.7		ug/L		99	70 - 130
o-Xylene	50.0	49.4		ug/L		99	70 - 130
p-Chlorotoluene	50.0	50.2		ug/L		100	70 - 130
p-Isopropyltoluene	50.0	52.2		ug/L		104	65 - 130
sec-Butylbenzene	50.0	52.2		ug/L		104	66 - 130
Styrene	50.0	49.5		ug/L		99	70 - 130
tert-Butylbenzene	50.0	50.0		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.6		ug/L		99	67 - 131
1,1,2,2-Tetrachloroethane	50.0	41.5		ug/L		83	70 - 131
Tetrachloroethene	50.0	47.3		ug/L		95	65 - 130
Toluene	50.0	46.0		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	45.7		ug/L		91	70 - 130
trans-1,3-Dichloropropene	50.0	46.3		ug/L		93	63 - 130
1,2,3-Trichlorobenzene	50.0	46.1		ug/L		92	60 - 138
1,2,4-Trichlorobenzene	50.0	49.0		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	68 - 130
1,1,2-Trichloroethane	50.0	45.3		ug/L		91	70 - 130
Trichloroethene	50.0	47.6		ug/L		95	70 - 130
Trichlorofluoromethane	50.0	46.7		ug/L		93	65 - 138

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

Lab Sample ID: LCS 400-688578/1002
Matrix: Water
Analysis Batch: 688578

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	42.7		ug/L		85	70 - 130
1,2,4-Trimethylbenzene	50.0	50.9		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.1		ug/L		100	69 - 130
Vinyl acetate	100	74.1		ug/L		74	26 - 150
Vinyl chloride	50.0	40.9		ug/L		82	59 - 136
Xylenes, Total	100	99.1		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-688325/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
Benzenethiol	ND		10	9.9	ug/L		10/17/24 15:51	10/21/24 19:36	1
Benzoic acid	ND		30	24	ug/L		10/17/24 15:51	10/21/24 19:36	1
Benzyl alcohol	ND		10	7.3	ug/L		10/17/24 15:51	10/21/24 19:36	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/17/24 15:51	10/21/24 19:36	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/17/24 15:51	10/21/24 19:36	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Chloroaniline	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/17/24 15:51	10/21/24 19:36	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/17/24 15:51	10/21/24 19:36	1
2-Chlorophenol	ND		10	4.1	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/17/24 15:51	10/21/24 19:36	1
Dibenzofuran	ND		10	4.0	ug/L		10/17/24 15:51	10/21/24 19:36	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/17/24 15:51	10/21/24 19:36	1
Diethyl phthalate	ND		10	4.4	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/17/24 15:51	10/21/24 19:36	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/17/24 15:51	10/21/24 19:36	1
1,4-Dioxane	ND		10	4.3	ug/L		10/17/24 15:51	10/21/24 19:36	1

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

Lab Sample ID: MB 400-688325/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688325

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/17/24 15:51	10/21/24 19:36	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/17/24 15:51	10/21/24 19:36	1
Hexachloroethane	ND		10	5.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
Indene	ND		10	3.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
Isophorone	ND		10	5.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
2-Methylphenol	ND		10	3.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
2-Nitroaniline	ND		10	5.0	ug/L		10/17/24 15:51	10/21/24 19:36	1
3-Nitroaniline	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Nitroaniline	ND		10	4.1	ug/L		10/17/24 15:51	10/21/24 19:36	1
Nitrobenzene	ND		10	4.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
2-Nitrophenol	ND		10	4.6	ug/L		10/17/24 15:51	10/21/24 19:36	1
4-Nitrophenol	ND		10	3.3	ug/L		10/17/24 15:51	10/21/24 19:36	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/17/24 15:51	10/21/24 19:36	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/17/24 15:51	10/21/24 19:36	1
Pentachlorophenol	ND		20	12	ug/L		10/17/24 15:51	10/21/24 19:36	1
Phenol	ND		10	4.2	ug/L		10/17/24 15:51	10/21/24 19:36	1
Pyridine	ND		10	10	ug/L		10/17/24 15:51	10/21/24 19:36	1
Quinoline	ND		10	2.4	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/17/24 15:51	10/21/24 19:36	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/17/24 15:51	10/21/24 19:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*21 - 114*	*10/17/24 15:51*	*10/21/24 19:36*	*1*
2-Fluorophenol	*40*		*10 - 105*	*10/17/24 15:51*	*10/21/24 19:36*	*1*
Nitrobenzene-d5	*47*		*16 - 127*	*10/17/24 15:51*	*10/21/24 19:36*	*1*
Phenol-d5	*28*		*10 - 129*	*10/17/24 15:51*	*10/21/24 19:36*	*1*
Terphenyl-d14	*65*		*13 - 150*	*10/17/24 15:51*	*10/21/24 19:36*	*1*
2,4,6-Tribromophenol	*72*		*10 - 150*	*10/17/24 15:51*	*10/21/24 19:36*	*1*

Lab Sample ID: LCS 400-688325/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	59.4		ug/L		50	10 - 127
Benzoic acid	493	226		ug/L		46	19 - 126
Benzyl alcohol	120	70.4		ug/L		59	17 - 109
Bis(2-chloroethoxy)methane	120	72.4		ug/L		60	24 - 125
Bis(2-chloroethyl)ether	120	59.6		ug/L		50	10 - 121
bis (2-chloroisopropyl) ether	120	66.7		ug/L		56	14 - 123
Bis(2-ethylhexyl) phthalate	120	88.7		ug/L		74	16 - 150
4-Bromophenyl phenyl ether	120	86.9		ug/L		72	17 - 150
Butyl benzyl phthalate	120	87.7		ug/L		73	21 - 150
4-Chloroaniline	120	66.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	94.4		ug/L		79	37 - 131

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

Lab Sample ID: LCS 400-688325/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	81.2		ug/L		68	24 - 132
2-Chlorophenol	120	78.5		ug/L		65	27 - 124
4-Chlorophenyl phenyl ether	120	91.1		ug/L		76	27 - 147
Dibenz[a,h]acridine	59.9	60.7		ug/L		101	40 - 140
Dibenzofuran	120	85.2		ug/L		71	30 - 135
3,3'-Dichlorobenzidine	240	190		ug/L		79	10 - 150
2,4-Dichlorophenol	120	88.6		ug/L		74	33 - 132
Diethyl phthalate	120	92.6		ug/L		77	37 - 145
2,4-Dimethylphenol	120	148		ug/L		123	38 - 132
Dimethyl phthalate	120	91.3		ug/L		76	32 - 137
Di-n-butyl phthalate	120	96.9		ug/L		81	27 - 150
4,6-Dinitro-ortho-cresol	240	255		ug/L		106	14 - 150
2,4-Dinitrophenol	240	377	*+	ug/L		157	15 - 150
2,4-Dinitrotoluene	120	94.7		ug/L		79	35 - 136
2,6-Dinitrotoluene	120	94.2		ug/L		78	29 - 140
Di-n-octyl phthalate	120	88.1		ug/L		73	26 - 150
1,4-Dioxane	120	36.0		ug/L		30	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	79.6		ug/L		66	23 - 138
Hexachlorobenzene	120	93.9		ug/L		78	10 - 150
Hexachlorocyclopentadiene	120	261	*+	ug/L		218	10 - 124
Hexachloroethane	120	53.3		ug/L		44	10 - 127
Indene	120	81.5		ug/L		68	18 - 150
Isophorone	120	73.6		ug/L		61	28 - 127
2-Methylphenol	120	83.6		ug/L		70	34 - 124
3 & 4 Methylphenol	120	79.0		ug/L		66	32 - 122
2-Nitroaniline	120	84.9		ug/L		71	24 - 139
3-Nitroaniline	120	71.2		ug/L		59	10 - 128
4-Nitroaniline	120	93.3		ug/L		78	28 - 118
Nitrobenzene	120	64.6		ug/L		54	29 - 120
2-Nitrophenol	120	84.4		ug/L		70	25 - 148
4-Nitrophenol	240	177		ug/L		74	12 - 129
N-Nitrosodimethylamine	120	45.2		ug/L		38	10 - 115
N-Nitrosodi-n-propylamine	120	77.5		ug/L		65	24 - 142
N-Nitrosodiphenylamine	119	86.2		ug/L		72	29 - 138
Pentachlorophenol	240	214		ug/L		89	19 - 150
Phenol	120	49.6		ug/L		41	11 - 95
Pyridine	240	29.3		ug/L		12	10 - 82
Quinoline	59.9	44.5		ug/L		74	10 - 141
2,4,5-Trichlorophenol	120	94.1		ug/L		78	30 - 144
2,4,6-Trichlorophenol	120	91.7		ug/L		76	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*21 - 114*
2-Fluorophenol	*48*		*10 - 105*
Nitrobenzene-d5	*60*		*16 - 127*
Phenol-d5	*40*		*10 - 129*
Terphenyl-d14	*69*		*13 - 150*

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

Lab Sample ID: LCS 400-688325/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688325

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*93*		*10 - 150*

Lab Sample ID: LCS 400-688325/4-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688325

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	97.0		ug/L		81	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*75*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCSD 400-688325/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688325

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	48.1		ug/L		40	10 - 127	21	40
Benzoic acid			493	269		ug/L		55	19 - 126	18	40
Benzyl alcohol			120	60.4		ug/L		50	17 - 109	15	40
Bis(2-chloroethoxy)methane			120	62.8		ug/L		52	24 - 125	14	40
Bis(2-chloroethyl)ether			120	49.6		ug/L		41	10 - 121	18	40
bis (2-chloroisopropyl) ether			120	56.5		ug/L		47	14 - 123	17	40
Bis(2-ethylhexyl) phthalate			120	90.1		ug/L		75	16 - 150	2	40
4-Bromophenyl phenyl ether			120	84.3		ug/L		70	17 - 150	3	40
Butyl benzyl phthalate			120	88.2		ug/L		73	21 - 150	1	40
4-Chloroaniline			120	64.0		ug/L		53	10 - 124	4	40
4-Chloro-3-methylphenol			120	88.1		ug/L		73	37 - 131	7	40
2-Chloronaphthalene			120	73.0		ug/L		61	24 - 132	11	40
2-Chlorophenol			120	64.3		ug/L		54	27 - 124	20	40
4-Chlorophenyl phenyl ether			120	83.0		ug/L		69	27 - 147	9	40
Dibenz[a,h]acridine			59.9	61.5		ug/L		103	40 - 140	1	40
Dibenzofuran			120	78.6		ug/L		65	30 - 135	8	40
3,3'-Dichlorobenzidine			240	191		ug/L		79	10 - 150	1	40
2,4-Dichlorophenol			120	75.6		ug/L		63	33 - 132	16	40
Diethyl phthalate			120	89.1		ug/L		74	37 - 145	4	40
2,4-Dimethylphenol			120	130		ug/L		108	38 - 132	13	40
Dimethyl phthalate			120	86.5		ug/L		72	32 - 137	5	40
Di-n-butyl phthalate			120	98.2		ug/L		82	27 - 150	1	40
4,6-Dinitro-ortho-cresol			240	256		ug/L		107	14 - 150	0	40
2,4-Dinitrophenol			240	372	*+	ug/L		155	15 - 150	1	40
2,4-Dinitrotoluene			120	91.9		ug/L		77	35 - 136	3	40
2,6-Dinitrotoluene			120	90.9		ug/L		76	29 - 140	4	40

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

Lab Sample ID: LCSD 400-688325/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688325

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	89.7		ug/L		75	26 - 150	2	40
1,4-Dioxane			120	30.6		ug/L		25	10 - 87	16	40
1,2-Diphenylhydrazine (as Azobenzene)			120	75.8		ug/L		63	23 - 138	5	40
Hexachlorobenzene			120	88.8		ug/L		74	10 - 150	6	40
Hexachlorocyclopentadiene			120	213	*+	ug/L		177	10 - 124	20	40
Hexachloroethane			120	43.5		ug/L		36	10 - 127	20	40
Indene			120	66.5		ug/L		55	18 - 150	20	40
Isophorone			120	64.0		ug/L		53	28 - 127	14	40
2-Methylphenol			120	71.5		ug/L		60	34 - 124	16	40
3 & 4 Methylphenol			120	69.2		ug/L		58	32 - 122	13	40
2-Nitroaniline			120	80.5		ug/L		67	24 - 139	5	40
3-Nitroaniline			120	68.8		ug/L		57	10 - 128	4	40
4-Nitroaniline			120	92.4		ug/L		77	28 - 118	1	40
Nitrobenzene			120	56.0		ug/L		47	29 - 120	14	40
2-Nitrophenol			120	73.6		ug/L		61	25 - 148	14	40
4-Nitrophenol			240	184		ug/L		77	12 - 129	4	40
N-Nitrosodimethylamine			120	37.1		ug/L		31	10 - 115	20	40
N-Nitrosodi-n-propylamine			120	65.8		ug/L		55	24 - 142	16	40
N-Nitrosodiphenylamine			119	84.7		ug/L		71	29 - 138	2	40
Pentachlorophenol			240	210		ug/L		88	19 - 150	2	40
Phenol			120	44.3		ug/L		37	11 - 95	11	40
Pyridine			240	24.5		ug/L		10	10 - 82	18	40
Quinoline			59.9	38.0		ug/L		63	10 - 141	16	40
2,4,5-Trichlorophenol			120	85.7		ug/L		71	30 - 144	9	40
2,4,6-Trichlorophenol			120	83.6		ug/L		70	27 - 147	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*40*		*10 - 105*
Nitrobenzene-d5	*51*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*67*		*13 - 150*
2,4,6-Tribromophenol	*89*		*10 - 150*

Lab Sample ID: LCSD 400-688325/5-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688325

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	80.2		ug/L		67	10 - 140	19	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*42*		*10 - 105*
Nitrobenzene-d5	*52*		*16 - 127*
Phenol-d5	*31*		*10 - 129*
Terphenyl-d14	*73*		*13 - 150*

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

Lab Sample ID: LCSD 400-688325/5-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688325

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	*76*		*10 - 150*

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

Lab Sample ID: MB 400-688277/1-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/17/24 11:23	10/17/24 16:05	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/17/24 11:23	10/17/24 16:05	1
Anthracene	ND		0.20	0.073	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Chrysene	ND		0.20	0.039	ug/L		10/17/24 11:23	10/17/24 16:05	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluoranthene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluorene	ND		0.20	0.087	ug/L		10/17/24 11:23	10/17/24 16:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/17/24 11:23	10/17/24 16:05	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/17/24 11:23	10/17/24 16:05	1
Phenanthrene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Pyrene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	*79*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Nitrobenzene-d5	*99*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Terphenyl-d14	*81*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.64		ug/L		79	50 - 150
Acenaphthylene	3.34	2.80		ug/L		84	50 - 150
Anthracene	3.34	2.78		ug/L		83	50 - 150
Benzo[a]anthracene	3.34	3.19		ug/L		96	50 - 150
Benzo[a]pyrene	3.34	2.99		ug/L		90	50 - 150
Benzo[b]fluoranthene	3.34	2.96		ug/L		89	50 - 150
Benzo[g,h,i]perylene	3.34	2.81		ug/L		84	50 - 150
Benzo[k]fluoranthene	3.34	2.88		ug/L		86	50 - 150
Chrysene	3.34	2.79		ug/L		84	50 - 150
Dibenz(a,h)anthracene	3.34	2.68		ug/L		80	50 - 150
Fluoranthene	3.34	2.76		ug/L		83	50 - 150

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

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	3.34	2.84		ug/L		85	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.71		ug/L		81	50 - 150
1-Methylnaphthalene	3.34	2.38		ug/L		72	50 - 150
2-Methylnaphthalene	3.34	2.06		ug/L		62	50 - 150
Phenanthrene	3.34	2.76		ug/L		83	50 - 150
Pyrene	3.34	2.70		ug/L		81	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*
Nitrobenzene-d5	*101*		*50 - 150*
Terphenyl-d14	*81*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688242/1-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688242

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		10/17/24 09:02	10/17/24 13:58	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/17/24 09:02	10/17/24 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*10/17/24 09:02*	*10/17/24 13:58*	*1*

Lab Sample ID: LCS 400-688242/2-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.101	0.108		ug/L		107	60 - 140
1,2-Dibromoethane	0.100	0.139		ug/L		138	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*114*		*51 - 149*

Lab Sample ID: LCSD 400-688242/3-A
Matrix: Water
Analysis Batch: 688235

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688242

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.111		ug/L		111	60 - 140	3	30
1,2-Dibromoethane	0.100	0.138		ug/L		138	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*116*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/10/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

400-264164 COC

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-101024-8260	10/10/2024	0000	Water	2					2	X			
	TB-ROX-101024-8011	10/10/2024	0000	Water	2					2		X		
	MW13-ROX-101024	10/10/2024	0950	Water	6			4		10	X	X	X	X
	P114R-ROX-101024	10/10/2024	1100	Water	6			4		10	X	X	X	X
	MW3-ROX-101024-EB	10/10/2024	1200	Water	6			4		10	X	X	X	X
	MW3-ROX-101024	10/10/2024	1315	Water	6			4		10	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0546 9894, 7252 0546 9909, 7252 0547 1460	10/10/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 10-11-24	Time: 0832
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 19Sept24

CUSTODY SEALS: 1599944, 1599945, 1599946, 1599947, 1599948, 1599949

1.3°C IR11
0.0°C IR11
0.1°C IR11

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10/22/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264164-1

Login Number: 264164
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C, 0.0°C, 0.1°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-264164-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264191-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andreia Vladimirescu, 11/27/24

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.	X			
Matrix Spike	MS recoveries met acceptance criteria.		X		

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/RPD Criteria
MW12-ROX-101124 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW12-ROX-101124 MS/MSD	SVOCs	4-Nitroaniline	**43/41**	4	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	4-Chloroaniline	**32/27**	17	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	2-Nitroaniline	**47/49**	4	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	3,3-Dichlorobenzidine	**24/19**	23	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	3-Nitroaniline	**48/47**	2	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	2-Methylphenol	50/**49**	2	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	Phenol	**32/31**	1	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	Pyridine	**23/24**	4	50-150/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**		**Quality Condition**			**Comments**
			Pass	**Fail[1]**	**N/A**	
MW12-ROX-101124 MS/MSD	SVOCs	1,4-Dioxane		**25/23**	6	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	2,4-Dinitrophenol		**161/172**	6	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	Aniline		**39/32**	17	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	N-Nitrosodimethylamine		**40/43**	6	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	Hexachlorocyclopentadiene		**230/232**	1	50-150/40
MW12-ROX-101124 MS/MSD	SVOCs	3&4-Methylphenol		**48/47**	3	50-150/40
MW12-ROX-101124 MS/MSD	PAHs	2-Methylnaphthalene		**49**/62	21	50-150/40

Analytical data that required qualification based on MS/MSD data are referenced 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. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Method 8260D (VOCs)
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. 2-Chloroethyl vinyl ether in sample MW12-ROX-101124 was qualified as estimated (UJ).

Method 8270E (SVOCs)
Several analytes in sample MW12-ROX-101124 were qualified as estimated (UJ).

Method 8270E (PAHs)
2-Methylnaphthalene in sample MW12-ROX-101124 was qualified as estimated (UJ).

Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-688961/1002	VOCs	Acetone	**194**	NA	43-150
LCS 400-688961/1002	VOCs	2-Butanone (MEK)	**185**	NA	61-145
LCS 400-689105/1002	VOCs	Acetone	**182**	NA	43-150
LCS 400-689105/1002	VOCs	2-Butanone (MEK)	**173**	NA	61-145
LCS/LCSD 400-688433/2-A/3-A	SVOCs	2,4-Dimethylphenol	**133**/115	14	38-132/40
LCS/LCSD 400-688433/2-A/3-A	SVOCs	2,4-Dinitrophenol	**165**/140	16	15-150/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**	
		Pass	**Fail[1]**	**N/A**		
LCS/LCSD 400-688433/2-A/3-A	SVOCs	Hexachlorocyclopentadiene		**228/207**	10	10-124/40
Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Trip blanks are quality control samples that do not require qualification.						
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X				
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X				
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X				
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).	
Usability	No results qualified as unusable.	X				
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8260D (VOCs) The continuing calibration verification (CCV) for chloroethane was outside evaluation criteria, biased low. The associated results for samples MW5-ROX-101124, MW5-ROX-101124-DUP, and MW12-ROX-101124 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/28/2024 11:46:30 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264191-1

Reviewed 11/27/2024
VA

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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10/28/2024 11:46:30 AM

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Job Narrative
400-264191-1

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 10/12/2024 8:36 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 0.4°C and 3.4°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-688961 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-688961 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-688961 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 one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101124-8260 (400-264191-1), MW5-ROX-101124 (400-264191-3), MW5-ROX-101124-DUP (400-264191-4) and MW12-ROX-101124 (400-264191-6). 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 laboratory control sample (LCS) for analytical batch 400-689105 recovered outside control limits for the following analytes: Acetone and Methyl Ethyl Ketone. 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 400-689105 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689105 recovered above the upper control limit for Acetone, 2-Butanone (MEK), Hexachlorobutadiene and 1,2,4-Trichlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689105 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: MW12-ROX-101124 (400-264191-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260D: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-689105 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688615 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 4,6-Dinitro-ortho-cresol, 2-Nitrophenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688615 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688433 and analytical batch 400-688615 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688433 and analytical batch 400-688615 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-688433 and analytical batch 400-688615 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8270E: The initial calibration curve analyzed in batch 400-688615 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

Method 8270E_QQQ: The matrix (MS) recoveries for preparation batch 400-688277 and analytical batch 400-688256 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
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264191-1	TB-ROX-101124-8260	Water	10/11/24 12:00	10/12/24 08:36
400-264191-2	TB-ROX-101124-8011	Water	10/11/24 12:00	10/12/24 08:36
400-264191-3	MW5-ROX-101124	Water	10/11/24 09:45	10/12/24 08:36
400-264191-4	MW5-ROX-101124-DUP	Water	10/11/24 09:45	10/12/24 08:36
400-264191-6	MW12-ROX-101124	Water	10/11/24 12:45	10/12/24 08:36

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: TB-ROX-101124-8260 — Lab Sample ID: 400-264191-1

No Detections.

Client Sample ID: TB-ROX-101124-8011 — Lab Sample ID: 400-264191-2

No Detections.

Client Sample ID: MW5-ROX-101124 — Lab Sample ID: 400-264191-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.26	J	1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.8		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	1.8		1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW5-ROX-101124-DUP — Lab Sample ID: 400-264191-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.67	J	1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.8		1.0	0.22	ug/L	1		8260D	Total/NA
tert-Butylbenzene	1.4		1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW12-ROX-101124 — Lab Sample ID: 400-264191-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: TB-ROX-101124-8260
Date Collected: 10/11/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-1
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			10/24/24 10:58	1
Acrolein	ND		20	3.3	ug/L			10/24/24 10:58	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 10:58	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 10:58	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 10:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 10:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 10:58	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 10:58	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/24/24 10:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 10:58	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 10:58	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 10:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 10:58	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 10:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 10:58	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 10:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 10:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 10:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 10:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 10:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 10:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 10:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 10:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 10:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 10:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 10:58	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 10:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 10:58	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 10:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 10:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 10:58	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 10:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 10:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 10:58	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 10:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 10:58	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: TB-ROX-101124-8260
Date Collected: 10/11/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-1
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			10/24/24 10:58	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 10:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 10:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 10:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 10:58	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 10:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 10:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 10:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 10:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 10:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 10:58	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 10:58	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 10:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 10:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 10:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 10:58	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 10:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/24/24 10:58*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*10/24/24 10:58*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/24/24 10:58*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: TB-ROX-101124-8011
Date Collected: 10/11/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-2
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		10/18/24 10:16	10/18/24 15:12	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*10/18/24 10:16*	*10/18/24 15:12*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: MW5-ROX-101124
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-3
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			10/24/24 15:21	1
Acrolein	ND		20	3.3	ug/L			10/24/24 15:21	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 15:21	1
Benzene	**0.26**	**J**	1.0	0.24	ug/L			10/24/24 15:21	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 15:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 15:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 15:21	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 15:21	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/24/24 15:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 15:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 15:21	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 15:21	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/24/24 15:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 15:21	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 15:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 15:21	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 15:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 15:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 15:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 15:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 15:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 15:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 15:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 15:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 15:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 15:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 15:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 15:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 15:21	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 15:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 15:21	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 15:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 15:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 15:21	1
Methyl tert-butyl ether	**1.8**		1.0	0.22	ug/L			10/24/24 15:21	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:21	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 15:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 15:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 15:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 15:21	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 15:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 15:21	1

Client Sample ID: MW5-ROX-101124
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-3
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			10/24/24 15:21	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 15:21	1
tert-Butylbenzene	**1.8**		1.0	0.63	ug/L			10/24/24 15:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 15:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 15:21	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 15:21	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 15:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 15:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 15:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 15:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 15:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 15:21	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 15:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 15:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 15:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 15:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 15:21	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 15:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 15:21	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/24/24 15:21*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*10/24/24 15:21*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/24/24 15:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	8.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
Benzenethiol	ND		9.8	9.7	ug/L		10/18/24 14:04	10/21/24 18:29	1
Benzoic acid	ND		29	23	ug/L		10/18/24 14:04	10/21/24 18:29	1
Benzyl alcohol	ND		9.8	7.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
Bis(2-chloroethoxy)methane	ND		9.8	4.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
Bis(2-chloroethyl)ether	ND		9.8	3.8	ug/L		10/18/24 14:04	10/21/24 18:29	1
bis (2-chloroisopropyl) ether	ND		9.8	1.8	ug/L		10/18/24 14:04	10/21/24 18:29	1
Bis(2-ethylhexyl) phthalate	ND		9.8	8.7	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Bromophenyl phenyl ether	ND		9.8	8.4	ug/L		10/18/24 14:04	10/21/24 18:29	1
Butyl benzyl phthalate	ND		9.8	5.7	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Chloroaniline	ND		9.8	4.6	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Chloro-3-methylphenol	ND		9.8	5.2	ug/L		10/18/24 14:04	10/21/24 18:29	1
2-Chloronaphthalene	ND		9.8	3.7	ug/L		10/18/24 14:04	10/21/24 18:29	1
2-Chlorophenol	ND		9.8	4.0	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Chlorophenyl phenyl ether	ND		9.8	3.6	ug/L		10/18/24 14:04	10/21/24 18:29	1
Dibenz[a,h]acridine	ND		9.8	2.7	ug/L		10/18/24 14:04	10/21/24 18:29	1
Dibenzofuran	ND		9.8	3.9	ug/L		10/18/24 14:04	10/21/24 18:29	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4-Dichlorophenol	ND		9.8	4.2	ug/L		10/18/24 14:04	10/21/24 18:29	1
Diethyl phthalate	ND		9.8	4.3	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4-Dimethylphenol	ND	*+	9.8	5.1	ug/L		10/18/24 14:04	10/21/24 18:29	1

Client Sample ID: MW5-ROX-101124
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.8	4.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
Di-n-butyl phthalate	ND		9.8	4.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
4,6-Dinitro-ortho-cresol	ND		9.8	9.8	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4-Dinitrophenol	ND	*+	29	4.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4-Dinitrotoluene	ND		9.8	5.0	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,6-Dinitrotoluene	ND		9.8	3.8	ug/L		10/18/24 14:04	10/21/24 18:29	1
Di-n-octyl phthalate	ND		9.8	5.9	ug/L		10/18/24 14:04	10/21/24 18:29	1
1,4-Dioxane	ND		9.8	4.2	ug/L		10/18/24 14:04	10/21/24 18:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	3.2	ug/L		10/18/24 14:04	10/21/24 18:29	1
Hexachlorobenzene	ND		9.8	9.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
Hexachlorocyclopentadiene	ND	*+	20	4.4	ug/L		10/18/24 14:04	10/21/24 18:29	1
Hexachloroethane	ND		9.8	5.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
Indene	ND		9.8	3.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
Isophorone	ND		9.8	5.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
2-Methylphenol	ND		9.8	3.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
3 & 4 Methylphenol	ND		20	4.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
2-Nitroaniline	ND		9.8	4.9	ug/L		10/18/24 14:04	10/21/24 18:29	1
3-Nitroaniline	ND		9.8	4.6	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Nitroaniline	ND		9.8	4.0	ug/L		10/18/24 14:04	10/21/24 18:29	1
Nitrobenzene	ND		9.8	4.6	ug/L		10/18/24 14:04	10/21/24 18:29	1
2-Nitrophenol	ND		9.8	4.5	ug/L		10/18/24 14:04	10/21/24 18:29	1
4-Nitrophenol	ND		9.8	3.2	ug/L		10/18/24 14:04	10/21/24 18:29	1
N-Nitrosodimethylamine	ND		9.8	2.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
N-Nitrosodi-n-propylamine	ND		9.8	2.4	ug/L		10/18/24 14:04	10/21/24 18:29	1
N-Nitrosodiphenylamine	ND		9.8	3.6	ug/L		10/18/24 14:04	10/21/24 18:29	1
Pentachlorophenol	ND		20	12	ug/L		10/18/24 14:04	10/21/24 18:29	1
Phenol	ND		9.8	4.1	ug/L		10/18/24 14:04	10/21/24 18:29	1
Pyridine	ND		9.8	9.8	ug/L		10/18/24 14:04	10/21/24 18:29	1
Quinoline	ND		9.8	2.3	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4,5-Trichlorophenol	ND		9.8	3.9	ug/L		10/18/24 14:04	10/21/24 18:29	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		10/18/24 14:04	10/21/24 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*10/18/24 14:04*	*10/21/24 18:29*	*1*
2-Fluorophenol	*42*		*10 - 105*	*10/18/24 14:04*	*10/21/24 18:29*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*10/18/24 14:04*	*10/21/24 18:29*	*1*
Phenol-d5	*32*		*10 - 129*	*10/18/24 14:04*	*10/21/24 18:29*	*1*
Terphenyl-d14	*75*		*13 - 150*	*10/18/24 14:04*	*10/21/24 18:29*	*1*
2,4,6-Tribromophenol	*90*		*10 - 150*	*10/18/24 14:04*	*10/21/24 18:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.083	ug/L		10/17/24 11:24	10/17/24 21:40	1
Acenaphthylene	ND		0.19	0.046	ug/L		10/17/24 11:24	10/17/24 21:40	1
Anthracene	ND		0.19	0.071	ug/L		10/17/24 11:24	10/17/24 21:40	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 21:40	1
Benzo[a]pyrene	ND		0.19	0.044	ug/L		10/17/24 11:24	10/17/24 21:40	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/17/24 11:24	10/17/24 21:40	1
Benzo[g,h,i]perylene	ND		0.19	0.051	ug/L		10/17/24 11:24	10/17/24 21:40	1

Client Sample ID: MW5-ROX-101124
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 21:40	1
Chrysene	ND		0.19	0.038	ug/L		10/17/24 11:24	10/17/24 21:40	1
Dibenz(a,h)anthracene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 21:40	1
Fluoranthene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 21:40	1
Fluorene	ND		0.19	0.085	ug/L		10/17/24 11:24	10/17/24 21:40	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 21:40	1
1-Methylnaphthalene	ND		0.19	0.064	ug/L		10/17/24 11:24	10/17/24 21:40	1
2-Methylnaphthalene	ND		0.19	0.075	ug/L		10/17/24 11:24	10/17/24 21:40	1
Phenanthrene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 21:40	1
Pyrene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/17/24 11:24*	*10/17/24 21:40*	*1*
Nitrobenzene-d5	*106*		*50 - 150*	*10/17/24 11:24*	*10/17/24 21:40*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/17/24 11:24*	*10/17/24 21:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/18/24 10:16	10/18/24 15:33	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*10/18/24 10:16*	*10/18/24 15:33*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: MW5-ROX-101124-DUP
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-4
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			10/24/24 15:43	1
Acrolein	ND		20	3.3	ug/L			10/24/24 15:43	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 15:43	1
Benzene	**0.67**	**J**	1.0	0.24	ug/L			10/24/24 15:43	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 15:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 15:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 15:43	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 15:43	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/24/24 15:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 15:43	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 15:43	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 15:43	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/24/24 15:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 15:43	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 15:43	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 15:43	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 15:43	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 15:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 15:43	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 15:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 15:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 15:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 15:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 15:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 15:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 15:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 15:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 15:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 15:43	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 15:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 15:43	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 15:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 15:43	1
Methyl tert-butyl ether	**1.8**		1.0	0.22	ug/L			10/24/24 15:43	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:43	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 15:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 15:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 15:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 15:43	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 15:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 15:43	1

Client Sample ID: MW5-ROX-101124-DUP
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-4
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			10/24/24 15:43	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 15:43	1
tert-Butylbenzene	**1.4**		1.0	0.63	ug/L			10/24/24 15:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 15:43	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 15:43	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 15:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:43	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 15:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 15:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 15:43	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 15:43	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 15:43	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 15:43	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 15:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 15:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 15:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 15:43	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 15:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 15:43	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/24/24 15:43*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/24/24 15:43*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/24/24 15:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	8.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
Benzenethiol	ND		9.7	9.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
Benzoic acid	ND		29	23	ug/L		10/18/24 14:04	10/21/24 18:51	1
Benzyl alcohol	ND		9.7	7.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
Bis(2-chloroethoxy)methane	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		10/18/24 14:04	10/21/24 18:51	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Bromophenyl phenyl ether	ND		9.7	8.4	ug/L		10/18/24 14:04	10/21/24 18:51	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Chloroaniline	ND		9.7	4.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Chloro-3-methylphenol	ND		9.7	5.2	ug/L		10/18/24 14:04	10/21/24 18:51	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
2-Chlorophenol	ND		9.7	4.0	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
Dibenzofuran	ND		9.7	3.9	ug/L		10/18/24 14:04	10/21/24 18:51	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		10/18/24 14:04	10/21/24 18:51	1
Diethyl phthalate	ND		9.7	4.3	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4-Dimethylphenol	ND	*+	9.7	5.1	ug/L		10/18/24 14:04	10/21/24 18:51	1

Client Sample ID: MW5-ROX-101124-DUP
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.7	4.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
Di-n-butyl phthalate	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4-Dinitrophenol	ND	*+	29	4.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4-Dinitrotoluene	ND		9.7	5.0	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		10/18/24 14:04	10/21/24 18:51	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		10/18/24 14:04	10/21/24 18:51	1
1,4-Dioxane	ND		9.7	4.2	ug/L		10/18/24 14:04	10/21/24 18:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		10/18/24 14:04	10/21/24 18:51	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		10/18/24 14:04	10/21/24 18:51	1
Hexachlorocyclopentadiene	ND	*+	19	4.4	ug/L		10/18/24 14:04	10/21/24 18:51	1
Hexachloroethane	ND		9.7	5.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
Indene	ND		9.7	3.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
Isophorone	ND		9.7	5.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
2-Methylphenol	ND		9.7	3.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
3 & 4 Methylphenol	ND		19	4.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
2-Nitroaniline	ND		9.7	4.9	ug/L		10/18/24 14:04	10/21/24 18:51	1
3-Nitroaniline	ND		9.7	4.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Nitroaniline	ND		9.7	4.0	ug/L		10/18/24 14:04	10/21/24 18:51	1
Nitrobenzene	ND		9.7	4.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
2-Nitrophenol	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 18:51	1
4-Nitrophenol	ND		9.7	3.2	ug/L		10/18/24 14:04	10/21/24 18:51	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		10/18/24 14:04	10/21/24 18:51	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		10/18/24 14:04	10/21/24 18:51	1
Pentachlorophenol	ND		19	12	ug/L		10/18/24 14:04	10/21/24 18:51	1
Phenol	ND		9.7	4.1	ug/L		10/18/24 14:04	10/21/24 18:51	1
Pyridine	ND		9.7	9.7	ug/L		10/18/24 14:04	10/21/24 18:51	1
Quinoline	ND		9.7	2.3	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		10/18/24 14:04	10/21/24 18:51	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/18/24 14:04	10/21/24 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*21 - 114*	*10/18/24 14:04*	*10/21/24 18:51*	*1*
2-Fluorophenol	*47*		*10 - 105*	*10/18/24 14:04*	*10/21/24 18:51*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/18/24 14:04*	*10/21/24 18:51*	*1*
Phenol-d5	*35*		*10 - 129*	*10/18/24 14:04*	*10/21/24 18:51*	*1*
Terphenyl-d14	*76*		*13 - 150*	*10/18/24 14:04*	*10/21/24 18:51*	*1*
2,4,6-Tribromophenol	*93*		*10 - 150*	*10/18/24 14:04*	*10/21/24 18:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.083	ug/L		10/17/24 11:24	10/17/24 22:10	1
Acenaphthylene	ND		0.19	0.046	ug/L		10/17/24 11:24	10/17/24 22:10	1
Anthracene	ND		0.19	0.071	ug/L		10/17/24 11:24	10/17/24 22:10	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 22:10	1
Benzo[a]pyrene	ND		0.19	0.044	ug/L		10/17/24 11:24	10/17/24 22:10	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/17/24 11:24	10/17/24 22:10	1
Benzo[g,h,i]perylene	ND		0.19	0.051	ug/L		10/17/24 11:24	10/17/24 22:10	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: MW5-ROX-101124-DUP
Date Collected: 10/11/24 09:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 22:10	1
Chrysene	ND		0.19	0.038	ug/L		10/17/24 11:24	10/17/24 22:10	1
Dibenz(a,h)anthracene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 22:10	1
Fluoranthene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 22:10	1
Fluorene	ND		0.19	0.085	ug/L		10/17/24 11:24	10/17/24 22:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 22:10	1
1-Methylnaphthalene	ND		0.19	0.064	ug/L		10/17/24 11:24	10/17/24 22:10	1
2-Methylnaphthalene	ND		0.19	0.075	ug/L		10/17/24 11:24	10/17/24 22:10	1
Phenanthrene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 22:10	1
Pyrene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:10*	*1*
Nitrobenzene-d5	*106*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:10*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.018	ug/L		10/18/24 10:16	10/18/24 15:54	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/18/24 10:16	10/18/24 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*56*		*51 - 149*	*10/18/24 10:16*	*10/18/24 15:54*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Client Sample ID: MW12-ROX-101124
Date Collected: 10/11/24 12:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-6
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			10/25/24 10:09	1
Acrolein	ND		20	3.3	ug/L			10/25/24 10:09	1
Acrylonitrile	ND		10	2.8	ug/L			10/25/24 10:09	1
Benzene	ND		1.0	0.24	ug/L			10/25/24 10:09	1
Bromobenzene	ND		1.0	0.54	ug/L			10/25/24 10:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/25/24 10:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
Bromoform	ND		5.0	0.25	ug/L			10/25/24 10:09	1
Bromomethane	ND		1.0	0.98	ug/L			10/25/24 10:09	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/25/24 10:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/25/24 10:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/25/24 10:09	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/25/24 10:09	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/25/24 10:09	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/25/24 10:09	1
Chloroform	ND		1.0	0.90	ug/L			10/25/24 10:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/25/24 10:09	1
Chloromethane	ND		1.0	0.40	ug/L			10/25/24 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/25/24 10:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/25/24 10:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/25/24 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/25/24 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/25/24 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/25/24 10:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/25/24 10:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/25/24 10:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/25/24 10:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/25/24 10:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/25/24 10:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/25/24 10:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/25/24 10:09	1
2-Hexanone	ND		25	4.3	ug/L			10/25/24 10:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/25/24 10:09	1
Methylene bromide	ND		5.0	0.22	ug/L			10/25/24 10:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/25/24 10:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/25/24 10:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/25/24 10:09	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/25/24 10:09	1
Naphthalene	ND		5.0	3.0	ug/L			10/25/24 10:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/25/24 10:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/25/24 10:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/25/24 10:09	1
o-Xylene	ND		5.0	3.0	ug/L			10/25/24 10:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/25/24 10:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/25/24 10:09	1

Client Sample ID: MW12-ROX-101124
Date Collected: 10/11/24 12:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-6
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			10/25/24 10:09	1
Styrene	ND		1.0	1.0	ug/L			10/25/24 10:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/25/24 10:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/25/24 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/25/24 10:09	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/25/24 10:09	1
Toluene	ND		1.0	0.90	ug/L			10/25/24 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/25/24 10:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/25/24 10:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/25/24 10:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/25/24 10:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/25/24 10:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/25/24 10:09	1
Trichloroethene	ND		1.0	0.15	ug/L			10/25/24 10:09	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/25/24 10:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/25/24 10:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/25/24 10:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/25/24 10:09	1
Vinyl acetate	ND		25	0.93	ug/L			10/25/24 10:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/25/24 10:09	1
Xylenes, Total	ND		10	6.0	ug/L			10/25/24 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/25/24 10:09*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/25/24 10:09*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/25/24 10:09*	*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		10/18/24 14:04	10/21/24 18:06	1
Benzenethiol	ND		9.4	9.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
Benzoic acid	ND		28	23	ug/L		10/18/24 14:04	10/21/24 18:06	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/18/24 14:04	10/21/24 18:06	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/18/24 14:04	10/21/24 18:06	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
Butyl benzyl phthalate	ND		9.4	5.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Chloroaniline	ND	F1 UJ	9.4	4.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/18/24 14:04	10/21/24 18:06	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/18/24 14:04	10/21/24 18:06	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/18/24 14:04	10/21/24 18:06	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/18/24 14:04	10/21/24 18:06	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/18/24 14:04	10/21/24 18:06	1
3,3'-Dichlorobenzidine	ND	F1 UJ	10	10	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/18/24 14:04	10/21/24 18:06	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4-Dimethylphenol	ND	*+	9.4	4.9	ug/L		10/18/24 14:04	10/21/24 18:06	1

Client Sample ID: MW12-ROX-101124
Date Collected: 10/11/24 12:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4-Dinitrophenol	ND	F1 *+	28	4.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/18/24 14:04	10/21/24 18:06	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/18/24 14:04	10/21/24 18:06	1
1,4-Dioxane	ND	F1 UJ	9.4	4.0	ug/L		10/18/24 14:04	10/21/24 18:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
Hexachlorocyclopentadiene	ND	F1 *+	19	4.2	ug/L		10/18/24 14:04	10/21/24 18:06	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
Indene	ND		9.4	3.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
Isophorone	ND		9.4	4.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
2-Methylphenol	ND	F1 UJ	9.4	3.0	ug/L		10/18/24 14:04	10/21/24 18:06	1
3 & 4 Methylphenol	ND	F1 UJ	19	4.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
2-Nitroaniline	ND	F1 UJ	9.4	4.7	ug/L		10/18/24 14:04	10/21/24 18:06	1
3-Nitroaniline	ND	F1 UJ	9.4	4.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Nitroaniline	ND	F1 UJ	9.4	3.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
N-Nitrosodimethylamine	ND	F1 UJ	9.4	2.1	ug/L		10/18/24 14:04	10/21/24 18:06	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/18/24 14:04	10/21/24 18:06	1
Pentachlorophenol	ND		19	11	ug/L		10/18/24 14:04	10/21/24 18:06	1
Phenol	ND	F1 UJ	9.4	3.9	ug/L		10/18/24 14:04	10/21/24 18:06	1
Pyridine	ND	F1 UJ	9.4	9.4	ug/L		10/18/24 14:04	10/21/24 18:06	1
Quinoline	ND		9.4	2.3	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/18/24 14:04	10/21/24 18:06	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/18/24 14:04	10/21/24 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*21 - 114*	*10/18/24 14:04*	*10/21/24 18:06*	*1*
2-Fluorophenol	*36*		*10 - 105*	*10/18/24 14:04*	*10/21/24 18:06*	*1*
Nitrobenzene-d5	*60*		*16 - 127*	*10/18/24 14:04*	*10/21/24 18:06*	*1*
Phenol-d5	*26*		*10 - 129*	*10/18/24 14:04*	*10/21/24 18:06*	*1*
Terphenyl-d14	*77*		*13 - 150*	*10/18/24 14:04*	*10/21/24 18:06*	*1*
2,4,6-Tribromophenol	*79*		*10 - 150*	*10/18/24 14:04*	*10/21/24 18:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.082	ug/L		10/17/24 11:24	10/17/24 23:11	1
Acenaphthylene	ND		0.19	0.045	ug/L		10/17/24 11:24	10/17/24 23:11	1
Anthracene	ND		0.19	0.070	ug/L		10/17/24 11:24	10/17/24 23:11	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 23:11	1
Benzo[a]pyrene	ND		0.19	0.043	ug/L		10/17/24 11:24	10/17/24 23:11	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/17/24 11:24	10/17/24 23:11	1
Benzo[g,h,i]perylene	ND		0.19	0.050	ug/L		10/17/24 11:24	10/17/24 23:11	1

Client Sample ID: MW12-ROX-101124
Date Collected: 10/11/24 12:45
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 23:11	1
Chrysene	ND		0.19	0.038	ug/L		10/17/24 11:24	10/17/24 23:11	1
Dibenz(a,h)anthracene	ND		0.19	0.042	ug/L		10/17/24 11:24	10/17/24 23:11	1
Fluoranthene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 23:11	1
Fluorene	ND		0.19	0.084	ug/L		10/17/24 11:24	10/17/24 23:11	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/17/24 11:24	10/17/24 23:11	1
1-Methylnaphthalene	ND		0.19	0.064	ug/L		10/17/24 11:24	10/17/24 23:11	1
2-Methylnaphthalene	ND	F1 UJ	0.19	0.074	ug/L		10/17/24 11:24	10/17/24 23:11	1
Phenanthrene	ND		0.19	0.042	ug/L		10/17/24 11:24	10/17/24 23:11	1
Pyrene	ND		0.19	0.039	ug/L		10/17/24 11:24	10/17/24 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 150*	*10/17/24 11:24*	*10/17/24 23:11*	*1*
Nitrobenzene-d5	*112*		*50 - 150*	*10/17/24 11:24*	*10/17/24 23:11*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/17/24 11:24*	*10/17/24 23:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/18/24 10:16	10/18/24 16:36	1
1,2-Dibromoethane	ND	F2	0.021	0.016	ug/L		10/18/24 10:16	10/18/24 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*10/18/24 10:16*	*10/18/24 16:36*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264191-1
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.

GC Semi VOA

Qualifier	Qualifier Description
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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

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)
400-264191-1	TB-ROX-101124-8260	93	110	97
400-264191-3	MW5-ROX-101124	94	103	97
400-264191-4	MW5-ROX-101124-DUP	92	104	96
400-264191-6	MW12-ROX-101124	94	106	98
400-264191-6 MS	MW12-ROX-101124	98	94	97
400-264191-6 MSD	MW12-ROX-101124	96	94	96
LCS 400-688961/1002	Lab Control Sample	100	97	97
LCS 400-689105/1002	Lab Control Sample	96	92	97
MB 400-688961/5	Method Blank	92	109	98
MB 400-689105/11	Method Blank	90	106	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)
400-264191-3	MW5-ROX-101124	58	42	53	32	75	90
400-264191-4	MW5-ROX-101124-DUP	63	47	58	35	76	93
400-264191-6	MW12-ROX-101124	61	36	60	26	77	79
400-264191-6 MS	MW12-ROX-101124	66	36	64	29	66	83
400-264191-6 MSD	MW12-ROX-101124	69	37	68	29	68	85
LCS 400-688433/19-A	Lab Control Sample	56	45	56	35	74	81
LCS 400-688433/2-A	Lab Control Sample	66	54	65	44	70	95
LCSD 400-688433/20-A	Lab Control Sample Dup	60	50	57	39	73	81
LCSD 400-688433/3-A	Lab Control Sample Dup	56	49	56	42	59	87
MB 400-688433/1-A	Method Blank	56	44	57	32	77	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264191-3	MW5-ROX-101124	77	106	84
400-264191-4	MW5-ROX-101124-DUP	75	106	84
400-264191-6	MW12-ROX-101124	81	112	79
400-264191-6 MS	MW12-ROX-101124	79	108	80

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264191-6 MSD	MW12-ROX-101124	82	109	78
LCS 400-688277/2-A	Lab Control Sample	77	101	81
MB 400-688277/1-A	Method Blank	79	99	81

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264191-2	TB-ROX-101124-8011	68
400-264191-3	MW5-ROX-101124	64
400-264191-4	MW5-ROX-101124-DUP	56
400-264191-6	MW12-ROX-101124	79
400-264191-6 MS	MW12-ROX-101124	53
400-264191-6 MSD	MW12-ROX-101124	53
LCS 400-688388/2-A	Lab Control Sample	90
LCSD 400-688388/3-A	Lab Control Sample Dup	90
MB 400-688388/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264191-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101124-8260
Lab Sample ID: 400-264191-1
Date Collected: 10/11/24 12:00
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688961	10/24/24 10:58	WPD	EET PEN

Client Sample ID: TB-ROX-101124-8011
Lab Sample ID: 400-264191-2
Date Collected: 10/11/24 12:00
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.6 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 15:12	KR	EET PEN

Client Sample ID: MW5-ROX-101124
Lab Sample ID: 400-264191-3
Date Collected: 10/11/24 09:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688961	10/24/24 15:21	WPD	EET PEN
Total/NA	Prep	3511			30.8 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 21:40	DS	EET PEN
Total/NA	Prep	3510C			256.2 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 18:29	S1B	EET PEN
Total/NA	Prep	8011			33 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 15:33	KR	EET PEN

Client Sample ID: MW5-ROX-101124-DUP
Lab Sample ID: 400-264191-4
Date Collected: 10/11/24 09:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688961	10/24/24 15:43	WPD	EET PEN
Total/NA	Prep	3511			30.8 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 22:10	DS	EET PEN
Total/NA	Prep	3510C			257.2 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 18:51	S1B	EET PEN
Total/NA	Prep	8011			32.3 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 15:54	KR	EET PEN

Client Sample ID: MW12-ROX-101124
Lab Sample ID: 400-264191-6
Date Collected: 10/11/24 12:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689105	10/25/24 10:09	WPD	EET PEN
Total/NA	Prep	3511			31.1 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 23:11	DS	EET PEN

Client Sample ID: MW12-ROX-101124
Lab Sample ID: 400-264191-6

Date Collected: 10/11/24 12:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			266.2 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 18:06	S1B	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 16:36	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688277/1-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:05	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688388/1-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:09	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688433/1-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 15:28	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688961/5

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	688961	10/24/24 08:24	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689105/11

Date Collected: N/A
Matrix: Water
Date Received: 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	689105	10/25/24 10:31	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688277/2-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:36	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688388/2-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:30	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688433/19-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 15:51	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688433/2-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:36	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688961/1002
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	688961	10/24/24 07:18	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689105/1002
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	689105	10/25/24 07:13	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688388/3-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:51	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688433/20-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:13	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688433/3-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:58	S1B	EET PEN

Client Sample ID: MW12-ROX-101124
Lab Sample ID: 400-264191-6 MS
Date Collected: 10/11/24 12:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689105	10/25/24 13:27	WPD	EET PEN
Total/NA	Prep	3511			30.8 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 23:41	DS	EET PEN
Total/NA	Prep	3510C			261.8 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 17:21	S1B	EET PEN
Total/NA	Prep	8011			32.1 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 16:57	KR	EET PEN

Client Sample ID: MW12-ROX-101124
Lab Sample ID: 400-264191-6 MSD
Date Collected: 10/11/24 12:45
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689105	10/25/24 13:49	WPD	EET PEN
Total/NA	Prep	3511			31.4 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/18/24 00:11	DS	EET PEN
Total/NA	Prep	3510C			262.2 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 17:44	S1B	EET PEN
Total/NA	Prep	8011			31.6 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 17:18	KR	EET PEN

Lab Chronicle

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

Laboratory References:

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-1

GC/MS VOA

Analysis Batch: 688961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-1	TB-ROX-101124-8260	Total/NA	Water	8260D	
400-264191-3	MW5-ROX-101124	Total/NA	Water	8260D	
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	8260D	
MB 400-688961/5	Method Blank	Total/NA	Water	8260D	
LCS 400-688961/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 689105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-6	MW12-ROX-101124	Total/NA	Water	8260D	
MB 400-689105/11	Method Blank	Total/NA	Water	8260D	
LCS 400-689105/1002	Lab Control Sample	Total/NA	Water	8260D	
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	8260D	
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	8260D	

GC/MS Semi VOA

Analysis Batch: 688256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-3	MW5-ROX-101124	Total/NA	Water	8270E	688277
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	8270E	688277
400-264191-6	MW12-ROX-101124	Total/NA	Water	8270E	688277
MB 400-688277/1-A	Method Blank	Total/NA	Water	8270E	688277
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	8270E	688277
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	8270E	688277
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	8270E	688277

Prep Batch: 688277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-3	MW5-ROX-101124	Total/NA	Water	3511	
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	3511	
400-264191-6	MW12-ROX-101124	Total/NA	Water	3511	
MB 400-688277/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	3511	
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	3511	
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	3511	

Prep Batch: 688433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-3	MW5-ROX-101124	Total/NA	Water	3510C	
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	3510C	
400-264191-6	MW12-ROX-101124	Total/NA	Water	3510C	
MB 400-688433/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688433/19-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688433/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688433/20-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688433/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	3510C	
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	3510C	

QC Association Summary

Client: AECOM
Job ID: 400-264191-1
Project/Site: ROXANA QUARTERLY GW

GC/MS Semi VOA

Analysis Batch: 688615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-3	MW5-ROX-101124	Total/NA	Water	8270E	688433
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	8270E	688433
400-264191-6	MW12-ROX-101124	Total/NA	Water	8270E	688433
MB 400-688433/1-A	Method Blank	Total/NA	Water	8270E	688433
LCS 400-688433/19-A	Lab Control Sample	Total/NA	Water	8270E	688433
LCS 400-688433/2-A	Lab Control Sample	Total/NA	Water	8270E	688433
LCSD 400-688433/20-A	Lab Control Sample Dup	Total/NA	Water	8270E	688433
LCSD 400-688433/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688433
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	8270E	688433
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	8270E	688433

GC Semi VOA

Prep Batch: 688388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-2	TB-ROX-101124-8011	Total/NA	Water	8011	
400-264191-3	MW5-ROX-101124	Total/NA	Water	8011	
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	8011	
400-264191-6	MW12-ROX-101124	Total/NA	Water	8011	
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	8011	
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	8011	

Analysis Batch: 688421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-2	TB-ROX-101124-8011	Total/NA	Water	8011	688388
400-264191-3	MW5-ROX-101124	Total/NA	Water	8011	688388
400-264191-4	MW5-ROX-101124-DUP	Total/NA	Water	8011	688388
400-264191-6	MW12-ROX-101124	Total/NA	Water	8011	688388
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	688388
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	688388
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688388
400-264191-6 MS	MW12-ROX-101124	Total/NA	Water	8011	688388
400-264191-6 MSD	MW12-ROX-101124	Total/NA	Water	8011	688388

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

Lab Sample ID: MB 400-688961/5
Matrix: Water
Analysis Batch: 688961

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			10/24/24 08:24	1
Acrolein	ND		20	3.3	ug/L			10/24/24 08:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 08:24	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 08:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 08:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 08:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 08:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 08:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 08:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 08:24	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 08:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 08:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 08:24	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 08:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 08:24	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 08:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 08:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 08:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 08:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 08:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 08:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 08:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 08:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 08:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 08:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 08:24	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 08:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 08:24	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 08:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 08:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 08:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 08:24	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 08:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 08:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 08:24	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 08:24	1

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

Lab Sample ID: MB 400-688961/5
Matrix: Water
Analysis Batch: 688961

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			10/24/24 08:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/24/24 08:24	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 08:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 08:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 08:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 08:24	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 08:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 08:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 08:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 08:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 08:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 08:24	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 08:24	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 08:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 08:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 08:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 08:24	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 08:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 08:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/24/24 08:24*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*10/24/24 08:24*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/24/24 08:24*	*1*

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	389	*+	ug/L		194	43 - 150
Acrolein	200	235		ug/L		118	38 - 150
Acrylonitrile	500	458		ug/L		92	64 - 142
Benzene	50.0	45.7		ug/L		91	70 - 130
Bromobenzene	50.0	48.4		ug/L		97	70 - 132
Bromochloromethane	50.0	47.5		ug/L		95	70 - 130
Bromodichloromethane	50.0	44.0		ug/L		88	67 - 133
Bromoform	50.0	45.2		ug/L		90	57 - 140
Bromomethane	20.0	19.3		ug/L		96	10 - 150
2-Butanone (MEK)	200	371	*+	ug/L		185	61 - 145
Carbon disulfide	50.0	44.4		ug/L		89	61 - 137
Carbon tetrachloride	50.0	43.6		ug/L		87	61 - 137
Chlorobenzene	50.0	47.1		ug/L		94	70 - 130
Chloroethane	20.0	14.7		ug/L		73	55 - 141
2-Chloroethyl vinyl ether	20.0	15.3		ug/L		76	10 - 150

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

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	43.1		ug/L		86	69 - 130
1-Chlorohexane	50.0	41.8		ug/L		84	69 - 130
Chloromethane	20.0	20.0		ug/L		100	58 - 137
cis-1,2-Dichloroethene	50.0	46.4		ug/L		93	68 - 130
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	69 - 132
Dibromochloromethane	50.0	44.1		ug/L		88	67 - 135
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	52.2		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 130
Dichlorodifluoromethane	20.0	24.4		ug/L		122	41 - 146
1,1-Dichloroethane	50.0	46.3		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	41.7		ug/L		83	69 - 130
1,1-Dichloroethene	50.0	50.4		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	45.5		ug/L		91	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	48.5		ug/L		97	68 - 130
Hexachlorobutadiene	50.0	59.2		ug/L		118	53 - 140
2-Hexanone	200	245		ug/L		123	65 - 137
Isopropylbenzene	50.0	43.5		ug/L		87	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	51.8		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	184		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	44.9		ug/L		90	70 - 130
Naphthalene	50.0	52.9		ug/L		106	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	48.6		ug/L		97	70 - 130
o-Xylene	50.0	45.5		ug/L		91	70 - 130
p-Chlorotoluene	50.0	49.3		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	53.6		ug/L		107	65 - 130
sec-Butylbenzene	50.0	51.7		ug/L		103	66 - 130
Styrene	50.0	47.0		ug/L		94	70 - 130
tert-Butylbenzene	50.0	48.1		ug/L		96	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 131
Tetrachloroethene	50.0	40.0		ug/L		80	65 - 130
Toluene	50.0	46.1		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	41.9		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	57.5		ug/L		115	60 - 138
1,2,4-Trichlorobenzene	50.0	57.4		ug/L		115	60 - 140
1,1,1-Trichloroethane	50.0	42.4		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	45.6		ug/L		91	70 - 130
Trichloroethene	50.0	46.4		ug/L		93	70 - 130
Trichlorofluoromethane	20.0	19.2		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	47.7		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	51.6		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	50.9		ug/L		102	69 - 130
Vinyl acetate	40.0	42.3		ug/L		106	26 - 150
Vinyl chloride	20.0	20.6		ug/L		103	59 - 136
Xylenes, Total	100	90.4		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-689105/11
Matrix: Water
Analysis Batch: 689105

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			10/25/24 10:31	1
Acrolein	ND		20	3.3	ug/L			10/25/24 10:31	1
Acrylonitrile	ND		10	2.8	ug/L			10/25/24 10:31	1
Benzene	ND		1.0	0.24	ug/L			10/25/24 10:31	1
Bromobenzene	ND		1.0	0.54	ug/L			10/25/24 10:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/25/24 10:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/25/24 10:31	1
Bromoform	ND		5.0	0.25	ug/L			10/25/24 10:31	1
Bromomethane	ND		1.0	0.98	ug/L			10/25/24 10:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/25/24 10:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/25/24 10:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/25/24 10:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/25/24 10:31	1
Chloroethane	ND		1.0	0.76	ug/L			10/25/24 10:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/25/24 10:31	1
Chloroform	ND		1.0	0.90	ug/L			10/25/24 10:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/25/24 10:31	1
Chloromethane	ND		1.0	0.40	ug/L			10/25/24 10:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/25/24 10:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/25/24 10:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/25/24 10:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/25/24 10:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/25/24 10:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/25/24 10:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/25/24 10:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/25/24 10:31	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/25/24 10:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/25/24 10:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/25/24 10:31	1

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

Lab Sample ID: MB 400-689105/11
Matrix: Water
Analysis Batch: 689105

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			10/25/24 10:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/25/24 10:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/25/24 10:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/25/24 10:31	1
2-Hexanone	ND		25	4.3	ug/L			10/25/24 10:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/25/24 10:31	1
Methylene bromide	ND		5.0	0.22	ug/L			10/25/24 10:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/25/24 10:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/25/24 10:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/25/24 10:31	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/25/24 10:31	1
Naphthalene	ND		5.0	3.0	ug/L			10/25/24 10:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/25/24 10:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/25/24 10:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/25/24 10:31	1
o-Xylene	ND		5.0	3.0	ug/L			10/25/24 10:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/25/24 10:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/25/24 10:31	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/25/24 10:31	1
Styrene	ND		1.0	1.0	ug/L			10/25/24 10:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/25/24 10:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/25/24 10:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/25/24 10:31	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/25/24 10:31	1
Toluene	ND		1.0	0.90	ug/L			10/25/24 10:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/25/24 10:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/25/24 10:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/25/24 10:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/25/24 10:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/25/24 10:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/25/24 10:31	1
Trichloroethene	ND		1.0	0.15	ug/L			10/25/24 10:31	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/25/24 10:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/25/24 10:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/25/24 10:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/25/24 10:31	1
Vinyl acetate	ND		25	0.93	ug/L			10/25/24 10:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/25/24 10:31	1
Xylenes, Total	ND		10	6.0	ug/L			10/25/24 10:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*10/25/24 10:31*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/25/24 10:31*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/25/24 10:31*	*1*

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

Lab Sample ID: LCS 400-689105/1002
Matrix: Water
Analysis Batch: 689105

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	364	*+	ug/L		182	43 - 150
Acrolein	200	205		ug/L		102	38 - 150
Acrylonitrile	500	437		ug/L		87	64 - 142
Benzene	50.0	46.9		ug/L		94	70 - 130
Bromobenzene	50.0	48.9		ug/L		98	70 - 132
Bromochloromethane	50.0	46.9		ug/L		94	70 - 130
Bromodichloromethane	50.0	44.3		ug/L		89	67 - 133
Bromoform	50.0	45.7		ug/L		91	57 - 140
Bromomethane	20.0	25.4		ug/L		127	10 - 150
2-Butanone (MEK)	200	346	*+	ug/L		173	61 - 145
Carbon disulfide	50.0	44.5		ug/L		89	61 - 137
Carbon tetrachloride	50.0	42.8		ug/L		86	61 - 137
Chlorobenzene	50.0	49.2		ug/L		98	70 - 130
Chloroethane	20.0	13.8		ug/L		69	55 - 141
2-Chloroethyl vinyl ether	20.0	13.8		ug/L		69	10 - 150
Chloroform	50.0	42.7		ug/L		85	69 - 130
1-Chlorohexane	50.0	43.7		ug/L		87	69 - 130
Chloromethane	20.0	19.9		ug/L		99	58 - 137
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	47.8		ug/L		96	69 - 132
Dibromochloromethane	50.0	44.5		ug/L		89	67 - 135
1,2-Dichlorobenzene	50.0	52.6		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	53.3		ug/L		107	70 - 130
1,4-Dichlorobenzene	50.0	52.4		ug/L		105	70 - 130
Dichlorodifluoromethane	20.0	21.7		ug/L		108	41 - 146
1,1-Dichloroethane	50.0	45.5		ug/L		91	70 - 130
1,2-Dichloroethane	50.0	40.2		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	50.6		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	50.4		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	46.5		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	46.4		ug/L		93	70 - 130
Ethylbenzene	50.0	47.8		ug/L		96	70 - 130
Ethyl methacrylate	50.0	47.6		ug/L		95	68 - 130
Hexachlorobutadiene	50.0	61.6		ug/L		123	53 - 140
2-Hexanone	200	236		ug/L		118	65 - 137
Isopropylbenzene	50.0	45.2		ug/L		90	70 - 130
Methylene bromide	50.0	46.0		ug/L		92	70 - 130
Methylene Chloride	50.0	52.2		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	176		ug/L		88	69 - 138
Methyl tert-butyl ether	50.0	46.3		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	46.8		ug/L		94	70 - 130
Naphthalene	50.0	52.0		ug/L		104	47 - 149
n-Butylbenzene	50.0	53.4		ug/L		107	67 - 130
N-Propylbenzene	50.0	50.5		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.1		ug/L		98	70 - 130
o-Xylene	50.0	47.1		ug/L		94	70 - 130
p-Chlorotoluene	50.0	50.0		ug/L		100	70 - 130

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

Lab Sample ID: LCS 400-689105/1002
Matrix: Water
Analysis Batch: 689105

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	55.3		ug/L		111	65 - 130
sec-Butylbenzene	50.0	53.1		ug/L		106	66 - 130
Styrene	50.0	48.7		ug/L		97	70 - 130
tert-Butylbenzene	50.0	48.5		ug/L		97	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.1		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.7		ug/L		93	70 - 131
Tetrachloroethene	50.0	41.9		ug/L		84	65 - 130
Toluene	50.0	47.1		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	42.4		ug/L		85	63 - 130
1,2,3-Trichlorobenzene	50.0	59.3		ug/L		119	60 - 138
1,2,4-Trichlorobenzene	50.0	60.6		ug/L		121	60 - 140
1,1,1-Trichloroethane	50.0	41.7		ug/L		83	68 - 130
1,1,2-Trichloroethane	50.0	46.0		ug/L		92	70 - 130
Trichloroethene	50.0	49.0		ug/L		98	70 - 130
Trichlorofluoromethane	20.0	17.9		ug/L		90	65 - 138
1,2,3-Trichloropropane	50.0	44.4		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	50.0	52.9		ug/L		106	70 - 130
1,3,5-Trimethylbenzene	50.0	51.7		ug/L		103	69 - 130
Vinyl acetate	40.0	38.3		ug/L		96	26 - 150
Vinyl chloride	20.0	19.7		ug/L		98	59 - 136
Xylenes, Total	100	93.8		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 689105

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	*+	200	125		ug/L		62	43 - 150
Acrolein	ND		200	197		ug/L		99	38 - 150
Acrylonitrile	ND		500	426		ug/L		85	62 - 149
Benzene	ND		50.0	40.8		ug/L		82	56 - 142
Bromobenzene	ND		50.0	41.3		ug/L		83	59 - 136
Bromochloromethane	ND		50.0	42.1		ug/L		84	64 - 140
Bromodichloromethane	ND		50.0	37.7		ug/L		75	59 - 143
Bromoform	ND		50.0	38.3		ug/L		77	50 - 140
Bromomethane	ND		20.0	11.7		ug/L		58	10 - 150
2-Butanone (MEK)	ND	*+	200	182		ug/L		91	55 - 150
Carbon disulfide	ND		50.0	37.4		ug/L		75	48 - 150
Carbon tetrachloride	ND		50.0	36.7		ug/L		73	55 - 145
Chlorobenzene	ND		50.0	40.9		ug/L		82	64 - 130
Chloroethane	ND		20.0	14.1		ug/L		70	50 - 150
2-Chloroethyl vinyl ether	ND	F1	20.0	ND	F1	ug/L		0	10 - 150

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

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 689105

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	ND		50.0	37.2		ug/L		74	60 - 141
1-Chlorohexane	ND		50.0	34.9		ug/L		70	56 - 136
Chloromethane	ND		20.0	16.2		ug/L		81	49 - 148
cis-1,2-Dichloroethene	ND		50.0	40.8		ug/L		82	59 - 143
cis-1,3-Dichloropropene	ND		50.0	41.4		ug/L		83	57 - 140
Dibromochloromethane	ND		50.0	38.4		ug/L		77	56 - 143
1,2-Dichlorobenzene	ND		50.0	42.4		ug/L		85	52 - 137
1,3-Dichlorobenzene	ND		50.0	42.2		ug/L		84	54 - 135
1,4-Dichlorobenzene	ND		50.0	41.4		ug/L		83	53 - 135
Dichlorodifluoromethane	ND		20.0	18.4		ug/L		92	16 - 150
1,1-Dichloroethane	ND		50.0	40.0		ug/L		80	61 - 144
1,2-Dichloroethane	ND		50.0	36.5		ug/L		73	60 - 141
1,1-Dichloroethene	ND		50.0	44.3		ug/L		89	54 - 147
1,2-Dichloropropane	ND		50.0	44.4		ug/L		89	66 - 137
1,3-Dichloropropane	ND		50.0	41.5		ug/L		83	66 - 133
2,2-Dichloropropane	ND		50.0	35.9		ug/L		72	42 - 144
1,1-Dichloropropene	ND		50.0	40.4		ug/L		81	65 - 136
Ethylbenzene	ND		50.0	39.0		ug/L		78	58 - 131
Ethyl methacrylate	ND		50.0	44.3		ug/L		89	64 - 130
Hexachlorobutadiene	ND		50.0	46.5		ug/L		93	31 - 149
2-Hexanone	ND		200	140		ug/L		70	65 - 140
Isopropylbenzene	ND		50.0	36.3		ug/L		73	56 - 133
Methylene bromide	ND		50.0	42.7		ug/L		85	63 - 138
Methylene Chloride	ND		50.0	44.7		ug/L		89	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	159		ug/L		80	63 - 146
Methyl tert-butyl ether	ND		50.0	43.7		ug/L		87	59 - 137
m-Xylene & p-Xylene	ND		50.0	37.9		ug/L		76	57 - 130
Naphthalene	ND		50.0	46.4		ug/L		93	25 - 150
n-Butylbenzene	ND		50.0	40.1		ug/L		80	41 - 142
N-Propylbenzene	ND		50.0	39.6		ug/L		79	51 - 138
o-Chlorotoluene	ND		50.0	40.0		ug/L		80	53 - 134
o-Xylene	ND		50.0	37.9		ug/L		76	61 - 130
p-Chlorotoluene	ND		50.0	37.7		ug/L		75	54 - 133
p-Isopropyltoluene	ND		50.0	42.9		ug/L		86	48 - 139
sec-Butylbenzene	ND		50.0	41.3		ug/L		83	50 - 138
Styrene	ND		50.0	40.4		ug/L		81	58 - 131
tert-Butylbenzene	ND		50.0	39.0		ug/L		78	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	39.7		ug/L		79	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	44.0		ug/L		88	66 - 135
Tetrachloroethene	ND		50.0	34.7		ug/L		69	52 - 133
Toluene	ND		50.0	40.1		ug/L		80	65 - 130
trans-1,2-Dichloroethene	ND		50.0	42.1		ug/L		84	61 - 143
trans-1,3-Dichloropropene	ND		50.0	36.2		ug/L		72	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	47.3		ug/L		95	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	46.7		ug/L		93	39 - 148
1,1,1-Trichloroethane	ND		50.0	36.3		ug/L		73	57 - 142
1,1,2-Trichloroethane	ND		50.0	41.4		ug/L		83	66 - 131
Trichloroethene	ND		50.0	41.1		ug/L		82	64 - 136
Trichlorofluoromethane	ND		20.0	15.1		ug/L		75	54 - 150

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

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 689105

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	42.4		ug/L		85	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	42.3		ug/L		85	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	41.2		ug/L		82	52 - 135
Vinyl acetate	ND		40.0	35.8		ug/L		89	26 - 150
Vinyl chloride	ND		20.0	16.8		ug/L		84	46 - 150
Xylenes, Total	ND		100	75.8		ug/L		76	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 689105

Client Sample ID: MW12-ROX-101124
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	123		ug/L		61	43 - 150	2	30
Acrolein	ND		200	197		ug/L		98	38 - 150	0	31
Acrylonitrile	ND		500	422		ug/L		84	62 - 149	1	30
Benzene	ND		50.0	42.3		ug/L		85	56 - 142	4	30
Bromobenzene	ND		50.0	41.0		ug/L		82	59 - 136	1	30
Bromochloromethane	ND		50.0	44.4		ug/L		89	64 - 140	6	30
Bromodichloromethane	ND		50.0	39.0		ug/L		78	59 - 143	3	30
Bromoform	ND		50.0	40.1		ug/L		80	50 - 140	5	30
Bromomethane	ND		20.0	11.9		ug/L		59	10 - 150	2	50
2-Butanone (MEK)	ND	*+	200	177		ug/L		89	55 - 150	3	30
Carbon disulfide	ND		50.0	38.5		ug/L		77	48 - 150	3	30
Carbon tetrachloride	ND		50.0	37.6		ug/L		75	55 - 145	2	30
Chlorobenzene	ND		50.0	42.4		ug/L		85	64 - 130	3	30
Chloroethane	ND		20.0	13.7		ug/L		68	50 - 150	3	30
2-Chloroethyl vinyl ether	ND	F1	20.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	38.9		ug/L		78	60 - 141	4	30
1-Chlorohexane	ND		50.0	36.9		ug/L		74	56 - 136	6	30
Chloromethane	ND		20.0	16.9		ug/L		85	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	41.5		ug/L		83	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	43.1		ug/L		86	57 - 140	4	30
Dibromochloromethane	ND		50.0	38.8		ug/L		78	56 - 143	1	30
1,2-Dichlorobenzene	ND		50.0	42.5		ug/L		85	52 - 137	0	30
1,3-Dichlorobenzene	ND		50.0	42.8		ug/L		86	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	41.8		ug/L		84	53 - 135	1	30
Dichlorodifluoromethane	ND		20.0	19.1		ug/L		95	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	41.2		ug/L		82	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	37.5		ug/L		75	60 - 141	3	30
1,1-Dichloroethene	ND		50.0	44.8		ug/L		90	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	45.8		ug/L		92	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	41.9		ug/L		84	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	36.9		ug/L		74	42 - 144	3	31

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

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 689105

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.0	41.7		ug/L		83	65 - 136	3	30
Ethylbenzene	ND		50.0	40.9		ug/L		82	58 - 131	5	30
Ethyl methacrylate	ND		50.0	44.3		ug/L		89	64 - 130	0	30
Hexachlorobutadiene	ND		50.0	47.0		ug/L		94	31 - 149	1	36
2-Hexanone	ND		200	138		ug/L		69	65 - 140	2	30
Isopropylbenzene	ND		50.0	38.4		ug/L		77	56 - 133	6	30
Methylene bromide	ND		50.0	43.0		ug/L		86	63 - 138	1	30
Methylene Chloride	ND		50.0	46.9		ug/L		94	60 - 146	5	32
4-Methyl-2-pentanone (MIBK)	ND		200	156		ug/L		78	63 - 146	2	30
Methyl tert-butyl ether	ND		50.0	43.3		ug/L		87	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	39.9		ug/L		80	57 - 130	5	30
Naphthalene	ND		50.0	45.6		ug/L		91	25 - 150	2	30
n-Butylbenzene	ND		50.0	41.4		ug/L		83	41 - 142	3	31
N-Propylbenzene	ND		50.0	40.2		ug/L		80	51 - 138	2	30
o-Chlorotoluene	ND		50.0	40.6		ug/L		81	53 - 134	1	30
o-Xylene	ND		50.0	40.2		ug/L		80	61 - 130	6	30
p-Chlorotoluene	ND		50.0	37.8		ug/L		76	54 - 133	0	30
p-Isopropyltoluene	ND		50.0	43.8		ug/L		88	48 - 139	2	30
sec-Butylbenzene	ND		50.0	42.8		ug/L		86	50 - 138	4	30
Styrene	ND		50.0	41.6		ug/L		83	58 - 131	3	30
tert-Butylbenzene	ND		50.0	39.7		ug/L		79	54 - 146	2	30
1,1,1,2-Tetrachloroethane	ND		50.0	41.5		ug/L		83	59 - 137	4	30
1,1,2,2-Tetrachloroethane	ND		50.0	41.8		ug/L		84	66 - 135	5	30
Tetrachloroethene	ND		50.0	35.7		ug/L		71	52 - 133	3	30
Toluene	ND		50.0	41.4		ug/L		83	65 - 130	3	30
trans-1,2-Dichloroethene	ND		50.0	43.0		ug/L		86	61 - 143	2	30
trans-1,3-Dichloropropene	ND		50.0	37.9		ug/L		76	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	46.5		ug/L		93	43 - 145	2	30
1,2,4-Trichlorobenzene	ND		50.0	45.7		ug/L		91	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	36.9		ug/L		74	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	42.1		ug/L		84	66 - 131	2	30
Trichloroethene	ND		50.0	43.3		ug/L		87	64 - 136	5	30
Trichlorofluoromethane	ND		20.0	15.7		ug/L		79	54 - 150	4	30
1,2,3-Trichloropropane	ND		50.0	39.8		ug/L		80	65 - 133	6	30
1,2,4-Trimethylbenzene	ND		50.0	42.4		ug/L		85	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	41.4		ug/L		83	52 - 135	0	30
Vinyl acetate	ND		40.0	36.9		ug/L		92	26 - 150	3	33
Vinyl chloride	ND		20.0	17.0		ug/L		85	46 - 150	1	30
Xylenes, Total	ND		100	80.1		ug/L		80	59 - 130	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: MB 400-688433/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzenethiol	ND		10	9.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzoic acid	ND		30	24	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzyl alcohol	ND		10	7.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chloroaniline	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Chlorophenol	ND		10	4.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dibenzofuran	ND		10	4.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Diethyl phthalate	ND		10	4.4	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
1,4-Dioxane	ND		10	4.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachloroethane	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Indene	ND		10	3.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Isophorone	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Methylphenol	ND		10	3.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Nitroaniline	ND		10	5.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
3-Nitroaniline	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Nitroaniline	ND		10	4.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
Nitrobenzene	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Nitrophenol	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Nitrophenol	ND		10	3.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Pentachlorophenol	ND		20	12	ug/L		10/18/24 14:04	10/21/24 15:28	1
Phenol	ND		10	4.2	ug/L		10/18/24 14:04	10/21/24 15:28	1

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

Lab Sample ID: MB 400-688433/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		10/18/24 14:04	10/21/24 15:28	1
Quinoline	ND		10	2.4	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/18/24 14:04	10/21/24 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*21 - 114*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Phenol-d5	*32*		*10 - 129*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Terphenyl-d14	*77*		*13 - 150*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*10/18/24 14:04*	*10/21/24 15:28*	*1*

Lab Sample ID: LCS 400-688433/19-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	111		ug/L		93	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*56*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCS 400-688433/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	55.4		ug/L		46	10 - 127
Benzoic acid	493	263		ug/L		53	19 - 126
Benzyl alcohol	120	75.8		ug/L		63	17 - 109
Bis(2-chloroethoxy)methane	120	77.1		ug/L		64	24 - 125
Bis(2-chloroethyl)ether	120	62.2		ug/L		52	10 - 121
bis (2-chloroisopropyl) ether	120	72.5		ug/L		60	14 - 123
Bis(2-ethylhexyl) phthalate	120	93.5		ug/L		78	16 - 150
4-Bromophenyl phenyl ether	120	93.1		ug/L		78	17 - 150
Butyl benzyl phthalate	120	91.2		ug/L		76	21 - 150
4-Chloroaniline	120	67.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	103		ug/L		86	37 - 131
2-Chloronaphthalene	120	87.7		ug/L		73	24 - 132
2-Chlorophenol	120	85.7		ug/L		71	27 - 124
4-Chlorophenyl phenyl ether	120	95.9		ug/L		80	27 - 147
Dibenz[a,h]acridine	59.9	65.5		ug/L		109	40 - 140

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

Lab Sample ID: LCS 400-688433/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	120	92.7		ug/L		77	30 - 135
3,3'-Dichlorobenzidine	240	202		ug/L		84	10 - 150
2,4-Dichlorophenol	120	94.6		ug/L		79	33 - 132
Diethyl phthalate	120	99.1		ug/L		83	37 - 145
2,4-Dimethylphenol	120	160	*+	ug/L		133	38 - 132
Dimethyl phthalate	120	97.8		ug/L		82	32 - 137
Di-n-butyl phthalate	120	103		ug/L		86	27 - 150
4,6-Dinitro-ortho-cresol	240	265		ug/L		110	14 - 150
2,4-Dinitrophenol	240	396	*+	ug/L		165	15 - 150
2,4-Dinitrotoluene	120	101		ug/L		84	35 - 136
2,6-Dinitrotoluene	120	101		ug/L		84	29 - 140
Di-n-octyl phthalate	120	93.3		ug/L		78	26 - 150
1,4-Dioxane	120	39.2		ug/L		33	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	83.3		ug/L		69	23 - 138
Hexachlorobenzene	120	99.6		ug/L		83	10 - 150
Hexachlorocyclopentadiene	120	274	*+	ug/L		228	10 - 124
Hexachloroethane	120	61.8		ug/L		52	10 - 127
Indene	120	89.4		ug/L		74	18 - 150
Isophorone	120	77.9		ug/L		65	28 - 127
2-Methylphenol	120	90.3		ug/L		75	34 - 124
3 & 4 Methylphenol	120	85.9		ug/L		72	32 - 122
2-Nitroaniline	120	92.4		ug/L		77	24 - 139
3-Nitroaniline	120	72.5		ug/L		60	10 - 128
4-Nitroaniline	120	90.5		ug/L		75	28 - 118
Nitrobenzene	120	71.0		ug/L		59	29 - 120
2-Nitrophenol	120	92.9		ug/L		77	25 - 148
4-Nitrophenol	240	198		ug/L		82	12 - 129
N-Nitrosodimethylamine	120	44.1		ug/L		37	10 - 115
N-Nitrosodi-n-propylamine	120	82.2		ug/L		68	24 - 142
N-Nitrosodiphenylamine	119	91.5		ug/L		77	29 - 138
Pentachlorophenol	240	224		ug/L		93	19 - 150
Phenol	120	56.3		ug/L		47	11 - 95
Pyridine	240	23.5		ug/L		10	10 - 82
Quinoline	59.9	43.9		ug/L		73	10 - 141
2,4,5-Trichlorophenol	120	102		ug/L		85	30 - 144
2,4,6-Trichlorophenol	120	99.8		ug/L		83	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*70*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

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

Lab Sample ID: LCSD 400-688433/20-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	114		ug/L		95	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*39*		*10 - 129*
Terphenyl-d14	*73*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCSD 400-688433/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	58.8		ug/L		49	10 - 127	6	40
Benzoic acid			493	263		ug/L		53	19 - 126	0	40
Benzyl alcohol			120	70.7		ug/L		59	17 - 109	7	40
Bis(2-chloroethoxy)methane			120	67.0		ug/L		56	24 - 125	14	40
Bis(2-chloroethyl)ether			120	53.3		ug/L		44	10 - 121	15	40
bis (2-chloroisopropyl) ether			120	62.5		ug/L		52	14 - 123	15	40
Bis(2-ethylhexyl) phthalate			120	78.2		ug/L		65	16 - 150	18	40
4-Bromophenyl phenyl ether			120	78.1		ug/L		65	17 - 150	18	40
Butyl benzyl phthalate			120	77.4		ug/L		64	21 - 150	16	40
4-Chloroaniline			120	67.5		ug/L		56	10 - 124	0	40
4-Chloro-3-methylphenol			120	88.0		ug/L		73	37 - 131	16	40
2-Chloronaphthalene			120	74.7		ug/L		62	24 - 132	16	40
2-Chlorophenol			120	75.1		ug/L		63	27 - 124	13	40
4-Chlorophenyl phenyl ether			120	81.9		ug/L		68	27 - 147	16	40
Dibenz[a,h]acridine			59.9	54.6		ug/L		91	40 - 140	18	40
Dibenzofuran			120	78.3		ug/L		65	30 - 135	17	40
3,3'-Dichlorobenzidine			240	173		ug/L		72	10 - 150	16	40
2,4-Dichlorophenol			120	81.4		ug/L		68	33 - 132	15	40
Diethyl phthalate			120	82.1		ug/L		68	37 - 145	19	40
2,4-Dimethylphenol			120	138		ug/L		115	38 - 132	14	40
Dimethyl phthalate			120	81.8		ug/L		68	32 - 137	18	40
Di-n-butyl phthalate			120	85.5		ug/L		71	27 - 150	19	40
4,6-Dinitro-ortho-cresol			240	230		ug/L		96	14 - 150	14	40
2,4-Dinitrophenol			240	337		ug/L		140	15 - 150	16	40
2,4-Dinitrotoluene			120	85.4		ug/L		71	35 - 136	16	40
2,6-Dinitrotoluene			120	85.6		ug/L		71	29 - 140	17	40
Di-n-octyl phthalate			120	78.1		ug/L		65	26 - 150	18	40
1,4-Dioxane			120	32.7		ug/L		27	10 - 87	18	40
1,2-Diphenylhydrazine (as Azobenzene)			120	71.2		ug/L		59	23 - 138	16	40
Hexachlorobenzene			120	84.2		ug/L		70	10 - 150	17	40
Hexachlorocyclopentadiene			120	248	*+	ug/L		207	10 - 124	10	40
Hexachloroethane			120	52.8		ug/L		44	10 - 127	16	40

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

Lab Sample ID: LCSD 400-688433/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene			120	76.9		ug/L		64	18 - 150	15	40
Isophorone			120	66.9		ug/L		56	28 - 127	15	40
2-Methylphenol			120	80.1		ug/L		67	34 - 124	12	40
3 & 4 Methylphenol			120	77.0		ug/L		64	32 - 122	11	40
2-Nitroaniline			120	80.6		ug/L		67	24 - 139	14	40
3-Nitroaniline			120	69.0		ug/L		58	10 - 128	5	40
4-Nitroaniline			120	84.3		ug/L		70	28 - 118	7	40
Nitrobenzene			120	61.4		ug/L		51	29 - 120	15	40
2-Nitrophenol			120	79.4		ug/L		66	25 - 148	16	40
4-Nitrophenol			240	181		ug/L		76	12 - 129	9	40
N-Nitrosodimethylamine			120	49.7		ug/L		41	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	71.7		ug/L		60	24 - 142	14	40
N-Nitrosodiphenylamine			119	77.1		ug/L		65	29 - 138	17	40
Pentachlorophenol			240	190		ug/L		79	19 - 150	16	40
Phenol			120	54.1		ug/L		45	11 - 95	4	40
Pyridine			240	29.8		ug/L		12	10 - 82	24	40
Quinoline			59.9	41.0		ug/L		68	10 - 141	7	40
2,4,5-Trichlorophenol			120	87.0		ug/L		72	30 - 144	15	40
2,4,6-Trichlorophenol			120	83.8		ug/L		70	27 - 147	17	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*56*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*59*		*13 - 150*
2,4,6-Tribromophenol	*87*		*10 - 150*

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 688615

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline	ND	F1	115	44.2	F1	ug/L		39	50 - 150		
Benzoic acid	ND		470	296		ug/L		63	50 - 150		
Benzyl alcohol	ND		115	70.0		ug/L		61	50 - 150		
Bis(2-chloroethoxy)methane	ND		115	72.3		ug/L		63	50 - 150		
Bis(2-chloroethyl)ether	ND		115	59.1		ug/L		52	50 - 150		
bis (2-chloroisopropyl) ether	ND		115	68.9		ug/L		60	50 - 150		
Bis(2-ethylhexyl) phthalate	ND		115	85.1		ug/L		74	50 - 150		
4-Bromophenyl phenyl ether	ND		115	84.5		ug/L		74	50 - 150		
Butyl benzyl phthalate	ND		115	83.9		ug/L		73	50 - 150		
4-Chloroaniline	ND	F1	115	36.7	F1	ug/L		32	50 - 150		
4-Chloro-3-methylphenol	ND		115	77.0		ug/L		67	50 - 150		
2-Chloronaphthalene	ND		115	81.8		ug/L		71	50 - 150		
2-Chlorophenol	ND		115	67.0		ug/L		59	50 - 150		
4-Chlorophenyl phenyl ether	ND		115	87.6		ug/L		76	50 - 150		
Dibenz[a,h]acridine	ND		57.2	57.0		ug/L		100	50 - 150		

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

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 688615

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dibenzofuran	ND		115	85.3		ug/L		74	50 - 150
3,3'-Dichlorobenzidine	ND	F1	229	55.2	F1	ug/L		24	50 - 150
2,4-Dichlorophenol	ND		115	75.2		ug/L		66	50 - 150
Diethyl phthalate	ND		115	89.4		ug/L		78	50 - 150
2,4-Dimethylphenol	ND	*+	115	104		ug/L		90	50 - 150
Dimethyl phthalate	ND		115	87.8		ug/L		77	50 - 150
Di-n-butyl phthalate	ND		115	93.8		ug/L		82	50 - 150
4,6-Dinitro-ortho-cresol	ND		229	246		ug/L		107	50 - 150
2,4-Dinitrophenol	ND	F1 *+	229	370	F1	ug/L		161	50 - 150
2,4-Dinitrotoluene	ND		115	91.0		ug/L		79	50 - 150
2,6-Dinitrotoluene	ND		115	91.7		ug/L		80	50 - 150
Di-n-octyl phthalate	ND		115	85.8		ug/L		75	50 - 150
1,4-Dioxane	ND	F1	115	28.2	F1	ug/L		25	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	77.2		ug/L		67	50 - 150
Hexachlorobenzene	ND		115	90.0		ug/L		79	50 - 150
Hexachlorocyclopentadiene	ND	F1 *+	115	263	F1	ug/L		230	50 - 150
Hexachloroethane	ND		115	57.2		ug/L		50	50 - 150
Indene	ND		115	80.9		ug/L		71	50 - 150
Isophorone	ND		115	72.7		ug/L		63	50 - 150
2-Methylphenol	ND	F1	115	56.8		ug/L		50	50 - 150
3 & 4 Methylphenol	ND	F1	115	55.2	F1	ug/L		48	50 - 150
2-Nitroaniline	ND	F1	115	53.6	F1	ug/L		47	50 - 150
3-Nitroaniline	ND	F1	115	54.6	F1	ug/L		48	50 - 150
4-Nitroaniline	ND	F1	115	48.9	F1	ug/L		43	50 - 150
Nitrobenzene	ND		115	77.9		ug/L		68	50 - 150
2-Nitrophenol	ND		115	91.3		ug/L		80	50 - 150
4-Nitrophenol	ND		229	171		ug/L		75	50 - 150
N-Nitrosodimethylamine	ND	F1	115	46.1	F1	ug/L		40	50 - 150
N-Nitrosodi-n-propylamine	ND		115	77.8		ug/L		68	50 - 150
N-Nitrosodiphenylamine	ND		114	69.1		ug/L		61	50 - 150
Pentachlorophenol	ND		229	186		ug/L		81	50 - 150
Phenol	ND	F1	115	36.5	F1	ug/L		32	50 - 150
Pyridine	ND	F1	229	52.0	F1	ug/L		23	50 - 150
Quinoline	ND		57.2	49.6		ug/L		87	50 - 150
2,4,5-Trichlorophenol	ND		115	84.3		ug/L		74	50 - 150
2,4,6-Trichlorophenol	ND		115	77.8		ug/L		68	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*36*		*10 - 105*
Nitrobenzene-d5	*64*		*16 - 127*
Phenol-d5	*29*		*10 - 129*
Terphenyl-d14	*66*		*13 - 150*
2,4,6-Tribromophenol	*83*		*10 - 150*

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

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 688615

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	ND	F1	114	37.2	F1	ug/L		32	50 - 150	17	40
Benzoic acid	ND		470	311		ug/L		66	50 - 150	5	40
Benzyl alcohol	ND		114	73.9		ug/L		65	50 - 150	5	40
Bis(2-chloroethoxy)methane	ND		114	75.8		ug/L		66	50 - 150	5	40
Bis(2-chloroethyl)ether	ND		114	61.1		ug/L		53	50 - 150	3	40
bis (2-chloroisopropyl) ether	ND		114	73.1		ug/L		64	50 - 150	6	40
Bis(2-ethylhexyl) phthalate	ND		114	87.5		ug/L		76	50 - 150	3	40
4-Bromophenyl phenyl ether	ND		114	88.1		ug/L		77	50 - 150	4	40
Butyl benzyl phthalate	ND		114	86.0		ug/L		75	50 - 150	2	40
4-Chloroaniline	ND	F1	114	31.0	F1	ug/L		27	50 - 150	17	40
4-Chloro-3-methylphenol	ND		114	76.3		ug/L		67	50 - 150	1	40
2-Chloronaphthalene	ND		114	86.2		ug/L		75	50 - 150	5	40
2-Chlorophenol	ND		114	67.8		ug/L		59	50 - 150	1	40
4-Chlorophenyl phenyl ether	ND		114	94.2		ug/L		82	50 - 150	7	40
Dibenz[a,h]acridine	ND		57.1	62.0		ug/L		109	50 - 150	8	40
Dibenzofuran	ND		114	89.9		ug/L		79	50 - 150	5	40
3,3'-Dichlorobenzidine	ND	F1	229	43.7	F1	ug/L		19	50 - 150	23	40
2,4-Dichlorophenol	ND		114	76.7		ug/L		67	50 - 150	2	40
Diethyl phthalate	ND		114	94.5		ug/L		83	50 - 150	6	40
2,4-Dimethylphenol	ND	*+	114	99.5		ug/L		87	50 - 150	4	40
Dimethyl phthalate	ND		114	93.0		ug/L		81	50 - 150	6	40
Di-n-butyl phthalate	ND		114	98.6		ug/L		86	50 - 150	5	40
4,6-Dinitro-ortho-cresol	ND		229	258		ug/L		113	50 - 150	5	40
2,4-Dinitrophenol	ND	F1 *+	229	393	F1	ug/L		172	50 - 150	6	40
2,4-Dinitrotoluene	ND		114	95.7		ug/L		84	50 - 150	5	40
2,6-Dinitrotoluene	ND		114	95.6		ug/L		84	50 - 150	4	40
Di-n-octyl phthalate	ND		114	88.3		ug/L		77	50 - 150	3	40
1,4-Dioxane	ND	F1	114	26.5	F1	ug/L		23	50 - 150	6	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	80.3		ug/L		70	50 - 150	4	40
Hexachlorobenzene	ND		114	94.3		ug/L		82	50 - 150	5	40
Hexachlorocyclopentadiene	ND	F1 *+	114	265	F1	ug/L		232	50 - 150	1	40
Hexachloroethane	ND		114	61.9		ug/L		54	50 - 150	8	40
Indene	ND		114	84.3		ug/L		74	50 - 150	4	40
Isophorone	ND		114	76.0		ug/L		66	50 - 150	4	40
2-Methylphenol	ND	F1	114	55.5	F1	ug/L		49	50 - 150	2	40
3 & 4 Methylphenol	ND	F1	114	53.7	F1	ug/L		47	50 - 150	3	40
2-Nitroaniline	ND	F1	114	55.7	F1	ug/L		49	50 - 150	4	40
3-Nitroaniline	ND	F1	114	53.3	F1	ug/L		47	50 - 150	2	40
4-Nitroaniline	ND	F1	114	47.0	F1	ug/L		41	50 - 150	4	40
Nitrobenzene	ND		114	82.8		ug/L		72	50 - 150	6	40
2-Nitrophenol	ND		114	93.9		ug/L		82	50 - 150	3	40
4-Nitrophenol	ND		229	181		ug/L		79	50 - 150	5	40
N-Nitrosodimethylamine	ND	F1	114	48.9	F1	ug/L		43	50 - 150	6	40
N-Nitrosodi-n-propylamine	ND		114	81.0		ug/L		71	50 - 150	4	40
N-Nitrosodiphenylamine	ND		114	68.3		ug/L		60	50 - 150	1	40
Pentachlorophenol	ND		229	193		ug/L		84	50 - 150	4	40
Phenol	ND	F1	114	36.0	F1	ug/L		31	50 - 150	1	40
Pyridine	ND	F1	229	54.1	F1	ug/L		24	50 - 150	4	40

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

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 688615

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline	ND		57.1	51.4		ug/L		90	50 - 150	4	40
2,4,5-Trichlorophenol	ND		114	85.9		ug/L		75	50 - 150	2	40
2,4,6-Trichlorophenol	ND		114	79.6		ug/L		70	50 - 150	2	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*69*		*21 - 114*
2-Fluorophenol	*37*		*10 - 105*
Nitrobenzene-d5	*68*		*16 - 127*
Phenol-d5	*29*		*10 - 129*
Terphenyl-d14	*68*		*13 - 150*
2,4,6-Tribromophenol	*85*		*10 - 150*

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

Lab Sample ID: MB 400-688277/1-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/17/24 11:23	10/17/24 16:05	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/17/24 11:23	10/17/24 16:05	1
Anthracene	ND		0.20	0.073	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Chrysene	ND		0.20	0.039	ug/L		10/17/24 11:23	10/17/24 16:05	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluoranthene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluorene	ND		0.20	0.087	ug/L		10/17/24 11:23	10/17/24 16:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/17/24 11:23	10/17/24 16:05	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/17/24 11:23	10/17/24 16:05	1
Phenanthrene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Pyrene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Nitrobenzene-d5	*99*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Terphenyl-d14	*81*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			3.34	2.64		ug/L		79	50 - 150		

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

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthylene	3.34	2.80		ug/L		84	50 - 150
Anthracene	3.34	2.78		ug/L		83	50 - 150
Benzo[a]anthracene	3.34	3.19		ug/L		96	50 - 150
Benzo[a]pyrene	3.34	2.99		ug/L		90	50 - 150
Benzo[b]fluoranthene	3.34	2.96		ug/L		89	50 - 150
Benzo[g,h,i]perylene	3.34	2.81		ug/L		84	50 - 150
Benzo[k]fluoranthene	3.34	2.88		ug/L		86	50 - 150
Chrysene	3.34	2.79		ug/L		84	50 - 150
Dibenz(a,h)anthracene	3.34	2.68		ug/L		80	50 - 150
Fluoranthene	3.34	2.76		ug/L		83	50 - 150
Fluorene	3.34	2.84		ug/L		85	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.71		ug/L		81	50 - 150
1-Methylnaphthalene	3.34	2.38		ug/L		72	50 - 150
2-Methylnaphthalene	3.34	2.06		ug/L		62	50 - 150
Phenanthrene	3.34	2.76		ug/L		83	50 - 150
Pyrene	3.34	2.70		ug/L		81	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*
Nitrobenzene-d5	*101*		*50 - 150*
Terphenyl-d14	*81*		*50 - 150*

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 688256

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688277

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		3.25	2.24		ug/L		69	50 - 150
Acenaphthylene	ND		3.25	2.36		ug/L		73	50 - 150
Anthracene	ND		3.25	2.44		ug/L		75	50 - 150
Benzo[a]anthracene	ND		3.25	2.85		ug/L		88	50 - 150
Benzo[a]pyrene	ND		3.25	2.54		ug/L		78	50 - 150
Benzo[b]fluoranthene	ND		3.25	2.64		ug/L		81	50 - 150
Benzo[g,h,i]perylene	ND		3.25	2.31		ug/L		71	50 - 150
Benzo[k]fluoranthene	ND		3.25	2.47		ug/L		76	50 - 150
Chrysene	ND		3.25	2.45		ug/L		75	50 - 150
Dibenz(a,h)anthracene	ND		3.25	2.21		ug/L		68	50 - 150
Fluoranthene	ND		3.25	2.53		ug/L		78	50 - 150
Fluorene	ND		3.25	2.32		ug/L		71	50 - 150
Indeno[1,2,3-cd]pyrene	ND		3.25	2.27		ug/L		70	50 - 150
1-Methylnaphthalene	ND		3.25	1.84		ug/L		57	50 - 150
2-Methylnaphthalene	ND	F1	3.25	1.59	F1	ug/L		49	50 - 150
Phenanthrene	ND		3.25	2.37		ug/L		73	50 - 150
Pyrene	ND		3.25	2.47		ug/L		76	50 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*79*		*50 - 150*
Nitrobenzene-d5	*108*		*50 - 150*

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

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 688256

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688277

Surrogate	MS %Recovery	MS Qualifier	Limits
Terphenyl-d14	80		50 - 150

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 688256

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688277

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		3.19	2.54		ug/L		80	50 - 150	13	40
Acenaphthylene	ND		3.19	2.74		ug/L		86	50 - 150	15	40
Anthracene	ND		3.19	2.77		ug/L		87	50 - 150	13	40
Benzo[a]anthracene	ND		3.19	2.95		ug/L		92	50 - 150	3	40
Benzo[a]pyrene	ND		3.19	2.65		ug/L		83	50 - 150	4	40
Benzo[b]fluoranthene	ND		3.19	2.75		ug/L		86	50 - 150	4	40
Benzo[g,h,i]perylene	ND		3.19	2.36		ug/L		74	50 - 150	2	40
Benzo[k]fluoranthene	ND		3.19	2.58		ug/L		81	50 - 150	4	40
Chrysene	ND		3.19	2.61		ug/L		82	50 - 150	7	40
Dibenz(a,h)anthracene	ND		3.19	2.30		ug/L		72	50 - 150	4	40
Fluoranthene	ND		3.19	2.70		ug/L		85	50 - 150	7	40
Fluorene	ND		3.19	2.65		ug/L		83	50 - 150	13	40
Indeno[1,2,3-cd]pyrene	ND		3.19	2.29		ug/L		72	50 - 150	1	40
1-Methylnaphthalene	ND		3.19	2.32		ug/L		73	50 - 150	23	40
2-Methylnaphthalene	ND	F1	3.19	1.97		ug/L		62	50 - 150	21	40
Phenanthrene	ND		3.19	2.78		ug/L		87	50 - 150	16	40
Pyrene	ND		3.19	2.64		ug/L		83	50 - 150	7	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	82		50 - 150
Nitrobenzene-d5	109		50 - 150
Terphenyl-d14	78		50 - 150

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

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		10/18/24 10:16	10/18/24 14:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/18/24 10:16	10/18/24 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		51 - 149	10/18/24 10:16	10/18/24 14:09	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-688388/2-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0904		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0839		ug/L		84	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: LCSD 400-688388/3-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0945		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0847		ug/L		84	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: 400-264191-6 MS
Matrix: Water
Analysis Batch: 688421

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688388

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane	ND		0.110	0.0957		ug/L		87	10 - 150		
1,2-Dibromoethane	ND	F2	0.109	0.0707	p	ug/L		65	39 - 150		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*53*		*51 - 149*

Lab Sample ID: 400-264191-6 MSD
Matrix: Water
Analysis Batch: 688421

Client Sample ID: MW12-ROX-101124
Prep Type: Total/NA
Prep Batch: 688388

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		0.111	0.0937		ug/L		84	10 - 150	2	20
1,2-Dibromoethane	ND	F2	0.111	0.0699		ug/L		63	39 - 150	1	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*53*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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 :

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*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
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☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/12/24	Time: 8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR0

Version: 19Sept24

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10/28/2024

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

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☐ 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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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 :

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☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
		10/12/24	8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

Version: 19Sept24

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10/28/2024

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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☐ 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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

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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: Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

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FAX: 314-429-0462

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☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

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- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
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	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
		10/12/24	8:36

Version: 19Sept24

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

Page 57 of 63

10/28/2024

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))
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Lab Vendor # 1364589 (TestAmerica)

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☐ 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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

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State: IL

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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: Roxana 4Q24 Groundwater

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

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☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/12/24	Time: 8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

Version: 19Sept24

Page 58 of 63

10/28/2024

Leah Klingensmith

From: Massa, Mary <Mary.Massa@aecom.com>
Sent: Monday, October 14, 2024 7:40 AM
To: Howell, Brett; Remiger, Melissa; Leah Klingensmith
Subject: Re: 400-264191 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast
Attachments: 4Q24 Roxana GW COC_101124_BP.pdf; 4Q24 Roxana GW COC_101124_updated.pdf

Unverified Sender: The sender of this email has not been verified. Review the content of the message carefully and verify the identity of the sender before acting on this email: replying, opening attachments or clicking links.

Good morning Leah,

I had just noticed earlier that MW-23 should've been on a separate COC and SDG and I completely missed the mistake on Friday. Please see attached for the corrected COCs with MW-23 (BP) separated. Please produce a separate SDG for MW-23. For the associated trip blanks, please just produce split reports for the included TB-ROX-101124-8260 and -8011 trips (with the trip ID associated with MW-23 being TB-ROX-101124-8260-BP and -8011-BP).

Let me know of any questions and concerns, and my apologies for the mishap.

Thank you,
Mary Massa (D'Angelo) PG (MO)

Geologist II, Oil & Gas (ENV PMO), US West
M +1(314) 795-7580
mary.massa@aecom.com
AECOM
100 North Broadway
20th Floor
Saint Louis, United States
T +1(314) 429-0100
aecom.com
Delivering a better world
LinkedIn | Twitter | Facebook | Instagram

From: Leah Klingensmith <TALS@reports.et.eurofinsus.com>
Sent: Monday, October 14, 2024 7:25 AM
To: Howell, Brett <brett.howell@aecom.com>; Massa, Mary <Mary.Massa@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>
Subject: 400-264191 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast

Hello,

Attached, please find the Sample Confirmation files for job 400-264191; ROXANA QUARTERLY GW

Please review the attachments for accuracy and notify your Project Manager of any discrepancies as quickly as possible.

Any discrepancies not communicated in a timely fashion could result in missed holding times, TAT delays and may potentially incur additional charges.

Please feel free to contact me if you have any questions.

Thank you.

Leah Klingensmith
Project Manager

Eurofins Pensacola
Phone: 615-301-5038

E-mail: Leah.Klingensmith@et.eurofinsus.com
www.eurofinsus.com/env

Reference: [400-801874]
Attachments: 4

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: melissa.remiger@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions | PHONE NO.: 314-802-1207 | E-MAIL: melissa.remiger@aecom.com | AECOM Other ID: Roxana 4Q24 Groundwater

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

* Include "J" values on Reports.
* Provide sample receipt upon login.
* 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS	Container PID Readings or Laboratory Notes:
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X				Split Sample
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X			Split Sample
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X	
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X	
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X	
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X	
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600

Version: 19Sept24

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264191-1

Login Number: 264191
List Number: 1
Creator: Beecher (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	0.4°C IR8, 3.4°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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
Job ID: 400-264191-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264191-2-Rev.1

Site Name: Roxana

Prepared By and Date: Adelina Gita 11/27/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-688961/1002	VOCs	Acetone	**194**	NA	43-150
LCS 400-688961/1002	VOCs	2-Butanone (MEK)	**185**	NA	61 - 145
LCS 400-688433/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**228/207**	10	10-124/40
LCS 400-688433/2-A/3-A	SVOCs	2,4-Dimethylphenol	**133**/115	14	38 - 132/40
LCS 400-688433/2-A/3-A	SVOCs	2,4-Dinitrophenol	**165**/140	16	15 – 150/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Trip blanks are quality control samples that do not require qualification.

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8260D (VOCs) The continuing calibration verification (CCV) for chloroethane was outside evaluation criteria, biased low. The associated result for sample MW23-ROX-101124 was qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/25/2024 8:24:10 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264191-2

Reviewed 11/27/2024
AG

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

Job Notes

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

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

Authorization

Generated
10/25/2024 8:24:10 AM

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

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Job Narrative
400-264191-2

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 10/12/2024 8:36 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 0.4°C and 3.4°C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-688961 recovered outside acceptance criteria, low biased, for Chloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-688961 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-688961 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 one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW23-ROX-101124 (400-264191-5) and TB-ROX-101124-8260-BP (400-264191-7). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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 400-688615 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Nitrophenol, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 4,6-Dinitro-ortho-cresol, 2-Nitrophenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688615 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688433 and analytical batch 400-688615 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688433 and analytical batch 400-688615 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 initial calibration curve analyzed in batch 400-688615 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered an estimated concentration.

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

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264191-5	MW23-ROX-101124	Water	10/11/24 11:05	10/12/24 08:36
400-264191-7	TB-ROX-101124-8260-BP	Water	10/10/24 12:00	10/12/24 08:36
400-264191-8	TB-ROX-101124-8011-BP	Water	10/10/24 12:00	10/12/24 08:36

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Client Sample ID: MW23-ROX-101124 — Lab Sample ID: 400-264191-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.59	J	1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.61	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: TB-ROX-101124-8260-BP — Lab Sample ID: 400-264191-7

No Detections.

Client Sample ID: TB-ROX-101124-8011-BP — Lab Sample ID: 400-264191-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW23-ROX-101124
Date Collected: 10/11/24 11:05
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-5
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			10/24/24 16:05	1
Acrolein	ND		20	3.3	ug/L			10/24/24 16:05	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 16:05	1
Benzene	**0.59**	**J**	1.0	0.24	ug/L			10/24/24 16:05	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 16:05	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 16:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 16:05	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 16:05	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/24/24 16:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 16:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 16:05	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 16:05	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/24/24 16:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 16:05	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 16:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 16:05	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 16:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 16:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 16:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 16:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 16:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 16:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 16:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 16:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 16:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 16:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 16:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 16:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 16:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 16:05	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 16:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 16:05	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 16:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 16:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 16:05	1
Methyl tert-butyl ether	**0.61**	**J**	1.0	0.22	ug/L			10/24/24 16:05	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 16:05	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 16:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 16:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 16:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 16:05	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 16:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 16:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 16:05	1

Client Sample ID: MW23-ROX-101124
Date Collected: 10/11/24 11:05
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-5
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			10/24/24 16:05	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 16:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 16:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 16:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 16:05	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 16:05	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 16:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 16:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 16:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 16:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 16:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 16:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 16:05	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 16:05	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 16:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 16:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 16:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 16:05	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 16:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 16:05	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/24/24 16:05*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*10/24/24 16:05*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/24/24 16:05*	*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		10/18/24 14:04	10/21/24 19:14	1
Benzenethiol	ND		9.7	9.6	ug/L		10/18/24 14:04	10/21/24 19:14	1
Benzoic acid	ND		29	23	ug/L		10/18/24 14:04	10/21/24 19:14	1
Benzyl alcohol	ND		9.7	7.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
Bis(2-chloroethoxy)methane	ND		9.7	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
Bis(2-chloroethyl)ether	ND		9.7	3.8	ug/L		10/18/24 14:04	10/21/24 19:14	1
bis (2-chloroisopropyl) ether	ND		9.7	1.7	ug/L		10/18/24 14:04	10/21/24 19:14	1
Bis(2-ethylhexyl) phthalate	ND		9.7	8.6	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Bromophenyl phenyl ether	ND		9.7	8.3	ug/L		10/18/24 14:04	10/21/24 19:14	1
Butyl benzyl phthalate	ND		9.7	5.6	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Chloroaniline	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Chloro-3-methylphenol	ND		9.7	5.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
2-Chloronaphthalene	ND		9.7	3.7	ug/L		10/18/24 14:04	10/21/24 19:14	1
2-Chlorophenol	ND		9.7	4.0	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Chlorophenyl phenyl ether	ND		9.7	3.6	ug/L		10/18/24 14:04	10/21/24 19:14	1
Dibenz[a,h]acridine	ND		9.7	2.7	ug/L		10/18/24 14:04	10/21/24 19:14	1
Dibenzofuran	ND		9.7	3.9	ug/L		10/18/24 14:04	10/21/24 19:14	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4-Dichlorophenol	ND		9.7	4.2	ug/L		10/18/24 14:04	10/21/24 19:14	1
Diethyl phthalate	ND		9.7	4.3	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4-Dimethylphenol	ND	*+	9.7	5.0	ug/L		10/18/24 14:04	10/21/24 19:14	1

Client Sample ID: MW23-ROX-101124
Date Collected: 10/11/24 11:05
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.7	4.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
Di-n-butyl phthalate	ND		9.7	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
4,6-Dinitro-ortho-cresol	ND		9.7	9.7	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4-Dinitrophenol	ND	*+	29	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4-Dinitrotoluene	ND		9.7	4.9	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,6-Dinitrotoluene	ND		9.7	3.8	ug/L		10/18/24 14:04	10/21/24 19:14	1
Di-n-octyl phthalate	ND		9.7	5.8	ug/L		10/18/24 14:04	10/21/24 19:14	1
1,4-Dioxane	ND		9.7	4.2	ug/L		10/18/24 14:04	10/21/24 19:14	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	3.2	ug/L		10/18/24 14:04	10/21/24 19:14	1
Hexachlorobenzene	ND		9.7	9.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
Hexachlorocyclopentadiene	ND	*+	19	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
Hexachloroethane	ND		9.7	5.0	ug/L		10/18/24 14:04	10/21/24 19:14	1
Indene	ND		9.7	3.5	ug/L		10/18/24 14:04	10/21/24 19:14	1
Isophorone	ND		9.7	5.0	ug/L		10/18/24 14:04	10/21/24 19:14	1
2-Methylphenol	ND		9.7	3.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
2-Nitroaniline	ND		9.7	4.8	ug/L		10/18/24 14:04	10/21/24 19:14	1
3-Nitroaniline	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Nitroaniline	ND		9.7	4.0	ug/L		10/18/24 14:04	10/21/24 19:14	1
Nitrobenzene	ND		9.7	4.5	ug/L		10/18/24 14:04	10/21/24 19:14	1
2-Nitrophenol	ND		9.7	4.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
4-Nitrophenol	ND		9.7	3.2	ug/L		10/18/24 14:04	10/21/24 19:14	1
N-Nitrosodimethylamine	ND		9.7	2.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
N-Nitrosodi-n-propylamine	ND		9.7	2.4	ug/L		10/18/24 14:04	10/21/24 19:14	1
N-Nitrosodiphenylamine	ND		9.7	3.6	ug/L		10/18/24 14:04	10/21/24 19:14	1
Pentachlorophenol	ND		19	12	ug/L		10/18/24 14:04	10/21/24 19:14	1
Phenol	ND		9.7	4.1	ug/L		10/18/24 14:04	10/21/24 19:14	1
Pyridine	ND		9.7	9.7	ug/L		10/18/24 14:04	10/21/24 19:14	1
Quinoline	ND		9.7	2.3	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4,5-Trichlorophenol	ND		9.7	3.9	ug/L		10/18/24 14:04	10/21/24 19:14	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		10/18/24 14:04	10/21/24 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*21 - 114*	*10/18/24 14:04*	*10/21/24 19:14*	*1*
2-Fluorophenol	*43*		*10 - 105*	*10/18/24 14:04*	*10/21/24 19:14*	*1*
Nitrobenzene-d5	*54*		*16 - 127*	*10/18/24 14:04*	*10/21/24 19:14*	*1*
Phenol-d5	*32*		*10 - 129*	*10/18/24 14:04*	*10/21/24 19:14*	*1*
Terphenyl-d14	*70*		*13 - 150*	*10/18/24 14:04*	*10/21/24 19:14*	*1*
2,4,6-Tribromophenol	*84*		*10 - 150*	*10/18/24 14:04*	*10/21/24 19:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.083	ug/L		10/17/24 11:24	10/17/24 22:41	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/17/24 11:24	10/17/24 22:41	1
Anthracene	ND		0.20	0.071	ug/L		10/17/24 11:24	10/17/24 22:41	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 22:41	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/17/24 11:24	10/17/24 22:41	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/17/24 11:24	10/17/24 22:41	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/17/24 11:24	10/17/24 22:41	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Client Sample ID: MW23-ROX-101124
Date Collected: 10/11/24 11:05
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 22:41	1
Chrysene	ND		0.20	0.038	ug/L		10/17/24 11:24	10/17/24 22:41	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 22:41	1
Fluoranthene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 22:41	1
Fluorene	ND		0.20	0.085	ug/L		10/17/24 11:24	10/17/24 22:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/17/24 11:24	10/17/24 22:41	1
1-Methylnaphthalene	ND		0.20	0.064	ug/L		10/17/24 11:24	10/17/24 22:41	1
2-Methylnaphthalene	ND		0.20	0.075	ug/L		10/17/24 11:24	10/17/24 22:41	1
Phenanthrene	ND		0.20	0.043	ug/L		10/17/24 11:24	10/17/24 22:41	1
Pyrene	ND		0.20	0.039	ug/L		10/17/24 11:24	10/17/24 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:41*	*1*
Nitrobenzene-d5	*110*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:41*	*1*
Terphenyl-d14	*80*		*50 - 150*	*10/17/24 11:24*	*10/17/24 22:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		10/18/24 10:16	10/18/24 16:15	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*59*		*51 - 149*	*10/18/24 10:16*	*10/18/24 16:15*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Client Sample ID: TB-ROX-101124-8260-BP
Date Collected: 10/10/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-7
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			10/24/24 10:58	1
Acrolein	ND		20	3.3	ug/L			10/24/24 10:58	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 10:58	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 10:58	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 10:58	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 10:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 10:58	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 10:58	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/24/24 10:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 10:58	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 10:58	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 10:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 10:58	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 10:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 10:58	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 10:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 10:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 10:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 10:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 10:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 10:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 10:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 10:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 10:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 10:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 10:58	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 10:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 10:58	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 10:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 10:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 10:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 10:58	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 10:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 10:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 10:58	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 10:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 10:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 10:58	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Client Sample ID: TB-ROX-101124-8260-BP
Date Collected: 10/10/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-7
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			10/24/24 10:58	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 10:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 10:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 10:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 10:58	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 10:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 10:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 10:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 10:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 10:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 10:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 10:58	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 10:58	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 10:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 10:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 10:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 10:58	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 10:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 10:58	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 10:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/24/24 10:58*	*1*
Dibromofluoromethane	*110*		*75 - 126*		*10/24/24 10:58*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/24/24 10:58*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Client Sample ID: TB-ROX-101124-8011-BP
Date Collected: 10/10/24 12:00
Date Received: 10/12/24 08:36

Lab Sample ID: 400-264191-8
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		10/18/24 10:16	10/18/24 15:12	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 15:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*10/18/24 10:16*	*10/18/24 15:12*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264191-2
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.

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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

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)
400-264191-5	MW23-ROX-101124	93	109	97
400-264191-7	TB-ROX-101124-8260-BP	93	110	97
LCS 400-688961/1002	Lab Control Sample	100	97	97
MB 400-688961/5	Method Blank	92	109	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)
400-264191-5	MW23-ROX-101124	59	43	54	32	70	84
LCS 400-688433/19-A	Lab Control Sample	56	45	56	35	74	81
LCS 400-688433/2-A	Lab Control Sample	66	54	65	44	70	95
LCSD 400-688433/20-A	Lab Control Sample Dup	60	50	57	39	73	81
LCSD 400-688433/3-A	Lab Control Sample Dup	56	49	56	42	59	87
MB 400-688433/1-A	Method Blank	56	44	57	32	77	82

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264191-5	MW23-ROX-101124	77	110	80
LCS 400-688277/2-A	Lab Control Sample	77	101	81
MB 400-688277/1-A	Method Blank	79	99	81

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM
Job ID: 400-264191-2
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264191-5	MW23-ROX-101124	59
400-264191-8	TB-ROX-101124-8011-BP	69
LCS 400-688388/2-A	Lab Control Sample	90
LCSD 400-688388/3-A	Lab Control Sample Dup	90
MB 400-688388/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264191-2

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264191-2
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW23-ROX-101124
Lab Sample ID: 400-264191-5
Date Collected: 10/11/24 11:05
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688961	10/24/24 16:05	WPD	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	688277	10/17/24 11:24	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 22:41	DS	EET PEN
Total/NA	Prep	3510C			258.6 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 19:14	S1B	EET PEN
Total/NA	Prep	8011			33.6 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 16:15	KR	EET PEN

Client Sample ID: TB-ROX-101124-8260-BP
Lab Sample ID: 400-264191-7
Date Collected: 10/10/24 12:00
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	688961	10/24/24 10:58	WPD	EET PEN

Client Sample ID: TB-ROX-101124-8011-BP
Lab Sample ID: 400-264191-8
Date Collected: 10/10/24 12:00
Matrix: Water
Date Received: 10/12/24 08:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			32.6 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 15:12	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688277/1-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:05	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688388/1-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:09	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688433/1-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 15:28	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264191-2
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688961/5
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	688961	10/24/24 08:24	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688277/2-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	3511			30 mL	2 mL	688277	10/17/24 11:23	RAW	EET PEN
Total/NA	Analysis	8270E		1			688256	10/17/24 16:36	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688388/2-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:30	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688433/19-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 15:51	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688433/2-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:36	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688961/1002
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	688961	10/24/24 07:18	WPD	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264191-2
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688388/3-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:51	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688433/20-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:13	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688433/3-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	688433	10/18/24 14:04	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688615	10/21/24 16:58	S1B	EET PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 688961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	8260D	
400-264191-7	TB-ROX-101124-8260-BP	Total/NA	Water	8260D	
MB 400-688961/5	Method Blank	Total/NA	Water	8260D	
LCS 400-688961/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Analysis Batch: 688256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	8270E	688277
MB 400-688277/1-A	Method Blank	Total/NA	Water	8270E	688277
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	8270E	688277

Prep Batch: 688277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	3511	
MB 400-688277/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688277/2-A	Lab Control Sample	Total/NA	Water	3511	

Prep Batch: 688433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	3510C	
MB 400-688433/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688433/19-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688433/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688433/20-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688433/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 688615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	8270E	688433
MB 400-688433/1-A	Method Blank	Total/NA	Water	8270E	688433
LCS 400-688433/19-A	Lab Control Sample	Total/NA	Water	8270E	688433
LCS 400-688433/2-A	Lab Control Sample	Total/NA	Water	8270E	688433
LCSD 400-688433/20-A	Lab Control Sample Dup	Total/NA	Water	8270E	688433
LCSD 400-688433/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688433

GC Semi VOA

Prep Batch: 688388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	8011	
400-264191-8	TB-ROX-101124-8011-BP	Total/NA	Water	8011	
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264191-5	MW23-ROX-101124	Total/NA	Water	8011	688388
400-264191-8	TB-ROX-101124-8011-BP	Total/NA	Water	8011	688388
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	688388

GC Semi VOA (Continued)

Analysis Batch: 688421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	688388
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688388

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

Lab Sample ID: MB 400-688961/5
Matrix: Water
Analysis Batch: 688961

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			10/24/24 08:24	1
Acrolein	ND		20	3.3	ug/L			10/24/24 08:24	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 08:24	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 08:24	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 08:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 08:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 08:24	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 08:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 08:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 08:24	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 08:24	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 08:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 08:24	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 08:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 08:24	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 08:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 08:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 08:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 08:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 08:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 08:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 08:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 08:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 08:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 08:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 08:24	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 08:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 08:24	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 08:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 08:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 08:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 08:24	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 08:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 08:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 08:24	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 08:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 08:24	1

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

Lab Sample ID: MB 400-688961/5
Matrix: Water
Analysis Batch: 688961

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			10/24/24 08:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/24/24 08:24	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 08:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 08:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 08:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 08:24	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 08:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 08:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 08:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 08:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 08:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 08:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 08:24	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 08:24	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 08:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 08:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 08:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 08:24	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 08:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 08:24	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 08:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/24/24 08:24*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*10/24/24 08:24*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/24/24 08:24*	*1*

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	389	*+	ug/L		194	43 - 150
Acrolein	200	235		ug/L		118	38 - 150
Acrylonitrile	500	458		ug/L		92	64 - 142
Benzene	50.0	45.7		ug/L		91	70 - 130
Bromobenzene	50.0	48.4		ug/L		97	70 - 132
Bromochloromethane	50.0	47.5		ug/L		95	70 - 130
Bromodichloromethane	50.0	44.0		ug/L		88	67 - 133
Bromoform	50.0	45.2		ug/L		90	57 - 140
Bromomethane	20.0	19.3		ug/L		96	10 - 150
2-Butanone (MEK)	200	371	*+	ug/L		185	61 - 145
Carbon disulfide	50.0	44.4		ug/L		89	61 - 137
Carbon tetrachloride	50.0	43.6		ug/L		87	61 - 137
Chlorobenzene	50.0	47.1		ug/L		94	70 - 130
Chloroethane	20.0	14.7		ug/L		73	55 - 141
2-Chloroethyl vinyl ether	20.0	15.3		ug/L		76	10 - 150

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

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	43.1		ug/L		86	69 - 130
1-Chlorohexane	50.0	41.8		ug/L		84	69 - 130
Chloromethane	20.0	20.0		ug/L		100	58 - 137
cis-1,2-Dichloroethene	50.0	46.4		ug/L		93	68 - 130
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	69 - 132
Dibromochloromethane	50.0	44.1		ug/L		88	67 - 135
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	52.2		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	50.9		ug/L		102	70 - 130
Dichlorodifluoromethane	20.0	24.4		ug/L		122	41 - 146
1,1-Dichloroethane	50.0	46.3		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	41.7		ug/L		83	69 - 130
1,1-Dichloroethene	50.0	50.4		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	50.6		ug/L		101	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	45.5		ug/L		91	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	48.5		ug/L		97	68 - 130
Hexachlorobutadiene	50.0	59.2		ug/L		118	53 - 140
2-Hexanone	200	245		ug/L		123	65 - 137
Isopropylbenzene	50.0	43.5		ug/L		87	70 - 130
Methylene bromide	50.0	46.8		ug/L		94	70 - 130
Methylene Chloride	50.0	51.8		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	184		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	44.9		ug/L		90	70 - 130
Naphthalene	50.0	52.9		ug/L		106	47 - 149
n-Butylbenzene	50.0	50.9		ug/L		102	67 - 130
N-Propylbenzene	50.0	49.8		ug/L		100	70 - 130
o-Chlorotoluene	50.0	48.6		ug/L		97	70 - 130
o-Xylene	50.0	45.5		ug/L		91	70 - 130
p-Chlorotoluene	50.0	49.3		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	53.6		ug/L		107	65 - 130
sec-Butylbenzene	50.0	51.7		ug/L		103	66 - 130
Styrene	50.0	47.0		ug/L		94	70 - 130
tert-Butylbenzene	50.0	48.1		ug/L		96	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.6		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/L		97	70 - 131
Tetrachloroethene	50.0	40.0		ug/L		80	65 - 130
Toluene	50.0	46.1		ug/L		92	70 - 130
trans-1,2-Dichloroethene	50.0	47.7		ug/L		95	70 - 130
trans-1,3-Dichloropropene	50.0	41.9		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	57.5		ug/L		115	60 - 138
1,2,4-Trichlorobenzene	50.0	57.4		ug/L		115	60 - 140
1,1,1-Trichloroethane	50.0	42.4		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	45.6		ug/L		91	70 - 130
Trichloroethene	50.0	46.4		ug/L		93	70 - 130
Trichlorofluoromethane	20.0	19.2		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-688961/1002
Matrix: Water
Analysis Batch: 688961

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	47.7		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	51.6		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	50.9		ug/L		102	69 - 130
Vinyl acetate	40.0	42.3		ug/L		106	26 - 150
Vinyl chloride	20.0	20.6		ug/L		103	59 - 136
Xylenes, Total	100	90.4		ug/L		90	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: MB 400-688433/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzenethiol	ND		10	9.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzoic acid	ND		30	24	ug/L		10/18/24 14:04	10/21/24 15:28	1
Benzyl alcohol	ND		10	7.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chloroaniline	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Chlorophenol	ND		10	4.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dibenzofuran	ND		10	4.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Diethyl phthalate	ND		10	4.4	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/18/24 14:04	10/21/24 15:28	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
1,4-Dioxane	ND		10	4.3	ug/L		10/18/24 14:04	10/21/24 15:28	1

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

Lab Sample ID: MB 400-688433/1-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688433

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/18/24 14:04	10/21/24 15:28	1
Hexachloroethane	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Indene	ND		10	3.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
Isophorone	ND		10	5.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Methylphenol	ND		10	3.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Nitroaniline	ND		10	5.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
3-Nitroaniline	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Nitroaniline	ND		10	4.1	ug/L		10/18/24 14:04	10/21/24 15:28	1
Nitrobenzene	ND		10	4.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
2-Nitrophenol	ND		10	4.6	ug/L		10/18/24 14:04	10/21/24 15:28	1
4-Nitrophenol	ND		10	3.3	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/18/24 14:04	10/21/24 15:28	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/18/24 14:04	10/21/24 15:28	1
Pentachlorophenol	ND		20	12	ug/L		10/18/24 14:04	10/21/24 15:28	1
Phenol	ND		10	4.2	ug/L		10/18/24 14:04	10/21/24 15:28	1
Pyridine	ND		10	10	ug/L		10/18/24 14:04	10/21/24 15:28	1
Quinoline	ND		10	2.4	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/18/24 14:04	10/21/24 15:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/18/24 14:04	10/21/24 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*21 - 114*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Phenol-d5	*32*		*10 - 129*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
Terphenyl-d14	*77*		*13 - 150*	*10/18/24 14:04*	*10/21/24 15:28*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*10/18/24 14:04*	*10/21/24 15:28*	*1*

Lab Sample ID: LCS 400-688433/19-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	111		ug/L		93	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*56*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

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

Lab Sample ID: LCS 400-688433/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	55.4		ug/L		46	10 - 127
Benzoic acid	493	263		ug/L		53	19 - 126
Benzyl alcohol	120	75.8		ug/L		63	17 - 109
Bis(2-chloroethoxy)methane	120	77.1		ug/L		64	24 - 125
Bis(2-chloroethyl)ether	120	62.2		ug/L		52	10 - 121
bis (2-chloroisopropyl) ether	120	72.5		ug/L		60	14 - 123
Bis(2-ethylhexyl) phthalate	120	93.5		ug/L		78	16 - 150
4-Bromophenyl phenyl ether	120	93.1		ug/L		78	17 - 150
Butyl benzyl phthalate	120	91.2		ug/L		76	21 - 150
4-Chloroaniline	120	67.7		ug/L		56	10 - 124
4-Chloro-3-methylphenol	120	103		ug/L		86	37 - 131
2-Chloronaphthalene	120	87.7		ug/L		73	24 - 132
2-Chlorophenol	120	85.7		ug/L		71	27 - 124
4-Chlorophenyl phenyl ether	120	95.9		ug/L		80	27 - 147
Dibenz[a,h]acridine	59.9	65.5		ug/L		109	40 - 140
Dibenzofuran	120	92.7		ug/L		77	30 - 135
3,3'-Dichlorobenzidine	240	202		ug/L		84	10 - 150
2,4-Dichlorophenol	120	94.6		ug/L		79	33 - 132
Diethyl phthalate	120	99.1		ug/L		83	37 - 145
2,4-Dimethylphenol	120	160	*+	ug/L		133	38 - 132
Dimethyl phthalate	120	97.8		ug/L		82	32 - 137
Di-n-butyl phthalate	120	103		ug/L		86	27 - 150
4,6-Dinitro-ortho-cresol	240	265		ug/L		110	14 - 150
2,4-Dinitrophenol	240	396	*+	ug/L		165	15 - 150
2,4-Dinitrotoluene	120	101		ug/L		84	35 - 136
2,6-Dinitrotoluene	120	101		ug/L		84	29 - 140
Di-n-octyl phthalate	120	93.3		ug/L		78	26 - 150
1,4-Dioxane	120	39.2		ug/L		33	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	83.3		ug/L		69	23 - 138
Hexachlorobenzene	120	99.6		ug/L		83	10 - 150
Hexachlorocyclopentadiene	120	274	*+	ug/L		228	10 - 124
Hexachloroethane	120	61.8		ug/L		52	10 - 127
Indene	120	89.4		ug/L		74	18 - 150
Isophorone	120	77.9		ug/L		65	28 - 127
2-Methylphenol	120	90.3		ug/L		75	34 - 124
3 & 4 Methylphenol	120	85.9		ug/L		72	32 - 122
2-Nitroaniline	120	92.4		ug/L		77	24 - 139
3-Nitroaniline	120	72.5		ug/L		60	10 - 128
4-Nitroaniline	120	90.5		ug/L		75	28 - 118
Nitrobenzene	120	71.0		ug/L		59	29 - 120
2-Nitrophenol	120	92.9		ug/L		77	25 - 148
4-Nitrophenol	240	198		ug/L		82	12 - 129
N-Nitrosodimethylamine	120	44.1		ug/L		37	10 - 115
N-Nitrosodi-n-propylamine	120	82.2		ug/L		68	24 - 142
N-Nitrosodiphenylamine	119	91.5		ug/L		77	29 - 138
Pentachlorophenol	240	224		ug/L		93	19 - 150
Phenol	120	56.3		ug/L		47	11 - 95
Pyridine	240	23.5		ug/L		10	10 - 82

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

Lab Sample ID: LCS 400-688433/2-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			59.9	43.9		ug/L		73	10 - 141		
2,4,5-Trichlorophenol			120	102		ug/L		85	30 - 144		
2,4,6-Trichlorophenol			120	99.8		ug/L		83	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*21 - 114*
2-Fluorophenol	*54*		*10 - 105*
Nitrobenzene-d5	*65*		*16 - 127*
Phenol-d5	*44*		*10 - 129*
Terphenyl-d14	*70*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCSD 400-688433/20-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	114		ug/L		95	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*39*		*10 - 129*
Terphenyl-d14	*73*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCSD 400-688433/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	58.8		ug/L		49	10 - 127	6	40
Benzoic acid			493	263		ug/L		53	19 - 126	0	40
Benzyl alcohol			120	70.7		ug/L		59	17 - 109	7	40
Bis(2-chloroethoxy)methane			120	67.0		ug/L		56	24 - 125	14	40
Bis(2-chloroethyl)ether			120	53.3		ug/L		44	10 - 121	15	40
bis (2-chloroisopropyl) ether			120	62.5		ug/L		52	14 - 123	15	40
Bis(2-ethylhexyl) phthalate			120	78.2		ug/L		65	16 - 150	18	40
4-Bromophenyl phenyl ether			120	78.1		ug/L		65	17 - 150	18	40
Butyl benzyl phthalate			120	77.4		ug/L		64	21 - 150	16	40
4-Chloroaniline			120	67.5		ug/L		56	10 - 124	0	40
4-Chloro-3-methylphenol			120	88.0		ug/L		73	37 - 131	16	40
2-Chloronaphthalene			120	74.7		ug/L		62	24 - 132	16	40
2-Chlorophenol			120	75.1		ug/L		63	27 - 124	13	40
4-Chlorophenyl phenyl ether			120	81.9		ug/L		68	27 - 147	16	40
Dibenz[a,h]acridine			59.9	54.6		ug/L		91	40 - 140	18	40
Dibenzofuran			120	78.3		ug/L		65	30 - 135	17	40

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

Lab Sample ID: LCSD 400-688433/3-A
Matrix: Water
Analysis Batch: 688615

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688433

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			240	173		ug/L		72	10 - 150	16	40
2,4-Dichlorophenol			120	81.4		ug/L		68	33 - 132	15	40
Diethyl phthalate			120	82.1		ug/L		68	37 - 145	19	40
2,4-Dimethylphenol			120	138		ug/L		115	38 - 132	14	40
Dimethyl phthalate			120	81.8		ug/L		68	32 - 137	18	40
Di-n-butyl phthalate			120	85.5		ug/L		71	27 - 150	19	40
4,6-Dinitro-ortho-cresol			240	230		ug/L		96	14 - 150	14	40
2,4-Dinitrophenol			240	337		ug/L		140	15 - 150	16	40
2,4-Dinitrotoluene			120	85.4		ug/L		71	35 - 136	16	40
2,6-Dinitrotoluene			120	85.6		ug/L		71	29 - 140	17	40
Di-n-octyl phthalate			120	78.1		ug/L		65	26 - 150	18	40
1,4-Dioxane			120	32.7		ug/L		27	10 - 87	18	40
1,2-Diphenylhydrazine (as Azobenzene)			120	71.2		ug/L		59	23 - 138	16	40
Hexachlorobenzene			120	84.2		ug/L		70	10 - 150	17	40
Hexachlorocyclopentadiene			120	248	*+	ug/L		207	10 - 124	10	40
Hexachloroethane			120	52.8		ug/L		44	10 - 127	16	40
Indene			120	76.9		ug/L		64	18 - 150	15	40
Isophorone			120	66.9		ug/L		56	28 - 127	15	40
2-Methylphenol			120	80.1		ug/L		67	34 - 124	12	40
3 & 4 Methylphenol			120	77.0		ug/L		64	32 - 122	11	40
2-Nitroaniline			120	80.6		ug/L		67	24 - 139	14	40
3-Nitroaniline			120	69.0		ug/L		58	10 - 128	5	40
4-Nitroaniline			120	84.3		ug/L		70	28 - 118	7	40
Nitrobenzene			120	61.4		ug/L		51	29 - 120	15	40
2-Nitrophenol			120	79.4		ug/L		66	25 - 148	16	40
4-Nitrophenol			240	181		ug/L		76	12 - 129	9	40
N-Nitrosodimethylamine			120	49.7		ug/L		41	10 - 115	12	40
N-Nitrosodi-n-propylamine			120	71.7		ug/L		60	24 - 142	14	40
N-Nitrosodiphenylamine			119	77.1		ug/L		65	29 - 138	17	40
Pentachlorophenol			240	190		ug/L		79	19 - 150	16	40
Phenol			120	54.1		ug/L		45	11 - 95	4	40
Pyridine			240	29.8		ug/L		12	10 - 82	24	40
Quinoline			59.9	41.0		ug/L		68	10 - 141	7	40
2,4,5-Trichlorophenol			120	87.0		ug/L		72	30 - 144	15	40
2,4,6-Trichlorophenol			120	83.8		ug/L		70	27 - 147	17	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*21 - 114*
2-Fluorophenol	*49*		*10 - 105*
Nitrobenzene-d5	*56*		*16 - 127*
Phenol-d5	*42*		*10 - 129*
Terphenyl-d14	*59*		*13 - 150*
2,4,6-Tribromophenol	*87*		*10 - 150*

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

Lab Sample ID: MB 400-688277/1-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688277

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/17/24 11:23	10/17/24 16:05	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/17/24 11:23	10/17/24 16:05	1
Anthracene	ND		0.20	0.073	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/17/24 11:23	10/17/24 16:05	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1
Chrysene	ND		0.20	0.039	ug/L		10/17/24 11:23	10/17/24 16:05	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluoranthene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
Fluorene	ND		0.20	0.087	ug/L		10/17/24 11:23	10/17/24 16:05	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/17/24 11:23	10/17/24 16:05	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/17/24 11:23	10/17/24 16:05	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/17/24 11:23	10/17/24 16:05	1
Phenanthrene	ND		0.20	0.044	ug/L		10/17/24 11:23	10/17/24 16:05	1
Pyrene	ND		0.20	0.040	ug/L		10/17/24 11:23	10/17/24 16:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Nitrobenzene-d5	*99*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*
Terphenyl-d14	*81*		*50 - 150*	*10/17/24 11:23*	*10/17/24 16:05*	*1*

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			3.34	2.64		ug/L		79	50 - 150		
Acenaphthylene			3.34	2.80		ug/L		84	50 - 150		
Anthracene			3.34	2.78		ug/L		83	50 - 150		
Benzo[a]anthracene			3.34	3.19		ug/L		96	50 - 150		
Benzo[a]pyrene			3.34	2.99		ug/L		90	50 - 150		
Benzo[b]fluoranthene			3.34	2.96		ug/L		89	50 - 150		
Benzo[g,h,i]perylene			3.34	2.81		ug/L		84	50 - 150		
Benzo[k]fluoranthene			3.34	2.88		ug/L		86	50 - 150		
Chrysene			3.34	2.79		ug/L		84	50 - 150		
Dibenz(a,h)anthracene			3.34	2.68		ug/L		80	50 - 150		
Fluoranthene			3.34	2.76		ug/L		83	50 - 150		
Fluorene			3.34	2.84		ug/L		85	50 - 150		
Indeno[1,2,3-cd]pyrene			3.34	2.71		ug/L		81	50 - 150		
1-Methylnaphthalene			3.34	2.38		ug/L		72	50 - 150		
2-Methylnaphthalene			3.34	2.06		ug/L		62	50 - 150		
Phenanthrene			3.34	2.76		ug/L		83	50 - 150		
Pyrene			3.34	2.70		ug/L		81	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*

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

Lab Sample ID: LCS 400-688277/2-A
Matrix: Water
Analysis Batch: 688256

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688277

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*101*		*50 - 150*
Terphenyl-d14	*81*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

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		10/18/24 10:16	10/18/24 14:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/18/24 10:16	10/18/24 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*10/18/24 10:16*	*10/18/24 14:09*	*1*

Lab Sample ID: LCS 400-688388/2-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0904		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0839		ug/L		84	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: LCSD 400-688388/3-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0945		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0847		ug/L		84	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/12/24	Time: 8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR0

Version: 19Sept24

Page 34 of 42

10/25/2024

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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 :

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*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
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☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
		10/12/24	8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

Version: 19Sept24

Page 35 of 42

10/25/2024

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101124-8260	10/11/2024	0000	Water	2					2	X			
	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

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COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
		10/12/24	8:36

Version: 19Sept24

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

10/25/2024

Shell Oil Products US Chain Of Custody Record

AECOM

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☐ Other (_____)

Lab Vendor # 1364589 (TestAmerica)

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☐ TRANSPORTATION | ☑ OTHER __ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 10/11/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	Roxana 4Q24 Groundwater

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SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

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TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

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☐ STATE REIMBURSEMENT RATE APPLIES
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REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

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	TB-ROX-101124-8011	10/11/2024	0000	Water	2					2		X		
	MW5-ROX-101124	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW5-ROX-101124-DUP	10/11/2024	0945	Water	6			4		10	X	X	X	X
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X
	MW12-ROX-101124	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MS	10/11/2024	1245	Water	6			4		10	X	X	X	X
	MW12-ROX-101124-MSD	10/11/2024	1245	Water	6			4		10	X	X	X	X

400-264191 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 10/12/24	Time: 8:36

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

0.4°C IR8, 3.4°C IR9

Version: 19Sept24

10/25/2024

Leah Klingensmith

From: Massa, Mary <Mary.Massa@aecom.com>
Sent: Monday, October 14, 2024 7:40 AM
To: Howell, Brett; Remiger, Melissa; Leah Klingensmith
Subject: Re: 400-264191 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast
Attachments: 4Q24 Roxana GW COC_101124_BP.pdf; 4Q24 Roxana GW COC_101124_updated.pdf

Unverified Sender: The sender of this email has not been verified. Review the content of the message carefully and verify the identity of the sender before acting on this email: replying, opening attachments or clicking links.

Good morning Leah,

I had just noticed earlier that MW-23 should've been on a separate COC and SDG and I completely missed the mistake on Friday. Please see attached for the corrected COCs with MW-23 (BP) separated. Please produce a separate SDG for MW-23. For the associated trip blanks, please just produce split reports for the included TB-ROX-101124-8260 and -8011 trips (with the trip ID associated with MW-23 being TB-ROX-101124-8260-BP and -8011-BP).

Let me know of any questions and concerns, and my apologies for the mishap.

Thank you,
Mary Massa (D'Angelo) PG (MO)

Geologist II, Oil & Gas (ENV PMO), US West
M +1(314) 795-7580
mary.massa@aecom.com
AECOM
100 North Broadway
20th Floor
Saint Louis, United States
T +1(314) 429-0100
aecom.com
Delivering a better world
LinkedIn | Twitter | Facebook | Instagram

From: Leah Klingensmith <TALS@reports.et.eurofinsus.com>
Sent: Monday, October 14, 2024 7:25 AM
To: Howell, Brett <brett.howell@aecom.com>; Massa, Mary <Mary.Massa@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>
Subject: 400-264191 ROXANA QUARTERLY GW Sample Confirmation files from Eurofins Southeast

Hello,

Attached, please find the Sample Confirmation files for job 400-264191; ROXANA QUARTERLY GW

Please review the attachments for accuracy and notify your Project Manager of any discrepancies as quickly as possible.

Any discrepancies not communicated in a timely fashion could result in missed holding times, TAT delays and may potentially incur additional charges.

Please feel free to contact me if you have any questions.

Thank you.

Leah Klingensmith
Project Manager

Eurofins Pensacola
Phone: 615-301-5038

E-mail: Leah.Klingensmith@et.eurofinsus.com
www.eurofinsus.com/env

Reference: [400-801874]
Attachments: 4

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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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 – 3.4.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 10/11/2024

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: melissa.remiger@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions | PHONE NO.: 314-802-1207 | E-MAIL: melissa.remiger@aecom.com | AECOM Other ID: Roxana 4Q24 Groundwater

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

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☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS	Container PID Readings or Laboratory Notes:
	TB-ROX-101124-8260-BP	10/11/2024	0000	Water	2					2	X				Split Sample
	TB-ROX-101124-8011-BP	10/11/2024	0000	Water	2					2		X			Split Sample
	MW23-ROX-101124	10/11/2024	1105	Water	6			4		10	X	X	X	X	

C McDavid 10-11-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1482, 7252 0547 1471	10/11/2024	1600

Version: 19Sept24

CUSTODY SEALS: 1599950, 1599951, 1599952, 1599953

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264191-2

Login Number: 264191

List Source: Eurofins Pensacola

List Number: 1

Creator: Beecher (Roberts), Alexis J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4°C IR8, 3.4°C IR10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	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
Job ID: 400-264191-2
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264274-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/27/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-688667/2-A/3-A	SVOCs	2,4-Dinitrophenol	**164/165**	1	15-150/40
LCS/LCSD 400-688667/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**242/224**	8	10-124/40
LCS/LCSD 400-688667/2-A/3-A	SVOCs	Pyridine	11/**8**	30	10-82/40
LCS/LCSD 400-688571/2-A/3-A	PAHs	2-Methylnaphthalene	**48**/62	26	50-150/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Method 8270E (SVOCs)

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples MW24-ROX-101424, P54-ROX-101424, and MW27-ROX-101424 were qualified as estimated (UJ). **Method 8270E (PAHs)** 2-Methylnaphthalene in samples MW24-ROX-101424, P54-ROX-101424, and MW27-ROX-101424 were qualified as estimated (UJ).					
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MB 400-688667/1-A	SVOCs	Di-n-butyl phthalate	92.8 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. **Method 8270E (SVOCs)** Di-n-butyl phthalate in sample MW27-ROX-101424 was qualified as non-detect (U) at the reported sample concentration.					
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method	X			Analytical data reported as non-detect and associated with ICV/CCV %D recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.				Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.				
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/31/2024 11:25:40 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264274-1

Reviewed 11/27/2024
AN

Eurofins Pensacola
3355 McLemore Drive
Pensacola FL 32514

See page two for job notes and contact information.

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Job Notes

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Authorization

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Job Narrative
400-264274-1

Receipt
The samples were received on 10/15/2024 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.3º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689000 recovered above the upper control limit for Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689000 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689000 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 400-689000 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101424-8260 (400-264274-1), MW24-ROX-101424 (400-264274-3), P54-ROX-101424 (400-264274-4) and MW27-ROX-101424 (400-264274-5). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The method blank for preparation batch 400-688667 contained Di-n-butyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688913 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 4,6-Dinitro-ortho-cresol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688913 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-688667 and analytical batch 400-688913 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688667 and analytical batch 400-688913 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The following samples and corresponding method blank contained common lab contaminant di-n-butyl phthalate above the reporting limit (RL) but less than regulatory limits. Data has been reported accordingly and can be re-extracted upon request. MW27-ROX-101424 (400-264274-5) and (MB 400-688667/1-A)

Job ID: 400-264274-1 (Continued) Eurofins Pensacola

Method 8270E: The following analyte(s) recovered outside control limits in one of two LCS control samples associated with preparation batch 400-688571 and analytical batch 400-688617. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264274-1	TB-ROX-101424-8260	Water	10/14/24 12:00	10/15/24 10:10
400-264274-2	TB-ROX-101424-8011	Water	10/14/24 12:00	10/15/24 10:10
400-264274-3	MW24-ROX-101424	Water	10/14/24 09:25	10/15/24 10:10
400-264274-4	P54-ROX-101424	Water	10/14/24 10:55	10/15/24 10:10
400-264274-5	MW27-ROX-101424	Water	10/14/24 12:30	10/15/24 10:10

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: TB-ROX-101424-8260 — Lab Sample ID: 400-264274-1

No Detections.

Client Sample ID: TB-ROX-101424-8011 — Lab Sample ID: 400-264274-2

No Detections.

Client Sample ID: MW24-ROX-101424 — Lab Sample ID: 400-264274-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.56	J	1.0	0.24	ug/L	1		8260D	Total/NA

Client Sample ID: P54-ROX-101424 — Lab Sample ID: 400-264274-4

No Detections.

Client Sample ID: MW27-ROX-101424 — Lab Sample ID: 400-264274-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.38	J	1.0	0.24	ug/L	1		8260D	Total/NA
Di-n-butyl phthalate	62	B U	9.4	4.3	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: TB-ROX-101424-8260
Date Collected: 10/14/24 12:00
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-1
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			10/24/24 17:38	1
Acrolein	ND		20	3.3	ug/L			10/24/24 17:38	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 17:38	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 17:38	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 17:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 17:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 17:38	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 17:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 17:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 17:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 17:38	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 17:38	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 17:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 17:38	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 17:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 17:38	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 17:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 17:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 17:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 17:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 17:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 17:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 17:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 17:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 17:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 17:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 17:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 17:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 17:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 17:38	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 17:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 17:38	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 17:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 17:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 17:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 17:38	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 17:38	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 17:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 17:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 17:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 17:38	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 17:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 17:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 17:38	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: TB-ROX-101424-8260
Date Collected: 10/14/24 12:00
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-1
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			10/24/24 17:38	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 17:38	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 17:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 17:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 17:38	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 17:38	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 17:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 17:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 17:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 17:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 17:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 17:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 17:38	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 17:38	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 17:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 17:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 17:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 17:38	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 17:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 17:38	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/24/24 17:38*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*10/24/24 17:38*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*10/24/24 17:38*	*1*

Client: AECOM
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101424-8011
Lab Sample ID: 400-264274-2
Date Collected: 10/14/24 12:00
Matrix: Water
Date Received: 10/15/24 10:10

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		10/18/24 10:16	10/18/24 18:00	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		10/18/24 10:16	10/18/24 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*10/18/24 10:16*	*10/18/24 18:00*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: MW24-ROX-101424
Date Collected: 10/14/24 09:25
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-3
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			10/24/24 20:26	1
Acrolein	ND		20	3.3	ug/L			10/24/24 20:26	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 20:26	1
Benzene	**0.56**	**J**	1.0	0.24	ug/L			10/24/24 20:26	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 20:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 20:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 20:26	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 20:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 20:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 20:26	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 20:26	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 20:26	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 20:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 20:26	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 20:26	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 20:26	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 20:26	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 20:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 20:26	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 20:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 20:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 20:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 20:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 20:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 20:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 20:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 20:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 20:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 20:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 20:26	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 20:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 20:26	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 20:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 20:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 20:26	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 20:26	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 20:26	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 20:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 20:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 20:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 20:26	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 20:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 20:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 20:26	1

Client Sample ID: MW24-ROX-101424
Date Collected: 10/14/24 09:25
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-3
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			10/24/24 20:26	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 20:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 20:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 20:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 20:26	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 20:26	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 20:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 20:26	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 20:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 20:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 20:26	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 20:26	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 20:26	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 20:26	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 20:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 20:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 20:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 20:26	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 20:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 20:26	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 130*		*10/24/24 20:26*	*1*
Dibromofluoromethane	*123*		*75 - 126*		*10/24/24 20:26*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*10/24/24 20:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.2	ug/L		10/21/24 17:02	10/23/24 20:56	1
Benzenethiol	ND		9.4	9.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
Benzoic acid	ND		28	23	ug/L		10/21/24 17:02	10/23/24 20:56	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/21/24 17:02	10/23/24 20:56	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 20:56	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/21/24 17:02	10/23/24 20:56	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/21/24 17:02	10/23/24 20:56	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/21/24 17:02	10/23/24 20:56	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 20:56	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/21/24 17:02	10/23/24 20:56	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 20:56	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
Diethyl phthalate	ND		9.4	4.2	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 20:56	1

Client Sample ID: MW24-ROX-101424
Date Collected: 10/14/24 09:25
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 20:56	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 20:56	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/21/24 17:02	10/23/24 20:56	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		10/21/24 17:02	10/23/24 20:56	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/21/24 17:02	10/23/24 20:56	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 20:56	1
Indene	ND		9.4	3.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
Isophorone	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 20:56	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/21/24 17:02	10/23/24 20:56	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/21/24 17:02	10/23/24 20:56	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 20:56	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/21/24 17:02	10/23/24 20:56	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 20:56	1
Pentachlorophenol	ND		19	11	ug/L		10/21/24 17:02	10/23/24 20:56	1
Phenol	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 20:56	1
Pyridine	ND	*- UJ	9.4	9.4	ug/L		10/21/24 17:02	10/23/24 20:56	1
Quinoline	ND		9.4	2.3	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 20:56	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/21/24 17:02	10/23/24 20:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*21 - 114*	*10/21/24 17:02*	*10/23/24 20:56*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/21/24 17:02*	*10/23/24 20:56*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*10/21/24 17:02*	*10/23/24 20:56*	*1*
Phenol-d5	*35*		*10 - 129*	*10/21/24 17:02*	*10/23/24 20:56*	*1*
Terphenyl-d14	*73*		*13 - 150*	*10/21/24 17:02*	*10/23/24 20:56*	*1*
2,4,6-Tribromophenol	*83*		*10 - 150*	*10/21/24 17:02*	*10/23/24 20:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/21/24 08:57	10/21/24 19:56	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 08:57	10/21/24 19:56	1
Anthracene	ND		0.20	0.072	ug/L		10/21/24 08:57	10/21/24 19:56	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 19:56	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 08:57	10/21/24 19:56	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 08:57	10/21/24 19:56	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 08:57	10/21/24 19:56	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: MW24-ROX-101424
Date Collected: 10/14/24 09:25
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 19:56	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/21/24 19:56	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 19:56	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 19:56	1
Fluorene	ND		0.20	0.086	ug/L		10/21/24 08:57	10/21/24 19:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 19:56	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/21/24 08:57	10/21/24 19:56	1
2-Methylnaphthalene	ND	*- UJ	0.20	0.076	ug/L		10/21/24 08:57	10/21/24 19:56	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 19:56	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*50 - 150*	*10/21/24 08:57*	*10/21/24 19:56*	*1*
Nitrobenzene-d5	*103*		*50 - 150*	*10/21/24 08:57*	*10/21/24 19:56*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/21/24 08:57*	*10/21/24 19:56*	*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		0.033	0.019	ug/L		10/18/24 10:16	10/18/24 18:21	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/18/24 10:16	10/18/24 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*10/18/24 10:16*	*10/18/24 18:21*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: P54-ROX-101424
Date Collected: 10/14/24 10:55
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-4
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			10/24/24 20:44	1
Acrolein	ND		20	3.3	ug/L			10/24/24 20:44	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 20:44	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 20:44	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 20:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 20:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 20:44	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 20:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 20:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 20:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 20:44	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 20:44	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 20:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 20:44	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 20:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 20:44	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 20:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 20:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 20:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 20:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 20:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 20:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 20:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 20:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 20:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 20:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 20:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 20:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 20:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 20:44	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 20:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 20:44	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 20:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 20:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 20:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 20:44	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 20:44	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 20:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 20:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 20:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 20:44	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 20:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 20:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 20:44	1

Client Sample ID: P54-ROX-101424
Date Collected: 10/14/24 10:55
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-4
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			10/24/24 20:44	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 20:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 20:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 20:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 20:44	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 20:44	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 20:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 20:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 20:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 20:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 20:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 20:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 20:44	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 20:44	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 20:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 20:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 20:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 20:44	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 20:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 20:44	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*10/24/24 20:44*	*1*
Dibromofluoromethane	*118*		*75 - 126*		*10/24/24 20:44*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*10/24/24 20:44*	*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		10/21/24 17:02	10/23/24 21:18	1
Benzenethiol	ND		9.4	9.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
Benzoic acid	ND		28	23	ug/L		10/21/24 17:02	10/23/24 21:18	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 21:18	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/21/24 17:02	10/23/24 21:18	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/21/24 17:02	10/23/24 21:18	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/21/24 17:02	10/23/24 21:18	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 21:18	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/21/24 17:02	10/23/24 21:18	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 21:18	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 21:18	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:18	1

Client Sample ID: P54-ROX-101424
Date Collected: 10/14/24 10:55
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 21:18	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/21/24 17:02	10/23/24 21:18	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 21:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/21/24 17:02	10/23/24 21:18	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
Indene	ND		9.4	3.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
Isophorone	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/21/24 17:02	10/23/24 21:18	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/21/24 17:02	10/23/24 21:18	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/21/24 17:02	10/23/24 21:18	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 21:18	1
Pentachlorophenol	ND		19	11	ug/L		10/21/24 17:02	10/23/24 21:18	1
Phenol	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:18	1
Pyridine	ND	*- UJ	9.4	9.4	ug/L		10/21/24 17:02	10/23/24 21:18	1
Quinoline	ND		9.4	2.3	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 21:18	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/21/24 17:02	10/23/24 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*21 - 114*	*10/21/24 17:02*	*10/23/24 21:18*	*1*
2-Fluorophenol	*43*		*10 - 105*	*10/21/24 17:02*	*10/23/24 21:18*	*1*
Nitrobenzene-d5	*55*		*16 - 127*	*10/21/24 17:02*	*10/23/24 21:18*	*1*
Phenol-d5	*34*		*10 - 129*	*10/21/24 17:02*	*10/23/24 21:18*	*1*
Terphenyl-d14	*63*		*13 - 150*	*10/21/24 17:02*	*10/23/24 21:18*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/21/24 17:02*	*10/23/24 21:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/21/24 08:57	10/21/24 20:26	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 08:57	10/21/24 20:26	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 08:57	10/21/24 20:26	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:26	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 08:57	10/21/24 20:26	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 08:57	10/21/24 20:26	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 08:57	10/21/24 20:26	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: P54-ROX-101424
Date Collected: 10/14/24 10:55
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:26	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/21/24 20:26	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 20:26	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 20:26	1
Fluorene	ND		0.20	0.087	ug/L		10/21/24 08:57	10/21/24 20:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 20:26	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 08:57	10/21/24 20:26	1
2-Methylnaphthalene	ND	*- UJ	0.20	0.077	ug/L		10/21/24 08:57	10/21/24 20:26	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 20:26	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:26*	*1*
Nitrobenzene-d5	*104*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:26*	*1*
Terphenyl-d14	*80*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		10/18/24 10:16	10/18/24 18:42	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*51 - 149*	*10/18/24 10:16*	*10/18/24 18:42*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Client Sample ID: MW27-ROX-101424
Date Collected: 10/14/24 12:30
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-5
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			10/24/24 21:03	1
Acrolein	ND		20	3.3	ug/L			10/24/24 21:03	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 21:03	1
Benzene	**0.38**	**J**	1.0	0.24	ug/L			10/24/24 21:03	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 21:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 21:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 21:03	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 21:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 21:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 21:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 21:03	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 21:03	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 21:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 21:03	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 21:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 21:03	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 21:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 21:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 21:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 21:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 21:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 21:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 21:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 21:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 21:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 21:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 21:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 21:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 21:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 21:03	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 21:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 21:03	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 21:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 21:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 21:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 21:03	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 21:03	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 21:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 21:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 21:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 21:03	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 21:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 21:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/24/24 21:03	1

Client Sample ID: MW27-ROX-101424
Date Collected: 10/14/24 12:30
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-5
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			10/24/24 21:03	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 21:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 21:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 21:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 21:03	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 21:03	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 21:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 21:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 21:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 21:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 21:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 21:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 21:03	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 21:03	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 21:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 21:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 21:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 21:03	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 21:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 21:03	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 21:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 130*		*10/24/24 21:03*	*1*
Dibromofluoromethane	*116*		*75 - 126*		*10/24/24 21:03*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/24/24 21:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.2	ug/L		10/21/24 17:02	10/23/24 21:40	1
Benzenethiol	ND		9.4	9.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
Benzoic acid	ND		28	23	ug/L		10/21/24 17:02	10/23/24 21:40	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/21/24 17:02	10/23/24 21:40	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 21:40	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/21/24 17:02	10/23/24 21:40	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/21/24 17:02	10/23/24 21:40	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/21/24 17:02	10/23/24 21:40	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 21:40	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/21/24 17:02	10/23/24 21:40	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 21:40	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
Diethyl phthalate	ND		9.4	4.2	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:40	1

Client: AECOM
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW27-ROX-101424
Lab Sample ID: 400-264274-5
Date Collected: 10/14/24 12:30
Matrix: Water
Date Received: 10/15/24 10:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 21:40	1
Di-n-butyl phthalate	**62**	**B**	9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 21:40	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/21/24 17:02	10/23/24 21:40	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		10/21/24 17:02	10/23/24 21:40	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/21/24 17:02	10/23/24 21:40	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:40	1
Indene	ND		9.4	3.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
Isophorone	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 21:40	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/21/24 17:02	10/23/24 21:40	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/21/24 17:02	10/23/24 21:40	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 21:40	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/21/24 17:02	10/23/24 21:40	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 21:40	1
Pentachlorophenol	ND		19	11	ug/L		10/21/24 17:02	10/23/24 21:40	1
Phenol	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 21:40	1
Pyridine	ND	*- UJ	9.4	9.4	ug/L		10/21/24 17:02	10/23/24 21:40	1
Quinoline	ND		9.4	2.3	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 21:40	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/21/24 17:02	10/23/24 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*10/21/24 17:02*	*10/23/24 21:40*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/21/24 17:02*	*10/23/24 21:40*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*10/21/24 17:02*	*10/23/24 21:40*	*1*
Phenol-d5	*36*		*10 - 129*	*10/21/24 17:02*	*10/23/24 21:40*	*1*
Terphenyl-d14	*79*		*13 - 150*	*10/21/24 17:02*	*10/23/24 21:40*	*1*
2,4,6-Tribromophenol	*78*		*10 - 150*	*10/21/24 17:02*	*10/23/24 21:40*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/21/24 08:57	10/21/24 20:57	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 08:57	10/21/24 20:57	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 08:57	10/21/24 20:57	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:57	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 08:57	10/21/24 20:57	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 08:57	10/21/24 20:57	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 08:57	10/21/24 20:57	1

Client Sample ID: MW27-ROX-101424
Date Collected: 10/14/24 12:30
Date Received: 10/15/24 10:10

Lab Sample ID: 400-264274-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:57	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/21/24 20:57	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 20:57	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 20:57	1
Fluorene	ND		0.20	0.086	ug/L		10/21/24 08:57	10/21/24 20:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 20:57	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 08:57	10/21/24 20:57	1
2-Methylnaphthalene	ND	*- UJ	0.20	0.076	ug/L		10/21/24 08:57	10/21/24 20:57	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 20:57	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:57*	*1*
Nitrobenzene-d5	*104*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:57*	*1*
Terphenyl-d14	*81*		*50 - 150*	*10/21/24 08:57*	*10/21/24 20:57*	*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	0.018	ug/L		10/18/24 10:16	10/18/24 19:04	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*10/18/24 10:16*	*10/18/24 19:04*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.

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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

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)
400-264274-1	TB-ROX-101424-8260	101	116	103
400-264274-3	MW24-ROX-101424	101	123	100
400-264274-4	P54-ROX-101424	97	118	100
400-264274-5	MW27-ROX-101424	100	116	96
LCS 400-689000/1028	Lab Control Sample	95	94	99
MB 400-689000/4	Method Blank	106	106	105

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(21-114)	(10-105)	(16-127)	(10-129)	(13-150)	(10-150)
400-264274-3	MW24-ROX-101424	64	45	62	35	73	83
400-264274-4	P54-ROX-101424	60	43	55	34	63	74
400-264274-5	MW27-ROX-101424	70	48	62	36	79	78
LCS 400-688667/16-A	Lab Control Sample	61	45	57	35	72	81
LCS 400-688667/2-A	Lab Control Sample	65	50	66	41	74	89
LCSD 400-688667/17-A	Lab Control Sample Dup	52	42	47	36	73	78
LCSD 400-688667/3-A	Lab Control Sample Dup	60	45	60	38	69	85
MB 400-688667/1-A	Method Blank	70	49	63	37	78	85

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264274-3	MW24-ROX-101424	79	103	79
400-264274-4	P54-ROX-101424	83	104	80
400-264274-5	MW27-ROX-101424	81	104	81
LCS 400-688571/2-A	Lab Control Sample	78	103	83
LCSD 400-688571/3-A	Lab Control Sample Dup	77	106	88
MB 400-688571/1-A	Method Blank	77	100	84

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

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)
400-264274-2	TB-ROX-101424-8011	75
400-264274-3	MW24-ROX-101424	71
400-264274-4	P54-ROX-101424	73
400-264274-5	MW27-ROX-101424	70
LCS 400-688388/2-A	Lab Control Sample	90
LCSD 400-688388/3-A	Lab Control Sample Dup	90
MB 400-688388/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101424-8260
Lab Sample ID: 400-264274-1
Date Collected: 10/14/24 12:00
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689000	10/24/24 17:38	CAR	EET PEN

Client Sample ID: TB-ROX-101424-8011
Lab Sample ID: 400-264274-2
Date Collected: 10/14/24 12:00
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31.7 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 18:00	KR	EET PEN

Client Sample ID: MW24-ROX-101424
Lab Sample ID: 400-264274-3
Date Collected: 10/14/24 09:25
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689000	10/24/24 20:26	CAR	EET PEN
Total/NA	Prep	3511			30.3 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 19:56	DS	EET PEN
Total/NA	Prep	3510C			265 mL	1 mL	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 20:56	S1B	EET PEN
Total/NA	Prep	8011			32.1 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 18:21	KR	EET PEN

Client Sample ID: P54-ROX-101424
Lab Sample ID: 400-264274-4
Date Collected: 10/14/24 10:55
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689000	10/24/24 20:44	CAR	EET PEN
Total/NA	Prep	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 20:26	DS	EET PEN
Total/NA	Prep	3510C			266 mL	1 mL	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 21:18	S1B	EET PEN
Total/NA	Prep	8011			33.8 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 18:42	KR	EET PEN

Client Sample ID: MW27-ROX-101424
Lab Sample ID: 400-264274-5
Date Collected: 10/14/24 12:30
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689000	10/24/24 21:03	CAR	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 20:57	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW27-ROX-101424
Lab Sample ID: 400-264274-5
Date Collected: 10/14/24 12:30
Matrix: Water
Date Received: 10/15/24 10:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			264.8 mL	1 mL	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 21:40	S1B	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 19:04	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688388/1-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:09	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688571/1-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 14:19	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688667/1-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 16:25	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689000/4
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	689000	10/24/24 15:27	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688388/2-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:30	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688571/2-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 14:49	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688667/16-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688667	10/22/24 16:01	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:33	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688667/2-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 16:48	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689000/1028
Date Collected: N/A
Matrix: Water
Date Received: 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	689000	10/24/24 14:22	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688388/3-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:51	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688571/3-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 15:20	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264274-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688667/17-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688667	10/22/24 16:01	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:56	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688667/3-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:11	S1B	EET PEN

Laboratory References:

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

GC/MS VOA

Analysis Batch: 689000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-1	TB-ROX-101424-8260	Total/NA	Water	8260D	
400-264274-3	MW24-ROX-101424	Total/NA	Water	8260D	
400-264274-4	P54-ROX-101424	Total/NA	Water	8260D	
400-264274-5	MW27-ROX-101424	Total/NA	Water	8260D	
MB 400-689000/4	Method Blank	Total/NA	Water	8260D	
LCS 400-689000/1028	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 688571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-3	MW24-ROX-101424	Total/NA	Water	3511	
400-264274-4	P54-ROX-101424	Total/NA	Water	3511	
400-264274-5	MW27-ROX-101424	Total/NA	Water	3511	
MB 400-688571/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688571/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688571/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 688617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-3	MW24-ROX-101424	Total/NA	Water	8270E	688571
400-264274-4	P54-ROX-101424	Total/NA	Water	8270E	688571
400-264274-5	MW27-ROX-101424	Total/NA	Water	8270E	688571
MB 400-688571/1-A	Method Blank	Total/NA	Water	8270E	688571
LCS 400-688571/2-A	Lab Control Sample	Total/NA	Water	8270E	688571
LCSD 400-688571/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688571

Prep Batch: 688667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-3	MW24-ROX-101424	Total/NA	Water	3510C	
400-264274-4	P54-ROX-101424	Total/NA	Water	3510C	
400-264274-5	MW27-ROX-101424	Total/NA	Water	3510C	
MB 400-688667/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688667/16-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688667/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688667/17-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688667/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 688913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-3	MW24-ROX-101424	Total/NA	Water	8270E	688667
400-264274-4	P54-ROX-101424	Total/NA	Water	8270E	688667
400-264274-5	MW27-ROX-101424	Total/NA	Water	8270E	688667
MB 400-688667/1-A	Method Blank	Total/NA	Water	8270E	688667
LCS 400-688667/16-A	Lab Control Sample	Total/NA	Water	8270E	688667
LCS 400-688667/2-A	Lab Control Sample	Total/NA	Water	8270E	688667
LCSD 400-688667/17-A	Lab Control Sample Dup	Total/NA	Water	8270E	688667
LCSD 400-688667/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688667

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264274-1

GC Semi VOA

Prep Batch: 688388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-2	TB-ROX-101424-8011	Total/NA	Water	8011	
400-264274-3	MW24-ROX-101424	Total/NA	Water	8011	
400-264274-4	P54-ROX-101424	Total/NA	Water	8011	
400-264274-5	MW27-ROX-101424	Total/NA	Water	8011	
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264274-2	TB-ROX-101424-8011	Total/NA	Water	8011	688388
400-264274-3	MW24-ROX-101424	Total/NA	Water	8011	688388
400-264274-4	P54-ROX-101424	Total/NA	Water	8011	688388
400-264274-5	MW27-ROX-101424	Total/NA	Water	8011	688388
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	688388
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	688388
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688388

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

Lab Sample ID: MB 400-689000/4
Matrix: Water
Analysis Batch: 689000

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			10/24/24 15:27	1
Acrolein	ND		20	3.3	ug/L			10/24/24 15:27	1
Acrylonitrile	ND		10	2.8	ug/L			10/24/24 15:27	1
Benzene	ND		1.0	0.24	ug/L			10/24/24 15:27	1
Bromobenzene	ND		1.0	0.54	ug/L			10/24/24 15:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/24/24 15:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
Bromoform	ND		5.0	0.25	ug/L			10/24/24 15:27	1
Bromomethane	ND		1.0	0.98	ug/L			10/24/24 15:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/24/24 15:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/24/24 15:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/24/24 15:27	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/24/24 15:27	1
Chloroethane	ND		1.0	0.76	ug/L			10/24/24 15:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/24/24 15:27	1
Chloroform	ND		1.0	0.90	ug/L			10/24/24 15:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/24/24 15:27	1
Chloromethane	ND		1.0	0.40	ug/L			10/24/24 15:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/24/24 15:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/24/24 15:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/24/24 15:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/24/24 15:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/24/24 15:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/24/24 15:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/24/24 15:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/24/24 15:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/24/24 15:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/24/24 15:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/24/24 15:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/24/24 15:27	1
2-Hexanone	ND		25	4.3	ug/L			10/24/24 15:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/24/24 15:27	1
Methylene bromide	ND		5.0	0.22	ug/L			10/24/24 15:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/24/24 15:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/24/24 15:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/24/24 15:27	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:27	1
Naphthalene	ND		5.0	3.0	ug/L			10/24/24 15:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/24/24 15:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/24/24 15:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/24/24 15:27	1
o-Xylene	ND		5.0	3.0	ug/L			10/24/24 15:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/24/24 15:27	1

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

Lab Sample ID: MB 400-689000/4
Matrix: Water
Analysis Batch: 689000

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			10/24/24 15:27	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/24/24 15:27	1
Styrene	ND		1.0	1.0	ug/L			10/24/24 15:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/24/24 15:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/24/24 15:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/24/24 15:27	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/24/24 15:27	1
Toluene	ND		1.0	0.90	ug/L			10/24/24 15:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/24/24 15:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/24/24 15:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/24/24 15:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/24/24 15:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/24/24 15:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/24/24 15:27	1
Trichloroethene	ND		1.0	0.15	ug/L			10/24/24 15:27	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/24/24 15:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/24/24 15:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/24/24 15:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/24/24 15:27	1
Vinyl acetate	ND		25	0.93	ug/L			10/24/24 15:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/24/24 15:27	1
Xylenes, Total	ND		10	6.0	ug/L			10/24/24 15:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 130*		*10/24/24 15:27*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/24/24 15:27*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*10/24/24 15:27*	*1*

Lab Sample ID: LCS 400-689000/1028
Matrix: Water
Analysis Batch: 689000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	188		ug/L		94	43 - 150
Acrolein	500	575		ug/L		115	38 - 150
Acrylonitrile	500	456		ug/L		91	64 - 142
Benzene	50.0	50.7		ug/L		101	70 - 130
Bromobenzene	50.0	50.4		ug/L		101	70 - 132
Bromochloromethane	50.0	48.2		ug/L		96	70 - 130
Bromodichloromethane	50.0	48.5		ug/L		97	67 - 133
Bromoform	50.0	49.9		ug/L		100	57 - 140
Bromomethane	50.0	57.1		ug/L		114	10 - 150
2-Butanone (MEK)	200	203		ug/L		101	61 - 145
Carbon disulfide	50.0	47.7		ug/L		95	61 - 137
Carbon tetrachloride	50.0	54.3		ug/L		109	61 - 137
Chlorobenzene	50.0	50.9		ug/L		102	70 - 130
Chloroethane	50.0	56.2		ug/L		112	55 - 141
2-Chloroethyl vinyl ether	50.0	51.7		ug/L		103	10 - 150

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

Lab Sample ID: LCS 400-689000/1028
Matrix: Water
Analysis Batch: 689000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.1		ug/L		92	69 - 130
1-Chlorohexane	50.0	50.9		ug/L		102	69 - 130
Chloromethane	50.0	51.9		ug/L		104	58 - 137
cis-1,2-Dichloroethene	50.0	50.7		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	53.7		ug/L		107	69 - 132
Dibromochloromethane	50.0	49.2		ug/L		98	67 - 135
1,2-Dichlorobenzene	50.0	54.5		ug/L		109	67 - 130
1,3-Dichlorobenzene	50.0	55.3		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	57.0		ug/L		114	70 - 130
Dichlorodifluoromethane	50.0	51.3		ug/L		103	41 - 146
1,1-Dichloroethane	50.0	46.8		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	47.8		ug/L		96	69 - 130
1,1-Dichloroethene	50.0	50.6		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	49.7		ug/L		99	70 - 130
1,3-Dichloropropane	50.0	52.1		ug/L		104	70 - 130
2,2-Dichloropropane	50.0	47.6		ug/L		95	52 - 135
1,1-Dichloropropene	50.0	53.0		ug/L		106	70 - 130
Ethylbenzene	50.0	52.9		ug/L		106	70 - 130
Ethyl methacrylate	50.0	52.4		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	62.6		ug/L		125	53 - 140
2-Hexanone	200	237		ug/L		118	65 - 137
Isopropylbenzene	50.0	57.6		ug/L		115	70 - 130
Methylene bromide	50.0	51.4		ug/L		103	70 - 130
Methylene Chloride	50.0	48.5		ug/L		97	66 - 135
4-Methyl-2-pentanone (MIBK)	200	205		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	53.0		ug/L		106	66 - 130
m-Xylene & p-Xylene	50.0	55.9		ug/L		112	70 - 130
Naphthalene	50.0	52.4		ug/L		105	47 - 149
n-Butylbenzene	50.0	60.6		ug/L		121	67 - 130
N-Propylbenzene	50.0	56.2		ug/L		112	70 - 130
o-Chlorotoluene	50.0	57.2		ug/L		114	70 - 130
o-Xylene	50.0	55.1		ug/L		110	70 - 130
p-Chlorotoluene	50.0	56.6		ug/L		113	70 - 130
p-Isopropyltoluene	50.0	59.6		ug/L		119	65 - 130
sec-Butylbenzene	50.0	57.5		ug/L		115	66 - 130
Styrene	50.0	54.1		ug/L		108	70 - 130
tert-Butylbenzene	50.0	56.1		ug/L		112	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.9		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.9		ug/L		102	70 - 131
Tetrachloroethene	50.0	56.8		ug/L		114	65 - 130
Toluene	50.0	52.2		ug/L		104	70 - 130
trans-1,2-Dichloroethene	50.0	48.9		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	53.6		ug/L		107	63 - 130
1,2,3-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	53.1		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	68 - 130
1,1,2-Trichloroethane	50.0	51.4		ug/L		103	70 - 130
Trichloroethene	50.0	53.0		ug/L		106	70 - 130
Trichlorofluoromethane	50.0	52.4		ug/L		105	65 - 138

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

Lab Sample ID: LCS 400-689000/1028
Matrix: Water
Analysis Batch: 689000

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	47.7		ug/L		95	70 - 130
1,2,4-Trimethylbenzene	50.0	58.8		ug/L		118	70 - 130
1,3,5-Trimethylbenzene	50.0	57.2		ug/L		114	69 - 130
Vinyl acetate	100	114		ug/L		114	26 - 150
Vinyl chloride	50.0	57.4		ug/L		115	59 - 136
Xylenes, Total	100	111		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 130*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*99*		*64 - 132*

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

Lab Sample ID: MB 400-688667/1-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzenethiol	ND		10	9.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzoic acid	ND		30	24	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzyl alcohol	ND		10	7.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Chloroaniline	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Chlorophenol	ND		10	4.1	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dibenzofuran	ND		10	4.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Diethyl phthalate	ND		10	4.4	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Di-n-butyl phthalate	92.8		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
1,4-Dioxane	ND		10	4.3	ug/L		10/21/24 17:02	10/23/24 16:25	1

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

Lab Sample ID: MB 400-688667/1-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachloroethane	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Indene	ND		10	3.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Isophorone	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Methylphenol	ND		10	3.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Nitroaniline	ND		10	5.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
3-Nitroaniline	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Nitroaniline	ND		10	4.1	ug/L		10/21/24 17:02	10/23/24 16:25	1
Nitrobenzene	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Nitrophenol	ND		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Nitrophenol	ND		10	3.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Pentachlorophenol	ND		20	12	ug/L		10/21/24 17:02	10/23/24 16:25	1
Phenol	ND		10	4.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Pyridine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 16:25	1
Quinoline	ND		10	2.4	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/24 17:02	10/23/24 16:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Phenol-d5	*37*		*10 - 129*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
2,4,6-Tribromophenol	*85*		*10 - 150*	*10/21/24 17:02*	*10/23/24 16:25*	*1*

Lab Sample ID: LCS 400-688667/16-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	87.8		ug/L		73	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

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

Lab Sample ID: LCS 400-688667/2-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	59.2		ug/L		49	10 - 127
Benzoic acid	493	209		ug/L		43	19 - 126
Benzyl alcohol	120	76.9		ug/L		64	17 - 109
Bis(2-chloroethoxy)methane	120	75.3		ug/L		63	24 - 125
Bis(2-chloroethyl)ether	120	64.9		ug/L		54	10 - 121
bis (2-chloroisopropyl) ether	120	81.5		ug/L		68	14 - 123
Bis(2-ethylhexyl) phthalate	120	99.4		ug/L		83	16 - 150
4-Bromophenyl phenyl ether	120	90.8		ug/L		76	17 - 150
Butyl benzyl phthalate	120	96.7		ug/L		81	21 - 150
4-Chloroaniline	120	76.7		ug/L		64	10 - 124
4-Chloro-3-methylphenol	120	94.8		ug/L		79	37 - 131
2-Chloronaphthalene	120	83.3		ug/L		69	24 - 132
2-Chlorophenol	120	83.2		ug/L		69	27 - 124
4-Chlorophenyl phenyl ether	120	88.6		ug/L		74	27 - 147
Dibenz[a,h]acridine	120	122		ug/L		102	40 - 140
Dibenzofuran	120	86.2		ug/L		72	30 - 135
3,3'-Dichlorobenzidine	240	212		ug/L		89	10 - 150
2,4-Dichlorophenol	120	88.9		ug/L		74	33 - 132
Diethyl phthalate	120	93.6		ug/L		78	37 - 145
2,4-Dimethylphenol	120	151		ug/L		126	38 - 132
Dimethyl phthalate	120	92.5		ug/L		77	32 - 137
Di-n-butyl phthalate	120	161		ug/L		134	27 - 150
4,6-Dinitro-ortho-cresol	240	279		ug/L		116	14 - 150
2,4-Dinitrophenol	240	393	*+	ug/L		164	15 - 150
2,4-Dinitrotoluene	120	92.5		ug/L		77	35 - 136
2,6-Dinitrotoluene	120	92.4		ug/L		77	29 - 140
Di-n-octyl phthalate	120	95.8		ug/L		80	26 - 150
1,4-Dioxane	120	27.0		ug/L		23	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	93.8		ug/L		78	23 - 138
Hexachlorobenzene	120	97.7		ug/L		81	10 - 150
Hexachlorocyclopentadiene	120	290	*+	ug/L		242	10 - 124
Hexachloroethane	120	73.0		ug/L		61	10 - 127
Indene	120	90.2		ug/L		75	18 - 150
Isophorone	120	76.1		ug/L		63	28 - 127
2-Methylphenol	120	89.8		ug/L		75	34 - 124
3 & 4 Methylphenol	120	85.4		ug/L		71	32 - 122
2-Nitroaniline	120	92.5		ug/L		77	24 - 139
3-Nitroaniline	120	78.3		ug/L		65	10 - 128
4-Nitroaniline	120	93.0		ug/L		78	28 - 118
Nitrobenzene	120	69.0		ug/L		58	29 - 120
2-Nitrophenol	120	84.1		ug/L		70	25 - 148
4-Nitrophenol	240	174		ug/L		72	12 - 129
N-Nitrosodimethylamine	120	47.7		ug/L		40	10 - 115
N-Nitrosodi-n-propylamine	120	87.0		ug/L		72	24 - 142
N-Nitrosodiphenylamine	119	95.0		ug/L		80	29 - 138
Pentachlorophenol	240	223		ug/L		93	19 - 150
Phenol	120	51.9		ug/L		43	11 - 95
Pyridine	240	27.4		ug/L		11	10 - 82

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

Lab Sample ID: LCS 400-688667/2-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	86.1		ug/L		72	10 - 141		
2,4,5-Trichlorophenol			120	93.1		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	89.4		ug/L		75	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*89*		*10 - 150*

Lab Sample ID: LCSD 400-688667/17-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	73.1		ug/L		61	10 - 140	18	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*52*		*21 - 114*
2-Fluorophenol	*42*		*10 - 105*
Nitrobenzene-d5	*47*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*73*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: LCSD 400-688667/3-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	43.9		ug/L		37	10 - 127	30	40
Benzoic acid			493	239		ug/L		48	19 - 126	13	40
Benzyl alcohol			120	73.0		ug/L		61	17 - 109	5	40
Bis(2-chloroethoxy)methane			120	69.9		ug/L		58	24 - 125	7	40
Bis(2-chloroethyl)ether			120	61.1		ug/L		51	10 - 121	6	40
bis (2-chloroisopropyl) ether			120	73.9		ug/L		62	14 - 123	10	40
Bis(2-ethylhexyl) phthalate			120	92.5		ug/L		77	16 - 150	7	40
4-Bromophenyl phenyl ether			120	86.1		ug/L		72	17 - 150	5	40
Butyl benzyl phthalate			120	88.3		ug/L		74	21 - 150	9	40
4-Chloroaniline			120	72.8		ug/L		61	10 - 124	5	40
4-Chloro-3-methylphenol			120	90.6		ug/L		75	37 - 131	5	40
2-Chloronaphthalene			120	78.2		ug/L		65	24 - 132	6	40
2-Chlorophenol			120	77.3		ug/L		64	27 - 124	7	40
4-Chlorophenyl phenyl ether			120	84.2		ug/L		70	27 - 147	5	40
Dibenz[a,h]acridine			120	123		ug/L		103	40 - 140	1	40
Dibenzofuran			120	81.7		ug/L		68	30 - 135	5	40

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

Lab Sample ID: LCSD 400-688667/3-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine			240	205		ug/L		86	10 - 150	3	40
2,4-Dichlorophenol			120	82.7		ug/L		69	33 - 132	7	40
Diethyl phthalate			120	89.3		ug/L		74	37 - 145	5	40
2,4-Dimethylphenol			120	143		ug/L		119	38 - 132	5	40
Dimethyl phthalate			120	87.0		ug/L		72	32 - 137	6	40
Di-n-butyl phthalate			120	157		ug/L		131	27 - 150	2	40
4,6-Dinitro-ortho-cresol			240	264		ug/L		110	14 - 150	5	40
2,4-Dinitrophenol			240	396	*+	ug/L		165	15 - 150	1	40
2,4-Dinitrotoluene			120	89.1		ug/L		74	35 - 136	4	40
2,6-Dinitrotoluene			120	87.9		ug/L		73	29 - 140	5	40
Di-n-octyl phthalate			120	88.7		ug/L		74	26 - 150	8	40
1,4-Dioxane			120	38.4		ug/L		32	10 - 87	35	40
1,2-Diphenylhydrazine (as Azobenzene)			120	87.7		ug/L		73	23 - 138	7	40
Hexachlorobenzene			120	90.5		ug/L		75	10 - 150	8	40
Hexachlorocyclopentadiene			120	269	*+	ug/L		224	10 - 124	8	40
Hexachloroethane			120	66.9		ug/L		56	10 - 127	9	40
Indene			120	81.5		ug/L		68	18 - 150	10	40
Isophorone			120	71.8		ug/L		60	28 - 127	6	40
2-Methylphenol			120	83.8		ug/L		70	34 - 124	7	40
3 & 4 Methylphenol			120	80.5		ug/L		67	32 - 122	6	40
2-Nitroaniline			120	88.6		ug/L		74	24 - 139	4	40
3-Nitroaniline			120	80.4		ug/L		67	10 - 128	3	40
4-Nitroaniline			120	93.5		ug/L		78	28 - 118	1	40
Nitrobenzene			120	64.6		ug/L		54	29 - 120	7	40
2-Nitrophenol			120	79.7		ug/L		66	25 - 148	5	40
4-Nitrophenol			240	179		ug/L		75	12 - 129	3	40
N-Nitrosodimethylamine			120	47.7		ug/L		40	10 - 115	0	40
N-Nitrosodi-n-propylamine			120	79.2		ug/L		66	24 - 142	9	40
N-Nitrosodiphenylamine			119	88.8		ug/L		75	29 - 138	7	40
Pentachlorophenol			240	215		ug/L		90	19 - 150	3	40
Phenol			120	48.6		ug/L		41	11 - 95	6	40
Pyridine			240	20.2	*-	ug/L		8	10 - 82	30	40
Quinoline			120	80.9		ug/L		68	10 - 141	6	40
2,4,5-Trichlorophenol			120	90.0		ug/L		75	30 - 144	3	40
2,4,6-Trichlorophenol			120	86.7		ug/L		72	27 - 147	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*60*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*69*		*13 - 150*
2,4,6-Tribromophenol	*85*		*10 - 150*

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

Lab Sample ID: MB 400-688571/1-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/21/24 08:57	10/21/24 14:19	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 08:57	10/21/24 14:19	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/21/24 14:19	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 14:19	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 14:19	1
Fluorene	ND		0.20	0.087	ug/L		10/21/24 08:57	10/21/24 14:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 14:19	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 08:57	10/21/24 14:19	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/21/24 08:57	10/21/24 14:19	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 14:19	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*
Nitrobenzene-d5	*100*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*

Lab Sample ID: LCS 400-688571/2-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.31		ug/L		69	50 - 150
Acenaphthylene	3.34	2.40		ug/L		72	50 - 150
Anthracene	3.34	2.35		ug/L		70	50 - 150
Benzo[a]anthracene	3.34	2.85		ug/L		85	50 - 150
Benzo[a]pyrene	3.34	2.60		ug/L		78	50 - 150
Benzo[b]fluoranthene	3.34	2.51		ug/L		75	50 - 150
Benzo[g,h,i]perylene	3.34	2.40		ug/L		72	50 - 150
Benzo[k]fluoranthene	3.34	2.71		ug/L		81	50 - 150
Chrysene	3.34	2.42		ug/L		73	50 - 150
Dibenz(a,h)anthracene	3.34	2.24		ug/L		67	50 - 150
Fluoranthene	3.34	2.32		ug/L		69	50 - 150
Fluorene	3.34	2.38		ug/L		71	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.33		ug/L		70	50 - 150
1-Methylnaphthalene	3.34	1.84		ug/L		55	50 - 150
2-Methylnaphthalene	3.34	1.59	*-	ug/L		48	50 - 150
Phenanthrene	3.34	2.19		ug/L		66	50 - 150
Pyrene	3.34	2.26		ug/L		68	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*50 - 150*

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

Lab Sample ID: LCS 400-688571/2-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688571

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	103		50 - 150
Terphenyl-d14	83		50 - 150

Lab Sample ID: LCSD 400-688571/3-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688571

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			3.34	2.82		ug/L		85	50 - 150	20	40
Acenaphthylene			3.34	2.88		ug/L		86	50 - 150	18	40
Anthracene			3.34	2.73		ug/L		82	50 - 150	15	40
Benzo[a]anthracene			3.34	3.32		ug/L		100	50 - 150	15	40
Benzo[a]pyrene			3.34	2.89		ug/L		87	50 - 150	10	40
Benzo[b]fluoranthene			3.34	2.85		ug/L		86	50 - 150	13	40
Benzo[g,h,i]perylene			3.34	2.65		ug/L		79	50 - 150	10	40
Benzo[k]fluoranthene			3.34	2.90		ug/L		87	50 - 150	7	40
Chrysene			3.34	2.78		ug/L		84	50 - 150	14	40
Dibenz(a,h)anthracene			3.34	2.46		ug/L		74	50 - 150	9	40
Fluoranthene			3.34	2.68		ug/L		80	50 - 150	15	40
Fluorene			3.34	2.89		ug/L		87	50 - 150	19	40
Indeno[1,2,3-cd]pyrene			3.34	2.53		ug/L		76	50 - 150	8	40
1-Methylnaphthalene			3.34	2.35		ug/L		71	50 - 150	24	40
2-Methylnaphthalene			3.34	2.08		ug/L		62	50 - 150	26	40
Phenanthrene			3.34	2.63		ug/L		79	50 - 150	18	40
Pyrene			3.34	2.60		ug/L		78	50 - 150	14	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	77		50 - 150
Nitrobenzene-d5	106		50 - 150
Terphenyl-d14	88		50 - 150

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

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		10/18/24 10:16	10/18/24 14:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/18/24 10:16	10/18/24 14:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	99		51 - 149	10/18/24 10:16	10/18/24 14:09	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-688388/2-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0904		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0839		ug/L		84	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: LCSD 400-688388/3-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0945		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0847		ug/L		84	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/14/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS
	TB-ROX-101424-8260	10/14/2024	0000	Water	2					2	X			
	TB-ROX-101424-8011	10/14/2024	0000	Water	2					2		X		
	MW24-ROX-101424	10/14/2024	0925	Water	6			4		10	X	X	X	X
	P54-ROX-101424	10/14/2024	1055	Water	6			4		10	X	X	X	X
	MW27-ROX-101424	10/14/2024	1230	Water	6			4		10	X	X	X	X

400-264274 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1910, 7252 0547 1909	10/14/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 10-15-24	Time: 1010
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: 1599954, 1599955, 1599956, 1599957

1.3°C IR 11

Version: 19Sept24

Page 44 of 46

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264274-1

Login Number: 264274
List Number: 1
Creator: Beecher (Roberts), Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-264274-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264405-1-Rev.1

Site Name: Roxana

Prepared By and Date: Adelina Gita 11/28/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.		X		

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW28-ROX-101524 MS/MSD	VOCs	Acetone	**32/34**	4	43-150/30
MW28-ROX-101524 MS/MSD	VOCs	2-Butanone (MEK)	**53**/58	10	55-150/30
MW28-ROX-101524 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW28-ROX-101524 MS/MSD	VOCs	Hexachlorobutadiene	108/67	**47**	31-149/36
MW28-ROX-101524 MS/MSD	VOCs	2-Hexanone	**57/60**	5	65-140/30
MW28-ROX-101524 MS/MSD	VOCs	n-Butylbenzene	100/67	**39**	41-142 /31
MW28-ROX-101524 MS/MSD	VOCs	N-Propylbenzene	102/75	**31**	51-138 /30
MW28-ROX-101524 MS/MSD	VOCs	p-Isopropyltoluene	100 /68	**38**	48-139 /30

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**		**Quality Condition**			**Comments**
			Pass	**Fail[1]**	**N/A**	
MW28-ROX-101524 MS/MSD	VOCs	sec-Butylbenzene		101 /70	**36**	50-138 /30

Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Method 8260D (VOCs)
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.

2-Chloroethyl vinyl ether, acetone, 2-butanone (MEK), and 2-hexanone in sample MW28-ROX-101524 were qualified as estimated (UJ).

Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-688667/2-A/3-A	SVOCs	2,4-Dinitrophenol	**164/165**	1	15-150/40
LCS 400-688667/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**242/224**	8	10-124/40
LCS 400-688667/2-A/3-A	SVOCs	Pyridine	**11/8**	30	10-82/40
LCS 400-688776/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**131**/124	6	10-124/40
LCS 400-688776/2-A/3-A	SVOCs	2,4-Dimethylphenol	127/**134**	6	38-132/40
LCS 400-688776/2-A/3-A	SVOCs	Quinoline	45/69	**43**	10-141/40
LCS 400-688776/2-A/3-A	SVOCs	Aniline	19/30	**46**	10-127/40
LCS 400-688571/2-A/3-A	PAHs	2-Methylnaphthalene	**48**/79	18	50-150/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MW28-ROX-101424-EB	SVOCs	Di-n-butyl phthalate	50 µg/L
MW28-ROX-101424-EB	SVOCs	Fluoranthene	0.10 µg/L

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	MW28-ROX-101424-EB / SVOCs / Phenanthrene / 0.067 µg/L MW28-ROX-101424-EB / SVOCs / Pyrene / 0.17 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.				
Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		
	Blank ID: MB 400-688667/1-A / Parameter: SVOCs / Analyte: Di-n-butyl phthalate / Concentration/Amount: 92.8 µg/L Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. Equipment blanks are quality control samples that do not require qualification.				
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8260D (VOCs) The continuing calibration verification (CCV) for 1,1,2,2-tetrachloroethane, 1,2,3-trichloropropane and bromoform were outside evaluation criteria, biased low. The associated results for samples MW28-ROX-101524, ROST3MW-ROX-101524, and ROST4PZE-ROX-101524 were qualified as estimated (UJ).					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/31/2024 11:29:01 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264405-1

Reviewed 11/28/2024
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
10/31/2024 11:29:01 AM

Authorized for release by
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Job Narrative
400-264405-1

Receipt
The samples were received on 10/16/2024 9:06 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1° C and 4.6° C.

GC/MS VOA
Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689261 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 continuing calibration verification (CCV) associated with batch 400-689261 recovered above the upper control limit for Acrolein. 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 400-689261 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane and Bromoform. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-689261 was outside control limits. Sample matrix interference is suspected.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689261 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 400-689261 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101524-8260 (400-264405-1), MW28-ROX-101424-EB (400-264405-3), MW28-ROX-101524 (400-264405-4), ROST3MW-ROX-101524 (400-264405-5) and ROST4PZE-ROX-101524 (400-264405-6). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688913 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Chloro-3-methylphenol, 2,4-Dichlorophenol, 4,6-Dinitro-ortho-cresol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-688913 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-688667 and analytical batch 400-688913 recovered outside control limits for the following analytes: 2,4-Dinitrophenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688667 and analytical batch 400-688913 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Job ID: 400-264405-1 (Continued) Eurofins Pensacola

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: 2,4-Dimethylphenol. 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: Quinoline and Aniline.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689342 recovered above the upper control limit for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 400-681899 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The following samples and corresponding method blank contained common lab contaminant di-n-butyl phthalate above the reporting limit (RL) but less than regulatory limits. Data has been reported accordingly and can be re-extracted upon request. MW28-ROX-101424-EB (400-264405-3) and (MB 400-688667/1-A)

Method 8270E: The following analyte(s) recovered outside control limits in one of two LCS control samples associated with preparation batch 400-688571 and analytical batch 400-688617. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264405-1	TB-ROX-101524-8260	Water	10/15/24 12:00	10/16/24 09:06
400-264405-2	TB-ROX-101524-8011	Water	10/15/24 12:00	10/16/24 09:06
400-264405-3	MW28-ROX-101424-EB	Water	10/14/24 13:45	10/16/24 09:06
400-264405-4	MW28-ROX-101524	Water	10/15/24 09:50	10/16/24 09:06
400-264405-5	ROST3MW-ROX-101524	Water	10/15/24 11:10	10/16/24 09:06
400-264405-6	ROST4PZE-ROX-101524	Water	10/15/24 13:15	10/16/24 09:06

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: TB-ROX-101524-8260 — Lab Sample ID: 400-264405-1

No Detections.

Client Sample ID: TB-ROX-101524-8011 — Lab Sample ID: 400-264405-2

No Detections.

Client Sample ID: MW28-ROX-101424-EB — Lab Sample ID: 400-264405-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Di-n-butyl phthalate	50	B	9.4	4.3	ug/L	1		8270E	Total/NA
Fluoranthene	0.10	J	0.20	0.031	ug/L	1		8270E	Total/NA
Phenanthrene	0.067	J	0.20	0.043	ug/L	1		8270E	Total/NA
Pyrene	0.17	J	0.20	0.039	ug/L	1		8270E	Total/NA

Client Sample ID: MW28-ROX-101524 — Lab Sample ID: 400-264405-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.25	J	1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	0.52	J	1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: ROST3MW-ROX-101524 — Lab Sample ID: 400-264405-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.11	J	0.20	0.084	ug/L	1		8270E	Total/NA
Fluorene	0.12	J	0.20	0.086	ug/L	1		8270E	Total/NA

Client Sample ID: ROST4PZE-ROX-101524 — Lab Sample ID: 400-264405-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	0.17	J	0.20	0.072	ug/L	1		8270E	Total/NA
Fluoranthene	0.040	J	0.20	0.032	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	0.17	J	0.20	0.065	ug/L	1		8270E	Total/NA
Phenanthrene	0.26		0.20	0.043	ug/L	1		8270E	Total/NA
Pyrene	0.11	J	0.20	0.039	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: TB-ROX-101524-8260
Date Collected: 10/15/24 12:00
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-1
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			10/26/24 16:49	1
Acrolein	ND		20	3.3	ug/L			10/26/24 16:49	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 16:49	1
Benzene	ND		1.0	0.24	ug/L			10/26/24 16:49	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 16:49	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 16:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
Bromoform	ND		5.0	0.25	ug/L			10/26/24 16:49	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 16:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/26/24 16:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 16:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 16:49	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 16:49	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 16:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/26/24 16:49	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 16:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 16:49	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 16:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 16:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 16:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 16:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 16:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 16:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 16:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 16:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 16:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 16:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 16:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 16:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 16:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/26/24 16:49	1
2-Hexanone	ND		25	4.3	ug/L			10/26/24 16:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 16:49	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 16:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 16:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/26/24 16:49	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 16:49	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 16:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/26/24 16:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/26/24 16:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 16:49	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 16:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 16:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/26/24 16:49	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: TB-ROX-101524-8260
Date Collected: 10/15/24 12:00
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-1
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			10/26/24 16:49	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 16:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 16:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 16:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/26/24 16:49	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 16:49	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 16:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 16:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 16:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 16:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 16:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 16:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 16:49	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 16:49	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 16:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/26/24 16:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 16:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 16:49	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 16:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 16:49	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/26/24 16:49*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/26/24 16:49*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/26/24 16:49*	*1*

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101524-8011
Lab Sample ID: 400-264405-2
Date Collected: 10/15/24 12:00
Matrix: Water
Date Received: 10/16/24 09:06

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		10/18/24 10:16	10/18/24 19:25	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/18/24 10:16	10/18/24 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*10/18/24 10:16*	*10/18/24 19:25*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: MW28-ROX-101424-EB
Date Collected: 10/14/24 13:45
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-3
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			10/26/24 17:16	1
Acrolein	ND		20	3.3	ug/L			10/26/24 17:16	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 17:16	1
Benzene	ND		1.0	0.24	ug/L			10/26/24 17:16	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 17:16	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 17:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
Bromoform	ND		5.0	0.25	ug/L			10/26/24 17:16	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 17:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/26/24 17:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 17:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 17:16	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 17:16	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 17:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/26/24 17:16	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 17:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 17:16	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 17:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 17:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 17:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 17:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 17:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 17:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 17:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 17:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 17:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 17:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 17:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 17:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 17:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/26/24 17:16	1
2-Hexanone	ND		25	4.3	ug/L			10/26/24 17:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 17:16	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 17:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 17:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 17:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/26/24 17:16	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 17:16	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 17:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/26/24 17:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/26/24 17:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 17:16	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 17:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 17:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/26/24 17:16	1

Client Sample ID: MW28-ROX-101424-EB
Date Collected: 10/14/24 13:45
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-3
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			10/26/24 17:16	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 17:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 17:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 17:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/26/24 17:16	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 17:16	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 17:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 17:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 17:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 17:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 17:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 17:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 17:16	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 17:16	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 17:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/26/24 17:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 17:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 17:16	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 17:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 17:16	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 130*		*10/26/24 17:16*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/26/24 17:16*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/26/24 17:16*	*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		10/21/24 17:02	10/23/24 22:03	1
Benzenethiol	ND		9.4	9.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
Benzoic acid	ND		28	23	ug/L		10/21/24 17:02	10/23/24 22:03	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/21/24 17:02	10/23/24 22:03	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 22:03	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/21/24 17:02	10/23/24 22:03	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/21/24 17:02	10/23/24 22:03	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 22:03	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/21/24 17:02	10/23/24 22:03	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 22:03	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 22:03	1

Client Sample ID: MW28-ROX-101424-EB
Date Collected: 10/14/24 13:45
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
Di-n-butyl phthalate	**50**	**B**	9.4	4.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/21/24 17:02	10/23/24 22:03	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/21/24 17:02	10/23/24 22:03	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/21/24 17:02	10/23/24 22:03	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 22:03	1
Indene	ND		9.4	3.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
Isophorone	ND		9.4	4.9	ug/L		10/21/24 17:02	10/23/24 22:03	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/21/24 17:02	10/23/24 22:03	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/21/24 17:02	10/23/24 22:03	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/21/24 17:02	10/23/24 22:03	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/21/24 17:02	10/23/24 22:03	1
Pentachlorophenol	ND		19	11	ug/L		10/21/24 17:02	10/23/24 22:03	1
Phenol	ND		9.4	4.0	ug/L		10/21/24 17:02	10/23/24 22:03	1
Pyridine	ND	*-	9.4	9.4	ug/L		10/21/24 17:02	10/23/24 22:03	1
Quinoline	ND		9.4	2.3	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/21/24 17:02	10/23/24 22:03	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/21/24 17:02	10/23/24 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*21 - 114*	*10/21/24 17:02*	*10/23/24 22:03*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/21/24 17:02*	*10/23/24 22:03*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*10/21/24 17:02*	*10/23/24 22:03*	*1*
Phenol-d5	*34*		*10 - 129*	*10/21/24 17:02*	*10/23/24 22:03*	*1*
Terphenyl-d14	*69*		*13 - 150*	*10/21/24 17:02*	*10/23/24 22:03*	*1*
2,4,6-Tribromophenol	*73*		*10 - 150*	*10/21/24 17:02*	*10/23/24 22:03*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.083	ug/L		10/21/24 08:57	10/22/24 00:29	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/21/24 08:57	10/22/24 00:29	1
Anthracene	ND		0.20	0.071	ug/L		10/21/24 08:57	10/22/24 00:29	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/22/24 00:29	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/22/24 00:29	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/21/24 08:57	10/22/24 00:29	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 08:57	10/22/24 00:29	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: MW28-ROX-101424-EB
Date Collected: 10/14/24 13:45
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/22/24 00:29	1
Chrysene	ND		0.20	0.038	ug/L		10/21/24 08:57	10/22/24 00:29	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/21/24 08:57	10/22/24 00:29	1
Fluoranthene	**0.10**	**J**	0.20	0.031	ug/L		10/21/24 08:57	10/22/24 00:29	1
Fluorene	ND		0.20	0.085	ug/L		10/21/24 08:57	10/22/24 00:29	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/21/24 08:57	10/22/24 00:29	1
1-Methylnaphthalene	ND		0.20	0.064	ug/L		10/21/24 08:57	10/22/24 00:29	1
2-Methylnaphthalene	ND	*-	0.20	0.075	ug/L		10/21/24 08:57	10/22/24 00:29	1
Phenanthrene	**0.067**	**J**	0.20	0.043	ug/L		10/21/24 08:57	10/22/24 00:29	1
Pyrene	**0.17**	**J**	0.20	0.039	ug/L		10/21/24 08:57	10/22/24 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 150*	*10/21/24 08:57*	*10/22/24 00:29*	*1*
Nitrobenzene-d5	*110*		*50 - 150*	*10/21/24 08:57*	*10/22/24 00:29*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/21/24 08:57*	*10/22/24 00:29*	*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		0.035	0.020	ug/L		10/18/24 10:16	10/18/24 19:46	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/18/24 10:16	10/18/24 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*10/18/24 10:16*	*10/18/24 19:46*	*1*

Client Sample ID: MW28-ROX-101524

Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/26/24 15:04	1
Acrolein	ND		20	3.3	ug/L			10/26/24 15:04	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 15:04	1
Benzene	**0.25**	**J**	1.0	0.24	ug/L			10/26/24 15:04	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 15:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 15:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 15:04	1
Bromoform	ND	UJ	5.0	0.25	ug/L			10/26/24 15:04	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 15:04	1
2-Butanone (MEK)	ND	F1 UJ	25	2.6	ug/L			10/26/24 15:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 15:04	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 15:04	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 15:04	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 15:04	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/26/24 15:04	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 15:04	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 15:04	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 15:04	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 15:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 15:04	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 15:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 15:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 15:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 15:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 15:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 15:04	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 15:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 15:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 15:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 15:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 15:04	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 15:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 15:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 15:04	1
Hexachlorobutadiene	ND	F2	5.0	0.90	ug/L			10/26/24 15:04	1
2-Hexanone	ND	F1 UJ	25	4.3	ug/L			10/26/24 15:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 15:04	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 15:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 15:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 15:04	1
Methyl tert-butyl ether	**0.52**	**J**	1.0	0.22	ug/L			10/26/24 15:04	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 15:04	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 15:04	1
n-Butylbenzene	ND	F2	1.0	0.76	ug/L			10/26/24 15:04	1
N-Propylbenzene	ND	F2	1.0	0.69	ug/L			10/26/24 15:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 15:04	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 15:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 15:04	1
p-Isopropyltoluene	ND	F2	1.0	0.71	ug/L			10/26/24 15:04	1

Client Sample ID: MW28-ROX-101524
Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND	F2	1.0	0.70	ug/L			10/26/24 15:04	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 15:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 15:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 15:04	1
1,1,2,2-Tetrachloroethane	ND	UJ	1.0	0.50	ug/L			10/26/24 15:04	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 15:04	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 15:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 15:04	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 15:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 15:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 15:04	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 15:04	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 15:04	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 15:04	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 15:04	1
1,2,3-Trichloropropane	ND	UJ	5.0	0.84	ug/L			10/26/24 15:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 15:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 15:04	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 15:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 15:04	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/26/24 15:04*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/26/24 15:04*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/26/24 15:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.5	8.2	ug/L		10/22/24 15:45	10/28/24 19:22	1
Benzenethiol	ND		9.5	9.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
Benzoic acid	ND		28	23	ug/L		10/22/24 15:45	10/28/24 19:22	1
Benzyl alcohol	ND		9.5	6.9	ug/L		10/22/24 15:45	10/28/24 19:22	1
Bis(2-chloroethoxy)methane	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		10/22/24 15:45	10/28/24 19:22	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		10/22/24 15:45	10/28/24 19:22	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Bromophenyl phenyl ether	ND		9.5	8.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Chloroaniline	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		10/22/24 15:45	10/28/24 19:22	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		10/22/24 15:45	10/28/24 19:22	1
2-Chlorophenol	ND		9.5	3.9	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		10/22/24 15:45	10/28/24 19:22	1
Dibenz[a,h]acridine	ND		9.5	2.6	ug/L		10/22/24 15:45	10/28/24 19:22	1
Dibenzofuran	ND		9.5	3.8	ug/L		10/22/24 15:45	10/28/24 19:22	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
Diethyl phthalate	ND		9.5	4.2	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4-Dimethylphenol	ND	*+	9.5	4.9	ug/L		10/22/24 15:45	10/28/24 19:22	1

Client Sample ID: MW28-ROX-101524
Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	4.0	ug/L		10/22/24 15:45	10/28/24 19:22	1
Di-n-butyl phthalate	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4-Dinitrophenol	ND		28	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4-Dinitrotoluene	ND		9.5	4.8	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		10/22/24 15:45	10/28/24 19:22	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		10/22/24 15:45	10/28/24 19:22	1
1,4-Dioxane	ND		9.5	4.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		10/22/24 15:45	10/28/24 19:22	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/22/24 15:45	10/28/24 19:22	1
Hexachloroethane	ND		9.5	4.9	ug/L		10/22/24 15:45	10/28/24 19:22	1
Indene	ND		9.5	3.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
Isophorone	ND		9.5	4.9	ug/L		10/22/24 15:45	10/28/24 19:22	1
2-Methylphenol	ND		9.5	3.0	ug/L		10/22/24 15:45	10/28/24 19:22	1
3 & 4 Methylphenol	ND		19	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
2-Nitroaniline	ND		9.5	4.7	ug/L		10/22/24 15:45	10/28/24 19:22	1
3-Nitroaniline	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Nitroaniline	ND		9.5	3.9	ug/L		10/22/24 15:45	10/28/24 19:22	1
Nitrobenzene	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
2-Nitrophenol	ND		9.5	4.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
4-Nitrophenol	ND		9.5	3.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		10/22/24 15:45	10/28/24 19:22	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		10/22/24 15:45	10/28/24 19:22	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		10/22/24 15:45	10/28/24 19:22	1
Pentachlorophenol	ND		19	11	ug/L		10/22/24 15:45	10/28/24 19:22	1
Phenol	ND		9.5	4.0	ug/L		10/22/24 15:45	10/28/24 19:22	1
Pyridine	ND		9.5	9.5	ug/L		10/22/24 15:45	10/28/24 19:22	1
Quinoline	ND	*1	9.5	2.3	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		10/22/24 15:45	10/28/24 19:22	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/22/24 15:45	10/28/24 19:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*21 - 114*	*10/22/24 15:45*	*10/28/24 19:22*	*1*
2-Fluorophenol	*44*		*10 - 105*	*10/22/24 15:45*	*10/28/24 19:22*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*10/22/24 15:45*	*10/28/24 19:22*	*1*
Phenol-d5	*30*		*10 - 129*	*10/22/24 15:45*	*10/28/24 19:22*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/22/24 15:45*	*10/28/24 19:22*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/22/24 15:45*	*10/28/24 19:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.083	ug/L		10/21/24 12:30	10/22/24 15:08	1
Acenaphthylene	ND		0.19	0.046	ug/L		10/21/24 12:30	10/22/24 15:08	1
Anthracene	ND		0.19	0.071	ug/L		10/21/24 12:30	10/22/24 15:08	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/21/24 12:30	10/22/24 15:08	1
Benzo[a]pyrene	ND		0.19	0.044	ug/L		10/21/24 12:30	10/22/24 15:08	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/21/24 12:30	10/22/24 15:08	1
Benzo[g,h,i]perylene	ND		0.19	0.051	ug/L		10/21/24 12:30	10/22/24 15:08	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: MW28-ROX-101524
Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/21/24 12:30	10/22/24 15:08	1
Chrysene	ND		0.19	0.038	ug/L		10/21/24 12:30	10/22/24 15:08	1
Dibenz(a,h)anthracene	ND		0.19	0.043	ug/L		10/21/24 12:30	10/22/24 15:08	1
Fluoranthene	ND		0.19	0.031	ug/L		10/21/24 12:30	10/22/24 15:08	1
Fluorene	ND		0.19	0.085	ug/L		10/21/24 12:30	10/22/24 15:08	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/21/24 12:30	10/22/24 15:08	1
1-Methylnaphthalene	ND		0.19	0.064	ug/L		10/21/24 12:30	10/22/24 15:08	1
2-Methylnaphthalene	ND		0.19	0.075	ug/L		10/21/24 12:30	10/22/24 15:08	1
Phenanthrene	ND		0.19	0.043	ug/L		10/21/24 12:30	10/22/24 15:08	1
Pyrene	ND		0.19	0.039	ug/L		10/21/24 12:30	10/22/24 15:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:08*	*1*
Nitrobenzene-d5	*108*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:08*	*1*
Terphenyl-d14	*80*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:08*	*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		0.034	0.019	ug/L		10/18/24 10:16	10/18/24 20:07	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/18/24 10:16	10/18/24 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*10/18/24 10:16*	*10/18/24 20:07*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: ROST3MW-ROX-101524
Date Collected: 10/15/24 11:10
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-5
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			10/26/24 19:01	1
Acrolein	ND		20	3.3	ug/L			10/26/24 19:01	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 19:01	1
Benzene	ND		1.0	0.24	ug/L			10/26/24 19:01	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 19:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 19:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 19:01	1
Bromoform	ND	UJ	5.0	0.25	ug/L			10/26/24 19:01	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 19:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/26/24 19:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 19:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 19:01	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 19:01	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 19:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/26/24 19:01	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 19:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 19:01	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 19:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 19:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 19:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 19:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 19:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 19:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 19:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 19:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 19:01	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 19:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 19:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:01	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 19:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 19:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 19:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/26/24 19:01	1
2-Hexanone	ND		25	4.3	ug/L			10/26/24 19:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 19:01	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 19:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 19:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/26/24 19:01	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 19:01	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 19:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/26/24 19:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/26/24 19:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 19:01	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 19:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 19:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/26/24 19:01	1

Client Sample ID: ROST3MW-ROX-101524
Lab Sample ID: 400-264405-5

Date Collected: 10/15/24 11:10
Matrix: Water
Date Received: 10/16/24 09:06

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			10/26/24 19:01	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 19:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 19:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 19:01	1
1,1,2,2-Tetrachloroethane	ND	UJ	1.0	0.50	ug/L			10/26/24 19:01	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 19:01	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 19:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 19:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 19:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 19:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 19:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 19:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 19:01	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 19:01	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 19:01	1
1,2,3-Trichloropropane	ND	UJ	5.0	0.84	ug/L			10/26/24 19:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 19:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 19:01	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 19:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 19:01	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 130*		*10/26/24 19:01*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*10/26/24 19:01*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/26/24 19:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.3	8.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
Benzenethiol	ND		9.3	9.2	ug/L		10/22/24 15:45	10/28/24 19:47	1
Benzoic acid	ND		28	22	ug/L		10/22/24 15:45	10/28/24 19:47	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/22/24 15:45	10/28/24 19:47	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/22/24 15:45	10/28/24 19:47	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/22/24 15:45	10/28/24 19:47	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/22/24 15:45	10/28/24 19:47	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Chloro-3-methylphenol	ND		9.3	5.0	ug/L		10/22/24 15:45	10/28/24 19:47	1
2-Chloronaphthalene	ND		9.3	3.6	ug/L		10/22/24 15:45	10/28/24 19:47	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Chlorophenyl phenyl ether	ND		9.3	3.5	ug/L		10/22/24 15:45	10/28/24 19:47	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/22/24 15:45	10/28/24 19:47	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/22/24 15:45	10/28/24 19:47	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/22/24 15:45	10/28/24 19:47	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4-Dimethylphenol	ND	*+	9.3	4.9	ug/L		10/22/24 15:45	10/28/24 19:47	1

Client Sample ID: ROST3MW-ROX-101524
Date Collected: 10/15/24 11:10
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/22/24 15:45	10/28/24 19:47	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/22/24 15:45	10/28/24 19:47	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/22/24 15:45	10/28/24 19:47	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/22/24 15:45	10/28/24 19:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
Hexachlorobenzene	ND		9.3	9.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/22/24 15:45	10/28/24 19:47	1
Hexachloroethane	ND		9.3	4.9	ug/L		10/22/24 15:45	10/28/24 19:47	1
Indene	ND		9.3	3.4	ug/L		10/22/24 15:45	10/28/24 19:47	1
Isophorone	ND		9.3	4.9	ug/L		10/22/24 15:45	10/28/24 19:47	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/22/24 15:45	10/28/24 19:47	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/22/24 15:45	10/28/24 19:47	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/22/24 15:45	10/28/24 19:47	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/22/24 15:45	10/28/24 19:47	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
N-Nitrosodimethylamine	ND		9.3	2.1	ug/L		10/22/24 15:45	10/28/24 19:47	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
N-Nitrosodiphenylamine	ND		9.3	3.5	ug/L		10/22/24 15:45	10/28/24 19:47	1
Pentachlorophenol	ND		19	11	ug/L		10/22/24 15:45	10/28/24 19:47	1
Phenol	ND		9.3	3.9	ug/L		10/22/24 15:45	10/28/24 19:47	1
Pyridine	ND		9.3	9.3	ug/L		10/22/24 15:45	10/28/24 19:47	1
Quinoline	ND	*1	9.3	2.2	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/22/24 15:45	10/28/24 19:47	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/22/24 15:45	10/28/24 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*10/22/24 15:45*	*10/28/24 19:47*	*1*
2-Fluorophenol	*42*		*10 - 105*	*10/22/24 15:45*	*10/28/24 19:47*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*10/22/24 15:45*	*10/28/24 19:47*	*1*
Phenol-d5	*28*		*10 - 129*	*10/22/24 15:45*	*10/28/24 19:47*	*1*
Terphenyl-d14	*74*		*13 - 150*	*10/22/24 15:45*	*10/28/24 19:47*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*10/22/24 15:45*	*10/28/24 19:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.11**	**J**	0.20	0.084	ug/L		10/21/24 12:30	10/22/24 15:38	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 12:30	10/22/24 15:38	1
Anthracene	ND		0.20	0.072	ug/L		10/21/24 12:30	10/22/24 15:38	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 15:38	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 12:30	10/22/24 15:38	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 12:30	10/22/24 15:38	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 12:30	10/22/24 15:38	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: ROST3MW-ROX-101524
Date Collected: 10/15/24 11:10
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 15:38	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 15:38	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 15:38	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 15:38	1
Fluorene	**0.12**	**J**	0.20	0.086	ug/L		10/21/24 12:30	10/22/24 15:38	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 15:38	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/21/24 12:30	10/22/24 15:38	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/21/24 12:30	10/22/24 15:38	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 15:38	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:38*	*1*
Nitrobenzene-d5	*111*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:38*	*1*
Terphenyl-d14	*77*		*50 - 150*	*10/21/24 12:30*	*10/22/24 15:38*	*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		0.037	0.021	ug/L		10/18/24 10:16	10/18/24 20:28	1
1,2-Dibromoethane	ND		0.024	0.018	ug/L		10/18/24 10:16	10/18/24 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/18/24 10:16*	*10/18/24 20:28*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: ROST4PZE-ROX-101524
Date Collected: 10/15/24 13:15
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-6
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			10/26/24 19:27	1
Acrolein	ND		20	3.3	ug/L			10/26/24 19:27	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 19:27	1
Benzene	ND		1.0	0.24	ug/L			10/26/24 19:27	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 19:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 19:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 19:27	1
Bromoform	ND	UJ	5.0	0.25	ug/L			10/26/24 19:27	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 19:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/26/24 19:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 19:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 19:27	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 19:27	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 19:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/26/24 19:27	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 19:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 19:27	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 19:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 19:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 19:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 19:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 19:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 19:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 19:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 19:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 19:27	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 19:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 19:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 19:27	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 19:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 19:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 19:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/26/24 19:27	1
2-Hexanone	ND		25	4.3	ug/L			10/26/24 19:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 19:27	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 19:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 19:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 19:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/26/24 19:27	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 19:27	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 19:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/26/24 19:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/26/24 19:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 19:27	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 19:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 19:27	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/26/24 19:27	1

Client Sample ID: ROST4PZE-ROX-101524
Date Collected: 10/15/24 13:15
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-6
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			10/26/24 19:27	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 19:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 19:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 19:27	1
1,1,2,2-Tetrachloroethane	ND	UJ	1.0	0.50	ug/L			10/26/24 19:27	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 19:27	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 19:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 19:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 19:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 19:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 19:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 19:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 19:27	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 19:27	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 19:27	1
1,2,3-Trichloropropane	ND	UJ	5.0	0.84	ug/L			10/26/24 19:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 19:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 19:27	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 19:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 19:27	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/26/24 19:27*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/26/24 19:27*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/26/24 19:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.4	8.2	ug/L		10/22/24 15:45	10/28/24 20:12	1
Benzenethiol	ND		9.4	9.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
Benzoic acid	ND		28	23	ug/L		10/22/24 15:45	10/28/24 20:12	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/22/24 15:45	10/28/24 20:12	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/22/24 15:45	10/28/24 20:12	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
Butyl benzyl phthalate	ND		9.4	5.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/22/24 15:45	10/28/24 20:12	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/22/24 15:45	10/28/24 20:12	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/22/24 15:45	10/28/24 20:12	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/22/24 15:45	10/28/24 20:12	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/22/24 15:45	10/28/24 20:12	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/22/24 15:45	10/28/24 20:12	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4-Dimethylphenol	ND	*+	9.4	4.9	ug/L		10/22/24 15:45	10/28/24 20:12	1

Client Sample ID: ROST4PZE-ROX-101524
Date Collected: 10/15/24 13:15
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/22/24 15:45	10/28/24 20:12	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/22/24 15:45	10/28/24 20:12	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/22/24 15:45	10/28/24 20:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/22/24 15:45	10/28/24 20:12	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
Indene	ND		9.4	3.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
Isophorone	ND		9.4	4.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/22/24 15:45	10/28/24 20:12	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/22/24 15:45	10/28/24 20:12	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/22/24 15:45	10/28/24 20:12	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/22/24 15:45	10/28/24 20:12	1
Pentachlorophenol	ND		19	11	ug/L		10/22/24 15:45	10/28/24 20:12	1
Phenol	ND		9.4	3.9	ug/L		10/22/24 15:45	10/28/24 20:12	1
Pyridine	ND		9.4	9.4	ug/L		10/22/24 15:45	10/28/24 20:12	1
Quinoline	ND	*1	9.4	2.3	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/22/24 15:45	10/28/24 20:12	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/22/24 15:45	10/28/24 20:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*21 - 114*	*10/22/24 15:45*	*10/28/24 20:12*	*1*
2-Fluorophenol	*39*		*10 - 105*	*10/22/24 15:45*	*10/28/24 20:12*	*1*
Nitrobenzene-d5	*57*		*16 - 127*	*10/22/24 15:45*	*10/28/24 20:12*	*1*
Phenol-d5	*29*		*10 - 129*	*10/22/24 15:45*	*10/28/24 20:12*	*1*
Terphenyl-d14	*95*		*13 - 150*	*10/22/24 15:45*	*10/28/24 20:12*	*1*
2,4,6-Tribromophenol	*81*		*10 - 150*	*10/22/24 15:45*	*10/28/24 20:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/21/24 12:30	10/22/24 16:09	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/21/24 12:30	10/22/24 16:09	1
Anthracene	**0.17**	**J**	0.20	0.072	ug/L		10/21/24 12:30	10/22/24 16:09	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:09	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 16:09	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/21/24 12:30	10/22/24 16:09	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 12:30	10/22/24 16:09	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Client Sample ID: ROST4PZE-ROX-101524
Date Collected: 10/15/24 13:15
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:09	1
Chrysene	ND		0.20	0.038	ug/L		10/21/24 12:30	10/22/24 16:09	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 16:09	1
Fluoranthene	**0.040**	**J**	0.20	0.032	ug/L		10/21/24 12:30	10/22/24 16:09	1
Fluorene	ND		0.20	0.086	ug/L		10/21/24 12:30	10/22/24 16:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 16:09	1
1-Methylnaphthalene	**0.17**	**J**	0.20	0.065	ug/L		10/21/24 12:30	10/22/24 16:09	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/21/24 12:30	10/22/24 16:09	1
Phenanthrene	**0.26**		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 16:09	1
Pyrene	**0.11**	**J**	0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:09*	*1*
Nitrobenzene-d5	*104*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:09*	*1*
Terphenyl-d14	*79*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/18/24 10:16	10/18/24 20:48	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*10/18/24 10:16*	*10/18/24 20:48*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

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)
400-264405-1	TB-ROX-101524-8260	95	100	94
400-264405-3	MW28-ROX-101424-EB	96	100	94
400-264405-4	MW28-ROX-101524	95	100	95
400-264405-4 MS	MW28-ROX-101524	93	97	96
400-264405-4 MSD	MW28-ROX-101524	94	99	98
400-264405-5	ROST3MW-ROX-101524	97	98	97
400-264405-6	ROST4PZE-ROX-101524	95	100	97
LCS 400-689261/1002	Lab Control Sample	87	102	98
MB 400-689261/4	Method Blank	95	101	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)
400-264405-3	MW28-ROX-101424-EB	56	45	53	34	69	73
400-264405-4	MW28-ROX-101524	65	44	62	30	78	74
400-264405-5	ROST3MW-ROX-101524	62	42	56	28	74	76
400-264405-6	ROST4PZE-ROX-101524	60	39	57	29	95	81
LCS 400-688667/16-A	Lab Control Sample	61	45	57	35	72	81
LCS 400-688667/2-A	Lab Control Sample	65	50	66	41	74	89
LCS 400-688776/2-A	Lab Control Sample	64	47	71	36	76	82
LCS 400-688776/4-A	Lab Control Sample	50	28	52	23	72	65
LCSD 400-688667/17-A	Lab Control Sample Dup	52	42	47	36	73	78
LCSD 400-688667/3-A	Lab Control Sample Dup	60	45	60	38	69	85
LCSD 400-688776/3-A	Lab Control Sample Dup	60	46	73	36	71	80
LCSD 400-688776/5-A	Lab Control Sample Dup	54	41	59	29	75	70
MB 400-688667/1-A	Method Blank	70	49	63	37	78	85
MB 400-688776/1-A	Method Blank	48	31	58	20	78	66

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264405-3	MW28-ROX-101424-EB	81	110	79

Surrogate Summary

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264405-4	MW28-ROX-101524	77	108	80
400-264405-5	ROST3MW-ROX-101524	81	111	77
400-264405-6	ROST4PZE-ROX-101524	77	104	79
LCS 400-688571/2-A	Lab Control Sample	78	103	83
LCS 400-688611/2-A	Lab Control Sample	77	112	78
LCSD 400-688571/3-A	Lab Control Sample Dup	77	106	88
LCSD 400-688611/3-A	Lab Control Sample Dup	85	115	82
MB 400-688571/1-A	Method Blank	77	100	84
MB 400-688611/1-A	Method Blank	82	104	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264405-2	TB-ROX-101524-8011	71
400-264405-3	MW28-ROX-101424-EB	67
400-264405-4	MW28-ROX-101524	71
400-264405-5	ROST3MW-ROX-101524	65
400-264405-6	ROST4PZE-ROX-101524	68
LCS 400-688388/2-A	Lab Control Sample	90
LCSD 400-688388/3-A	Lab Control Sample Dup	90
MB 400-688388/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101524-8260
Lab Sample ID: 400-264405-1
Date Collected: 10/15/24 12:00
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 16:49	IMC	EET PEN

Client Sample ID: TB-ROX-101524-8011
Lab Sample ID: 400-264405-2
Date Collected: 10/15/24 12:00
Matrix: Water
Date Received: 10/16/24 09:06

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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 19:25	KR	EET PEN

Client Sample ID: MW28-ROX-101424-EB
Lab Sample ID: 400-264405-3
Date Collected: 10/14/24 13:45
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 17:16	IMC	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/22/24 00:29	DS	EET PEN
Total/NA	Prep	3510C			265.6 mL	1 mL	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 22:03	S1B	EET PEN
Total/NA	Prep	8011			30.2 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 19:46	KR	EET PEN

Client Sample ID: MW28-ROX-101524
Lab Sample ID: 400-264405-4
Date Collected: 10/15/24 09:50
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 15:04	IMC	EET PEN
Total/NA	Prep	3510C			264.2 mL	1 mL	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 19:22	VC1	EET PEN
Total/NA	Prep	3511			30.8 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 15:08	DS	EET PEN
Total/NA	Prep	8011			30.9 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 20:07	KR	EET PEN

Client Sample ID: ROST3MW-ROX-101524
Lab Sample ID: 400-264405-5
Date Collected: 10/15/24 11:10
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 19:01	IMC	EET PEN
Total/NA	Prep	3510C			267.6 mL	1 mL	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 19:47	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: ROST3MW-ROX-101524
Lab Sample ID: 400-264405-5
Date Collected: 10/15/24 11:10
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			30.3 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 15:38	DS	EET PEN
Total/NA	Prep	8011			28.7 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 20:28	KR	EET PEN

Client Sample ID: ROST4PZE-ROX-101524
Lab Sample ID: 400-264405-6
Date Collected: 10/15/24 13:15
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 19:27	IMC	EET PEN
Total/NA	Prep	3510C			266.2 mL	1 mL	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 20:12	VC1	EET PEN
Total/NA	Prep	3511			30.4 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 16:09	DS	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 20:48	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688388/1-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:09	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688571/1-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 14:19	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688611/1-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 12:39	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688667/1-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 16:25	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688776/1-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 17:15	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689261/4
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	689261	10/26/24 14:11	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688388/2-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:30	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688571/2-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 14:49	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688611/2-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1	0 mL	1.0 mL	688707	10/22/24 13:10	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688667/16-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688667	10/22/24 16:01	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:33	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688667/2-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 16:48	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688776/2-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 17:41	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688776/4-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:32	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689261/1002
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	689261	10/26/24 12:56	IMC	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688388/3-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:51	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688571/3-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	3511			30 mL	2 mL	688571	10/21/24 08:57	RAW	EET PEN
Total/NA	Analysis	8270E		1			688617	10/21/24 15:20	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688611/3-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 13:40	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688667/17-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688667	10/22/24 16:01	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:56	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688667/3-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	688667	10/21/24 17:02	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	688913	10/23/24 17:11	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688776/3-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:06	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688776/5-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:57	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264405-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW28-ROX-101524
Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 15:30	IMC	EET PEN

Client Sample ID: MW28-ROX-101524
Date Collected: 10/15/24 09:50
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264405-4 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689261	10/26/24 15:57	IMC	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264405-1

GC/MS VOA

Analysis Batch: 689261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-1	TB-ROX-101524-8260	Total/NA	Water	8260D	
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	8260D	
400-264405-4	MW28-ROX-101524	Total/NA	Water	8260D	
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	8260D	
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	8260D	
MB 400-689261/4	Method Blank	Total/NA	Water	8260D	
LCS 400-689261/1002	Lab Control Sample	Total/NA	Water	8260D	
400-264405-4 MS	MW28-ROX-101524	Total/NA	Water	8260D	
400-264405-4 MSD	MW28-ROX-101524	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 688571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	3511	
MB 400-688571/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688571/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688571/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Prep Batch: 688611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-4	MW28-ROX-101524	Total/NA	Water	3511	
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	3511	
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	3511	
MB 400-688611/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688611/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688611/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 688617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	8270E	688571
MB 400-688571/1-A	Method Blank	Total/NA	Water	8270E	688571
LCS 400-688571/2-A	Lab Control Sample	Total/NA	Water	8270E	688571
LCSD 400-688571/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688571

Prep Batch: 688667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	3510C	
MB 400-688667/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688667/16-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688667/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688667/17-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688667/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 688707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-4	MW28-ROX-101524	Total/NA	Water	8270E	688611
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	8270E	688611
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	8270E	688611
MB 400-688611/1-A	Method Blank	Total/NA	Water	8270E	688611
LCS 400-688611/2-A	Lab Control Sample	Total/NA	Water	8270E	688611

GC/MS Semi VOA (Continued)

Analysis Batch: 688707 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-688611/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688611

Prep Batch: 688776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-4	MW28-ROX-101524	Total/NA	Water	3510C	
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	3510C	
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	3510C	
MB 400-688776/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688776/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688776/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688776/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688776/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 688913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	8270E	688667
MB 400-688667/1-A	Method Blank	Total/NA	Water	8270E	688667
LCS 400-688667/16-A	Lab Control Sample	Total/NA	Water	8270E	688667
LCS 400-688667/2-A	Lab Control Sample	Total/NA	Water	8270E	688667
LCSD 400-688667/17-A	Lab Control Sample Dup	Total/NA	Water	8270E	688667
LCSD 400-688667/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688667

Analysis Batch: 689342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-4	MW28-ROX-101524	Total/NA	Water	8270E	688776
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	8270E	688776
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	8270E	688776
MB 400-688776/1-A	Method Blank	Total/NA	Water	8270E	688776
LCS 400-688776/2-A	Lab Control Sample	Total/NA	Water	8270E	688776
LCS 400-688776/4-A	Lab Control Sample	Total/NA	Water	8270E	688776
LCSD 400-688776/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688776
LCSD 400-688776/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	688776

GC Semi VOA

Prep Batch: 688388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-2	TB-ROX-101524-8011	Total/NA	Water	8011	
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	8011	
400-264405-4	MW28-ROX-101524	Total/NA	Water	8011	
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	8011	
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	8011	
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-2	TB-ROX-101524-8011	Total/NA	Water	8011	688388
400-264405-3	MW28-ROX-101424-EB	Total/NA	Water	8011	688388
400-264405-4	MW28-ROX-101524	Total/NA	Water	8011	688388

GC Semi VOA (Continued)

Analysis Batch: 688421 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264405-5	ROST3MW-ROX-101524	Total/NA	Water	8011	688388
400-264405-6	ROST4PZE-ROX-101524	Total/NA	Water	8011	688388
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	688388
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	688388
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688388

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

Lab Sample ID: MB 400-689261/4
Matrix: Water
Analysis Batch: 689261

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			10/26/24 14:11	1
Acrolein	ND		20	3.3	ug/L			10/26/24 14:11	1
Acrylonitrile	ND		10	2.8	ug/L			10/26/24 14:11	1
Benzene	ND		1.0	0.24	ug/L			10/26/24 14:11	1
Bromobenzene	ND		1.0	0.54	ug/L			10/26/24 14:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/26/24 14:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
Bromoform	ND		5.0	0.25	ug/L			10/26/24 14:11	1
Bromomethane	ND		1.0	0.98	ug/L			10/26/24 14:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/26/24 14:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/26/24 14:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/26/24 14:11	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/26/24 14:11	1
Chloroethane	ND		1.0	0.76	ug/L			10/26/24 14:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/26/24 14:11	1
Chloroform	ND		1.0	0.90	ug/L			10/26/24 14:11	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/26/24 14:11	1
Chloromethane	ND		1.0	0.40	ug/L			10/26/24 14:11	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/26/24 14:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/26/24 14:11	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/26/24 14:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/26/24 14:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/26/24 14:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/26/24 14:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/26/24 14:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/26/24 14:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 14:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/26/24 14:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/26/24 14:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/26/24 14:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/26/24 14:11	1
2-Hexanone	ND		25	4.3	ug/L			10/26/24 14:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/26/24 14:11	1
Methylene bromide	ND		5.0	0.22	ug/L			10/26/24 14:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/26/24 14:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/26/24 14:11	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/26/24 14:11	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/26/24 14:11	1
Naphthalene	ND		5.0	3.0	ug/L			10/26/24 14:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/26/24 14:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/26/24 14:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/26/24 14:11	1
o-Xylene	ND		5.0	3.0	ug/L			10/26/24 14:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/26/24 14:11	1

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

Lab Sample ID: MB 400-689261/4
Matrix: Water
Analysis Batch: 689261

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			10/26/24 14:11	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/26/24 14:11	1
Styrene	ND		1.0	1.0	ug/L			10/26/24 14:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/26/24 14:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/26/24 14:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/26/24 14:11	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/26/24 14:11	1
Toluene	ND		1.0	0.90	ug/L			10/26/24 14:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/26/24 14:11	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/26/24 14:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/26/24 14:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/26/24 14:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/26/24 14:11	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/26/24 14:11	1
Trichloroethene	ND		1.0	0.15	ug/L			10/26/24 14:11	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/26/24 14:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/26/24 14:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/26/24 14:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/26/24 14:11	1
Vinyl acetate	ND		25	0.93	ug/L			10/26/24 14:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/26/24 14:11	1
Xylenes, Total	ND		10	6.0	ug/L			10/26/24 14:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/26/24 14:11*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/26/24 14:11*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/26/24 14:11*	*1*

Lab Sample ID: LCS 400-689261/1002
Matrix: Water
Analysis Batch: 689261

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	195		ug/L		98	43 - 150
Acrolein	500	602		ug/L		120	38 - 150
Acrylonitrile	500	442		ug/L		88	64 - 142
Benzene	50.0	48.5		ug/L		97	70 - 130
Bromobenzene	50.0	44.7		ug/L		89	70 - 132
Bromochloromethane	50.0	49.5		ug/L		99	70 - 130
Bromodichloromethane	50.0	49.2		ug/L		98	67 - 133
Bromoform	50.0	38.6		ug/L		77	57 - 140
Bromomethane	50.0	52.2		ug/L		104	10 - 150
2-Butanone (MEK)	200	195		ug/L		97	61 - 145
Carbon disulfide	50.0	42.5		ug/L		85	61 - 137
Carbon tetrachloride	50.0	48.8		ug/L		98	61 - 137
Chlorobenzene	50.0	49.2		ug/L		98	70 - 130
Chloroethane	50.0	50.2		ug/L		100	55 - 141
2-Chloroethyl vinyl ether	50.0	26.3		ug/L		53	10 - 150

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

Lab Sample ID: LCS 400-689261/1002
Matrix: Water
Analysis Batch: 689261

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	49.5		ug/L		99	69 - 130
1-Chlorohexane	50.0	54.4		ug/L		109	69 - 130
Chloromethane	50.0	51.8		ug/L		104	58 - 137
cis-1,2-Dichloroethene	50.0	49.4		ug/L		99	68 - 130
cis-1,3-Dichloropropene	50.0	48.1		ug/L		96	69 - 132
Dibromochloromethane	50.0	47.3		ug/L		95	67 - 135
1,2-Dichlorobenzene	50.0	46.0		ug/L		92	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	50.0	48.6		ug/L		97	41 - 146
1,1-Dichloroethane	50.0	48.8		ug/L		98	70 - 130
1,2-Dichloroethane	50.0	48.7		ug/L		97	69 - 130
1,1-Dichloroethene	50.0	48.4		ug/L		97	63 - 134
1,2-Dichloropropane	50.0	49.6		ug/L		99	70 - 130
1,3-Dichloropropane	50.0	47.3		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	46.1		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	48.6		ug/L		97	70 - 130
Ethylbenzene	50.0	50.4		ug/L		101	70 - 130
Ethyl methacrylate	50.0	43.4		ug/L		87	68 - 130
Hexachlorobutadiene	50.0	51.1		ug/L		102	53 - 140
2-Hexanone	200	202		ug/L		101	65 - 137
Isopropylbenzene	50.0	51.2		ug/L		102	70 - 130
Methylene bromide	50.0	47.3		ug/L		95	70 - 130
Methylene Chloride	50.0	50.9		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	181		ug/L		90	69 - 138
Methyl tert-butyl ether	50.0	43.0		ug/L		86	66 - 130
m-Xylene & p-Xylene	50.0	50.1		ug/L		100	70 - 130
Naphthalene	50.0	39.3		ug/L		79	47 - 149
n-Butylbenzene	50.0	45.6		ug/L		91	67 - 130
N-Propylbenzene	50.0	48.3		ug/L		97	70 - 130
o-Chlorotoluene	50.0	42.5		ug/L		85	70 - 130
o-Xylene	50.0	49.4		ug/L		99	70 - 130
p-Chlorotoluene	50.0	43.8		ug/L		88	70 - 130
p-Isopropyltoluene	50.0	47.8		ug/L		96	65 - 130
sec-Butylbenzene	50.0	47.5		ug/L		95	66 - 130
Styrene	50.0	50.4		ug/L		101	70 - 130
tert-Butylbenzene	50.0	42.9		ug/L		86	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.7		ug/L		99	67 - 131
1,1,2,2-Tetrachloroethane	50.0	38.8		ug/L		78	70 - 131
Tetrachloroethene	50.0	48.5		ug/L		97	65 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	47.1		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	60 - 138
1,2,4-Trichlorobenzene	50.0	46.7		ug/L		93	60 - 140
1,1,1-Trichloroethane	50.0	48.9		ug/L		98	68 - 130
1,1,2-Trichloroethane	50.0	46.8		ug/L		94	70 - 130
Trichloroethene	50.0	48.8		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	52.2		ug/L		104	65 - 138

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

Lab Sample ID: LCS 400-689261/1002
Matrix: Water
Analysis Batch: 689261

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	38.2		ug/L		76	70 - 130		
1,2,4-Trimethylbenzene			50.0	46.0		ug/L		92	70 - 130		
1,3,5-Trimethylbenzene			50.0	44.8		ug/L		90	69 - 130		
Vinyl acetate			100	89.1		ug/L		89	26 - 150		
Vinyl chloride			50.0	50.8		ug/L		102	59 - 136		
Xylenes, Total			100	99.5		ug/L		99	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*72 - 130*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: 400-264405-4 MS
Matrix: Water
Analysis Batch: 689261

Client Sample ID: MW28-ROX-101524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acetone	ND	F1	200	64.8	F1	ug/L		32	43 - 150		
Acrolein	ND		500	575		ug/L		115	38 - 150		
Acrylonitrile	ND		500	436		ug/L		87	62 - 149		
Benzene	0.25	J	50.0	47.6		ug/L		95	56 - 142		
Bromobenzene	ND		50.0	47.8		ug/L		96	59 - 136		
Bromochloromethane	ND		50.0	47.8		ug/L		96	64 - 140		
Bromodichloromethane	ND		50.0	45.7		ug/L		91	59 - 143		
Bromoform	ND		50.0	41.1		ug/L		82	50 - 140		
Bromomethane	ND		50.0	41.6		ug/L		83	10 - 150		
2-Butanone (MEK)	ND	F1	200	105	F1	ug/L		53	55 - 150		
Carbon disulfide	ND		50.0	40.1		ug/L		80	48 - 150		
Carbon tetrachloride	ND		50.0	44.4		ug/L		89	55 - 145		
Chlorobenzene	ND		50.0	48.5		ug/L		97	64 - 130		
Chloroethane	ND		50.0	45.9		ug/L		92	50 - 150		
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150		
Chloroform	ND		50.0	46.7		ug/L		93	60 - 141		
1-Chlorohexane	ND		50.0	48.9		ug/L		98	56 - 136		
Chloromethane	ND		50.0	49.1		ug/L		98	49 - 148		
cis-1,2-Dichloroethene	ND		50.0	46.3		ug/L		93	59 - 143		
cis-1,3-Dichloropropene	ND		50.0	45.8		ug/L		92	57 - 140		
Dibromochloromethane	ND		50.0	46.0		ug/L		92	56 - 143		
1,2-Dichlorobenzene	ND		50.0	50.7		ug/L		101	52 - 137		
1,3-Dichlorobenzene	ND		50.0	50.3		ug/L		101	54 - 135		
1,4-Dichlorobenzene	ND		50.0	50.9		ug/L		102	53 - 135		
Dichlorodifluoromethane	ND		50.0	43.8		ug/L		88	16 - 150		
1,1-Dichloroethane	ND		50.0	45.8		ug/L		92	61 - 144		
1,2-Dichloroethane	ND		50.0	44.1		ug/L		88	60 - 141		
1,1-Dichloroethene	ND		50.0	43.4		ug/L		87	54 - 147		
1,2-Dichloropropane	ND		50.0	48.8		ug/L		98	66 - 137		
1,3-Dichloropropane	ND		50.0	46.3		ug/L		93	66 - 133		
2,2-Dichloropropane	ND		50.0	41.4		ug/L		83	42 - 144		

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

Lab Sample ID: 400-264405-4 MS
Matrix: Water
Analysis Batch: 689261

Client Sample ID: MW28-ROX-101524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloropropene	ND		50.0	45.3		ug/L		91	65 - 136
Ethylbenzene	ND		50.0	47.9		ug/L		96	58 - 131
Ethyl methacrylate	ND		50.0	42.2		ug/L		84	64 - 130
Hexachlorobutadiene	ND	F2	50.0	53.9		ug/L		108	31 - 149
2-Hexanone	ND	F1	200	115	F1	ug/L		57	65 - 140
Isopropylbenzene	ND		50.0	49.2		ug/L		98	56 - 133
Methylene bromide	ND		50.0	45.2		ug/L		90	63 - 138
Methylene Chloride	ND		50.0	49.5		ug/L		99	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	159		ug/L		80	63 - 146
Methyl tert-butyl ether	0.52	J	50.0	41.1		ug/L		81	59 - 137
m-Xylene & p-Xylene	ND		50.0	47.7		ug/L		95	57 - 130
Naphthalene	ND		50.0	43.2		ug/L		86	25 - 150
n-Butylbenzene	ND	F2	50.0	49.8		ug/L		100	41 - 142
N-Propylbenzene	ND	F2	50.0	51.2		ug/L		102	51 - 138
o-Chlorotoluene	ND		50.0	47.0		ug/L		94	53 - 134
o-Xylene	ND		50.0	48.1		ug/L		96	61 - 130
p-Chlorotoluene	ND		50.0	47.3		ug/L		95	54 - 133
p-Isopropyltoluene	ND	F2	50.0	50.2		ug/L		100	48 - 139
sec-Butylbenzene	ND	F2	50.0	50.5		ug/L		101	50 - 138
Styrene	ND		50.0	49.2		ug/L		98	58 - 131
tert-Butylbenzene	ND		50.0	46.3		ug/L		93	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	47.1		ug/L		94	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	42.0		ug/L		84	66 - 135
Tetrachloroethene	ND		50.0	46.8		ug/L		94	52 - 133
Toluene	ND		50.0	46.8		ug/L		94	65 - 130
trans-1,2-Dichloroethene	ND		50.0	45.7		ug/L		91	61 - 143
trans-1,3-Dichloropropene	ND		50.0	43.5		ug/L		87	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	47.8		ug/L		96	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	50.2		ug/L		100	39 - 148
1,1,1-Trichloroethane	ND		50.0	44.5		ug/L		89	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.1		ug/L		92	66 - 131
Trichloroethene	ND		50.0	47.0		ug/L		94	64 - 136
Trichlorofluoromethane	ND		50.0	46.9		ug/L		94	54 - 150
1,2,3-Trichloropropane	ND		50.0	43.1		ug/L		86	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	48.9		ug/L		98	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	48.1		ug/L		96	52 - 135
Vinyl acetate	ND		100	87.4		ug/L		87	26 - 150
Vinyl chloride	ND		50.0	47.8		ug/L		96	46 - 150
Xylenes, Total	ND		100	95.7		ug/L		96	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*72 - 130*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: 400-264405-4 MSD
Matrix: Water
Analysis Batch: 689261

Client Sample ID: MW28-ROX-101524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND	F1	200	67.6	F1	ug/L		34	43 - 150	4	30
Acrolein	ND		500	577		ug/L		115	38 - 150	0	31
Acrylonitrile	ND		500	470		ug/L		94	62 - 149	8	30
Benzene	0.25	J	50.0	44.3		ug/L		88	56 - 142	7	30
Bromobenzene	ND		50.0	41.2		ug/L		82	59 - 136	15	30
Bromochloromethane	ND		50.0	47.2		ug/L		94	64 - 140	1	30
Bromodichloromethane	ND		50.0	42.7		ug/L		85	59 - 143	7	30
Bromoform	ND		50.0	41.6		ug/L		83	50 - 140	1	30
Bromomethane	ND		50.0	39.4		ug/L		79	10 - 150	5	50
2-Butanone (MEK)	ND	F1	200	116		ug/L		58	55 - 150	10	30
Carbon disulfide	ND		50.0	38.9		ug/L		78	48 - 150	3	30
Carbon tetrachloride	ND		50.0	41.1		ug/L		82	55 - 145	8	30
Chlorobenzene	ND		50.0	41.7		ug/L		83	64 - 130	15	30
Chloroethane	ND		50.0	43.0		ug/L		86	50 - 150	7	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	43.9		ug/L		88	60 - 141	6	30
1-Chlorohexane	ND		50.0	37.9		ug/L		76	56 - 136	26	30
Chloromethane	ND		50.0	46.5		ug/L		93	49 - 148	6	31
cis-1,2-Dichloroethene	ND		50.0	44.1		ug/L		88	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	42.7		ug/L		85	57 - 140	7	30
Dibromochloromethane	ND		50.0	43.7		ug/L		87	56 - 143	5	30
1,2-Dichlorobenzene	ND		50.0	41.6		ug/L		83	52 - 137	20	30
1,3-Dichlorobenzene	ND		50.0	39.9		ug/L		80	54 - 135	23	30
1,4-Dichlorobenzene	ND		50.0	40.0		ug/L		80	53 - 135	24	30
Dichlorodifluoromethane	ND		50.0	42.2		ug/L		84	16 - 150	4	31
1,1-Dichloroethane	ND		50.0	45.0		ug/L		90	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	41.9		ug/L		84	60 - 141	5	30
1,1-Dichloroethene	ND		50.0	43.4		ug/L		87	54 - 147	0	30
1,2-Dichloropropane	ND		50.0	45.6		ug/L		91	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	44.6		ug/L		89	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	39.9		ug/L		80	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	41.9		ug/L		84	65 - 136	8	30
Ethylbenzene	ND		50.0	39.0		ug/L		78	58 - 131	20	30
Ethyl methacrylate	ND		50.0	41.7		ug/L		83	64 - 130	1	30
Hexachlorobutadiene	ND	F2	50.0	33.4	F2	ug/L		67	31 - 149	47	36
2-Hexanone	ND	F1	200	121	F1	ug/L		60	65 - 140	5	30
Isopropylbenzene	ND		50.0	37.5		ug/L		75	56 - 133	27	30
Methylene bromide	ND		50.0	44.4		ug/L		89	63 - 138	2	30
Methylene Chloride	ND		50.0	47.5		ug/L		95	60 - 146	4	32
4-Methyl-2-pentanone (MIBK)	ND		200	167		ug/L		83	63 - 146	5	30
Methyl tert-butyl ether	0.52	J	50.0	41.4		ug/L		82	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	38.1		ug/L		76	57 - 130	22	30
Naphthalene	ND		50.0	41.9		ug/L		84	25 - 150	3	30
n-Butylbenzene	ND	F2	50.0	33.6	F2	ug/L		67	41 - 142	39	31
N-Propylbenzene	ND	F2	50.0	37.4	F2	ug/L		75	51 - 138	31	30
o-Chlorotoluene	ND		50.0	37.2		ug/L		74	53 - 134	23	30
o-Xylene	ND		50.0	39.2		ug/L		78	61 - 130	20	30
p-Chlorotoluene	ND		50.0	36.3		ug/L		73	54 - 133	26	30

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

Lab Sample ID: 400-264405-4 MSD
Matrix: Water
Analysis Batch: 689261

Client Sample ID: MW28-ROX-101524
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
p-Isopropyltoluene	ND	F2	50.0	34.1	F2	ug/L		68	48 - 139	38	30
sec-Butylbenzene	ND	F2	50.0	35.0	F2	ug/L		70	50 - 138	36	30
Styrene	ND		50.0	40.6		ug/L		81	58 - 131	19	30
tert-Butylbenzene	ND		50.0	34.2		ug/L		68	54 - 146	30	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.7		ug/L		87	59 - 137	7	30
1,1,2,2-Tetrachloroethane	ND		50.0	42.8		ug/L		86	66 - 135	2	30
Tetrachloroethene	ND		50.0	39.6		ug/L		79	52 - 133	17	30
Toluene	ND		50.0	41.8		ug/L		84	65 - 130	11	30
trans-1,2-Dichloroethene	ND		50.0	43.9		ug/L		88	61 - 143	4	30
trans-1,3-Dichloropropene	ND		50.0	41.9		ug/L		84	53 - 133	4	30
1,2,3-Trichlorobenzene	ND		50.0	41.2		ug/L		82	43 - 145	15	30
1,2,4-Trichlorobenzene	ND		50.0	40.9		ug/L		82	39 - 148	20	30
1,1,1-Trichloroethane	ND		50.0	41.9		ug/L		84	57 - 142	6	30
1,1,2-Trichloroethane	ND		50.0	45.0		ug/L		90	66 - 131	2	30
Trichloroethene	ND		50.0	42.7		ug/L		85	64 - 136	9	30
Trichlorofluoromethane	ND		50.0	43.4		ug/L		87	54 - 150	8	30
1,2,3-Trichloropropane	ND		50.0	43.1		ug/L		86	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	37.2		ug/L		74	50 - 139	27	30
1,3,5-Trimethylbenzene	ND		50.0	36.1		ug/L		72	52 - 135	29	30
Vinyl acetate	ND		100	85.8		ug/L		86	26 - 150	2	33
Vinyl chloride	ND		50.0	45.7		ug/L		91	46 - 150	4	30
Xylenes, Total	ND		100	77.3		ug/L		77	59 - 130	21	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-688667/1-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzenethiol	ND		10	9.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzoic acid	ND		30	24	ug/L		10/21/24 17:02	10/23/24 16:25	1
Benzyl alcohol	ND		10	7.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Chloroaniline	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Chlorophenol	ND		10	4.1	ug/L		10/21/24 17:02	10/23/24 16:25	1

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

Lab Sample ID: MB 400-688667/1-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688667

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dibenzofuran	ND		10	4.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Diethyl phthalate	ND		10	4.4	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Di-n-butyl phthalate	92.8		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/21/24 17:02	10/23/24 16:25	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
1,4-Dioxane	ND		10	4.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/21/24 17:02	10/23/24 16:25	1
Hexachloroethane	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Indene	ND		10	3.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
Isophorone	ND		10	5.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Methylphenol	ND		10	3.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Nitroaniline	ND		10	5.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
3-Nitroaniline	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Nitroaniline	ND		10	4.1	ug/L		10/21/24 17:02	10/23/24 16:25	1
Nitrobenzene	ND		10	4.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
2-Nitrophenol	ND		10	4.6	ug/L		10/21/24 17:02	10/23/24 16:25	1
4-Nitrophenol	ND		10	3.3	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/21/24 17:02	10/23/24 16:25	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/21/24 17:02	10/23/24 16:25	1
Pentachlorophenol	ND		20	12	ug/L		10/21/24 17:02	10/23/24 16:25	1
Phenol	ND		10	4.2	ug/L		10/21/24 17:02	10/23/24 16:25	1
Pyridine	ND		10	10	ug/L		10/21/24 17:02	10/23/24 16:25	1
Quinoline	ND		10	2.4	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/21/24 17:02	10/23/24 16:25	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/21/24 17:02	10/23/24 16:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*21 - 114*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Phenol-d5	*37*		*10 - 129*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/21/24 17:02*	*10/23/24 16:25*	*1*
2,4,6-Tribromophenol	*85*		*10 - 150*	*10/21/24 17:02*	*10/23/24 16:25*	*1*

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

Lab Sample ID: LCS 400-688667/16-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	87.8		ug/L		73	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*57*		*16 - 127*
Phenol-d5	*35*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

Lab Sample ID: LCS 400-688667/2-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	59.2		ug/L		49	10 - 127
Benzoic acid	493	209		ug/L		43	19 - 126
Benzyl alcohol	120	76.9		ug/L		64	17 - 109
Bis(2-chloroethoxy)methane	120	75.3		ug/L		63	24 - 125
Bis(2-chloroethyl)ether	120	64.9		ug/L		54	10 - 121
bis (2-chloroisopropyl) ether	120	81.5		ug/L		68	14 - 123
Bis(2-ethylhexyl) phthalate	120	99.4		ug/L		83	16 - 150
4-Bromophenyl phenyl ether	120	90.8		ug/L		76	17 - 150
Butyl benzyl phthalate	120	96.7		ug/L		81	21 - 150
4-Chloroaniline	120	76.7		ug/L		64	10 - 124
4-Chloro-3-methylphenol	120	94.8		ug/L		79	37 - 131
2-Chloronaphthalene	120	83.3		ug/L		69	24 - 132
2-Chlorophenol	120	83.2		ug/L		69	27 - 124
4-Chlorophenyl phenyl ether	120	88.6		ug/L		74	27 - 147
Dibenz[a,h]acridine	120	122		ug/L		102	40 - 140
Dibenzofuran	120	86.2		ug/L		72	30 - 135
3,3'-Dichlorobenzidine	240	212		ug/L		89	10 - 150
2,4-Dichlorophenol	120	88.9		ug/L		74	33 - 132
Diethyl phthalate	120	93.6		ug/L		78	37 - 145
2,4-Dimethylphenol	120	151		ug/L		126	38 - 132
Dimethyl phthalate	120	92.5		ug/L		77	32 - 137
Di-n-butyl phthalate	120	161		ug/L		134	27 - 150
4,6-Dinitro-ortho-cresol	240	279		ug/L		116	14 - 150
2,4-Dinitrophenol	240	393	*+	ug/L		164	15 - 150
2,4-Dinitrotoluene	120	92.5		ug/L		77	35 - 136
2,6-Dinitrotoluene	120	92.4		ug/L		77	29 - 140
Di-n-octyl phthalate	120	95.8		ug/L		80	26 - 150
1,4-Dioxane	120	27.0		ug/L		23	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	93.8		ug/L		78	23 - 138
Hexachlorobenzene	120	97.7		ug/L		81	10 - 150
Hexachlorocyclopentadiene	120	290	*+	ug/L		242	10 - 124
Hexachloroethane	120	73.0		ug/L		61	10 - 127

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

Lab Sample ID: LCS 400-688667/2-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indene			120	90.2		ug/L		75	18 - 150		
Isophorone			120	76.1		ug/L		63	28 - 127		
2-Methylphenol			120	89.8		ug/L		75	34 - 124		
3 & 4 Methylphenol			120	85.4		ug/L		71	32 - 122		
2-Nitroaniline			120	92.5		ug/L		77	24 - 139		
3-Nitroaniline			120	78.3		ug/L		65	10 - 128		
4-Nitroaniline			120	93.0		ug/L		78	28 - 118		
Nitrobenzene			120	69.0		ug/L		58	29 - 120		
2-Nitrophenol			120	84.1		ug/L		70	25 - 148		
4-Nitrophenol			240	174		ug/L		72	12 - 129		
N-Nitrosodimethylamine			120	47.7		ug/L		40	10 - 115		
N-Nitrosodi-n-propylamine			120	87.0		ug/L		72	24 - 142		
N-Nitrosodiphenylamine			119	95.0		ug/L		80	29 - 138		
Pentachlorophenol			240	223		ug/L		93	19 - 150		
Phenol			120	51.9		ug/L		43	11 - 95		
Pyridine			240	27.4		ug/L		11	10 - 82		
Quinoline			120	86.1		ug/L		72	10 - 141		
2,4,5-Trichlorophenol			120	93.1		ug/L		78	30 - 144		
2,4,6-Trichlorophenol			120	89.4		ug/L		75	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*66*		*16 - 127*
Phenol-d5	*41*		*10 - 129*
Terphenyl-d14	*74*		*13 - 150*
2,4,6-Tribromophenol	*89*		*10 - 150*

Lab Sample ID: LCSD 400-688667/17-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	73.1		ug/L		61	10 - 140	18	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*52*		*21 - 114*
2-Fluorophenol	*42*		*10 - 105*
Nitrobenzene-d5	*47*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*73*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

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

Lab Sample ID: LCSD 400-688667/3-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	43.9		ug/L		37	10 - 127	30	40
Benzoic acid	493	239		ug/L		48	19 - 126	13	40
Benzyl alcohol	120	73.0		ug/L		61	17 - 109	5	40
Bis(2-chloroethoxy)methane	120	69.9		ug/L		58	24 - 125	7	40
Bis(2-chloroethyl)ether	120	61.1		ug/L		51	10 - 121	6	40
bis (2-chloroisopropyl) ether	120	73.9		ug/L		62	14 - 123	10	40
Bis(2-ethylhexyl) phthalate	120	92.5		ug/L		77	16 - 150	7	40
4-Bromophenyl phenyl ether	120	86.1		ug/L		72	17 - 150	5	40
Butyl benzyl phthalate	120	88.3		ug/L		74	21 - 150	9	40
4-Chloroaniline	120	72.8		ug/L		61	10 - 124	5	40
4-Chloro-3-methylphenol	120	90.6		ug/L		75	37 - 131	5	40
2-Chloronaphthalene	120	78.2		ug/L		65	24 - 132	6	40
2-Chlorophenol	120	77.3		ug/L		64	27 - 124	7	40
4-Chlorophenyl phenyl ether	120	84.2		ug/L		70	27 - 147	5	40
Dibenz[a,h]acridine	120	123		ug/L		103	40 - 140	1	40
Dibenzofuran	120	81.7		ug/L		68	30 - 135	5	40
3,3'-Dichlorobenzidine	240	205		ug/L		86	10 - 150	3	40
2,4-Dichlorophenol	120	82.7		ug/L		69	33 - 132	7	40
Diethyl phthalate	120	89.3		ug/L		74	37 - 145	5	40
2,4-Dimethylphenol	120	143		ug/L		119	38 - 132	5	40
Dimethyl phthalate	120	87.0		ug/L		72	32 - 137	6	40
Di-n-butyl phthalate	120	157		ug/L		131	27 - 150	2	40
4,6-Dinitro-ortho-cresol	240	264		ug/L		110	14 - 150	5	40
2,4-Dinitrophenol	240	396	*+	ug/L		165	15 - 150	1	40
2,4-Dinitrotoluene	120	89.1		ug/L		74	35 - 136	4	40
2,6-Dinitrotoluene	120	87.9		ug/L		73	29 - 140	5	40
Di-n-octyl phthalate	120	88.7		ug/L		74	26 - 150	8	40
1,4-Dioxane	120	38.4		ug/L		32	10 - 87	35	40
1,2-Diphenylhydrazine (as Azobenzene)	120	87.7		ug/L		73	23 - 138	7	40
Hexachlorobenzene	120	90.5		ug/L		75	10 - 150	8	40
Hexachlorocyclopentadiene	120	269	*+	ug/L		224	10 - 124	8	40
Hexachloroethane	120	66.9		ug/L		56	10 - 127	9	40
Indene	120	81.5		ug/L		68	18 - 150	10	40
Isophorone	120	71.8		ug/L		60	28 - 127	6	40
2-Methylphenol	120	83.8		ug/L		70	34 - 124	7	40
3 & 4 Methylphenol	120	80.5		ug/L		67	32 - 122	6	40
2-Nitroaniline	120	88.6		ug/L		74	24 - 139	4	40
3-Nitroaniline	120	80.4		ug/L		67	10 - 128	3	40
4-Nitroaniline	120	93.5		ug/L		78	28 - 118	1	40
Nitrobenzene	120	64.6		ug/L		54	29 - 120	7	40
2-Nitrophenol	120	79.7		ug/L		66	25 - 148	5	40
4-Nitrophenol	240	179		ug/L		75	12 - 129	3	40
N-Nitrosodimethylamine	120	47.7		ug/L		40	10 - 115	0	40
N-Nitrosodi-n-propylamine	120	79.2		ug/L		66	24 - 142	9	40
N-Nitrosodiphenylamine	119	88.8		ug/L		75	29 - 138	7	40
Pentachlorophenol	240	215		ug/L		90	19 - 150	3	40
Phenol	120	48.6		ug/L		41	11 - 95	6	40
Pyridine	240	20.2	*-	ug/L		8	10 - 82	30	40

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

Lab Sample ID: LCSD 400-688667/3-A
Matrix: Water
Analysis Batch: 688913

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688667

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	80.9		ug/L		68	10 - 141	6	40
2,4,5-Trichlorophenol			120	90.0		ug/L		75	30 - 144	3	40
2,4,6-Trichlorophenol			120	86.7		ug/L		72	27 - 147	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*60*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*69*		*13 - 150*
2,4,6-Tribromophenol	*85*		*10 - 150*

Lab Sample ID: MB 400-688776/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzenethiol	ND		10	9.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzoic acid	ND		30	24	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzyl alcohol	ND		10	7.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chloroaniline	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Chlorophenol	ND		10	4.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dibenzofuran	ND		10	4.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Diethyl phthalate	ND		10	4.4	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
1,4-Dioxane	ND		10	4.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/22/24 15:45	10/28/24 17:15	1

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

Lab Sample ID: MB 400-688776/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/22/24 15:45	10/28/24 17:15	1
Hexachloroethane	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Indene	ND		10	3.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Isophorone	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Methylphenol	ND		10	3.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Nitroaniline	ND		10	5.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
3-Nitroaniline	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Nitroaniline	ND		10	4.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
Nitrobenzene	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Nitrophenol	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Nitrophenol	ND		10	3.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Pentachlorophenol	ND		20	12	ug/L		10/22/24 15:45	10/28/24 17:15	1
Phenol	ND		10	4.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Pyridine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 17:15	1
Quinoline	ND		10	2.4	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/22/24 15:45	10/28/24 17:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*21 - 114*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
2-Fluorophenol	*31*		*10 - 105*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Phenol-d5	*20*		*10 - 129*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*10/22/24 15:45*	*10/28/24 17:15*	*1*

Lab Sample ID: LCS 400-688776/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	22.6		ug/L		19	10 - 127
Benzoic acid	493	118		ug/L		24	19 - 126
Benzyl alcohol	120	57.6		ug/L		48	17 - 109
Bis(2-chloroethoxy)methane	120	95.8		ug/L		80	24 - 125
Bis(2-chloroethyl)ether	120	124		ug/L		104	10 - 121
bis (2-chloroisopropyl) ether	120	124		ug/L		104	14 - 123
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	16 - 150
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	17 - 150
Butyl benzyl phthalate	120	106		ug/L		88	21 - 150
4-Chloroaniline	120	60.8		ug/L		51	10 - 124
4-Chloro-3-methylphenol	120	85.5		ug/L		71	37 - 131
2-Chloronaphthalene	120	93.4		ug/L		78	24 - 132
2-Chlorophenol	120	92.9		ug/L		77	27 - 124

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

Lab Sample ID: LCS 400-688776/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chlorophenyl phenyl ether	120	100		ug/L		83	27 - 147
Dibenz[a,h]acridine	59.9	64.5		ug/L		108	40 - 140
Dibenzofuran	120	102		ug/L		85	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	81.3		ug/L		68	33 - 132
Diethyl phthalate	120	106		ug/L		89	37 - 145
2,4-Dimethylphenol	120	152		ug/L		127	38 - 132
Dimethyl phthalate	120	105		ug/L		87	32 - 137
Di-n-butyl phthalate	120	112		ug/L		93	27 - 150
4,6-Dinitro-ortho-cresol	240	210		ug/L		88	14 - 150
2,4-Dinitrophenol	240	235		ug/L		98	15 - 150
2,4-Dinitrotoluene	120	108		ug/L		90	35 - 136
2,6-Dinitrotoluene	120	99.5		ug/L		83	29 - 140
Di-n-octyl phthalate	120	115		ug/L		96	26 - 150
1,4-Dioxane	120	35.6		ug/L		30	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	105		ug/L		88	23 - 138
Hexachlorobenzene	120	99.7		ug/L		83	10 - 150
Hexachlorocyclopentadiene	120	158	*+	ug/L		131	10 - 124
Hexachloroethane	120	80.8		ug/L		67	10 - 127
Indene	120	84.7		ug/L		71	18 - 150
Isophorone	120	95.1		ug/L		79	28 - 127
2-Methylphenol	120	98.8		ug/L		82	34 - 124
3 & 4 Methylphenol	120	82.2		ug/L		69	32 - 122
2-Nitroaniline	120	104		ug/L		87	24 - 139
3-Nitroaniline	120	71.6		ug/L		60	10 - 128
4-Nitroaniline	120	106		ug/L		88	28 - 118
Nitrobenzene	120	86.6		ug/L		72	29 - 120
2-Nitrophenol	120	87.7		ug/L		73	25 - 148
4-Nitrophenol	240	110		ug/L		46	12 - 129
N-Nitrosodimethylamine	120	35.3		ug/L		29	10 - 115
N-Nitrosodi-n-propylamine	120	101		ug/L		84	24 - 142
N-Nitrosodiphenylamine	119	93.2		ug/L		78	29 - 138
Pentachlorophenol	240	172		ug/L		72	19 - 150
Phenol	120	46.5		ug/L		39	11 - 95
Pyridine	240	27.3		ug/L		11	10 - 82
Quinoline	59.9	26.7		ug/L		45	10 - 141
2,4,5-Trichlorophenol	120	91.0		ug/L		76	30 - 144
2,4,6-Trichlorophenol	120	87.3		ug/L		73	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*21 - 114*
2-Fluorophenol	*47*		*10 - 105*
Nitrobenzene-d5	*71*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

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

Lab Sample ID: LCS 400-688776/4-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	69.4		ug/L		58	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*21 - 114*
2-Fluorophenol	*28*		*10 - 105*
Nitrobenzene-d5	*52*		*16 - 127*
Phenol-d5	*23*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*65*		*10 - 150*

Lab Sample ID: LCSD 400-688776/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	36.2	*1	ug/L		30	10 - 127	46	40
Benzoic acid			493	134		ug/L		27	19 - 126	13	40
Benzyl alcohol			120	55.2		ug/L		46	17 - 109	4	40
Bis(2-chloroethoxy)methane			120	99.9		ug/L		83	24 - 125	4	40
Bis(2-chloroethyl)ether			120	103		ug/L		86	10 - 121	19	40
bis (2-chloroisopropyl) ether			120	104		ug/L		87	14 - 123	17	40
Bis(2-ethylhexyl) phthalate			120	107		ug/L		89	16 - 150	2	40
4-Bromophenyl phenyl ether			120	92.2		ug/L		77	17 - 150	4	40
Butyl benzyl phthalate			120	106		ug/L		88	21 - 150	0	40
4-Chloroaniline			120	70.2		ug/L		59	10 - 124	14	40
4-Chloro-3-methylphenol			120	94.0		ug/L		78	37 - 131	9	40
2-Chloronaphthalene			120	89.9		ug/L		75	24 - 132	4	40
2-Chlorophenol			120	86.7		ug/L		72	27 - 124	7	40
4-Chlorophenyl phenyl ether			120	98.0		ug/L		82	27 - 147	2	40
Dibenz[a,h]acridine			59.9	53.9		ug/L		90	40 - 140	18	40
Dibenzofuran			120	98.7		ug/L		82	30 - 135	4	40
3,3'-Dichlorobenzidine			160	138		ug/L		87	10 - 150	3	40
2,4-Dichlorophenol			120	90.3		ug/L		75	33 - 132	11	40
Diethyl phthalate			120	104		ug/L		87	37 - 145	2	40
2,4-Dimethylphenol			120	161	*+	ug/L		134	38 - 132	6	40
Dimethyl phthalate			120	97.3		ug/L		81	32 - 137	8	40
Di-n-butyl phthalate			120	110		ug/L		91	27 - 150	2	40
4,6-Dinitro-ortho-cresol			240	213		ug/L		89	14 - 150	1	40
2,4-Dinitrophenol			240	242		ug/L		101	15 - 150	3	40
2,4-Dinitrotoluene			120	104		ug/L		86	35 - 136	5	40
2,6-Dinitrotoluene			120	93.4		ug/L		78	29 - 140	6	40
Di-n-octyl phthalate			120	109		ug/L		91	26 - 150	5	40
1,4-Dioxane			120	34.2		ug/L		28	10 - 87	4	40
1,2-Diphenylhydrazine (as Azobenzene)			120	104		ug/L		87	23 - 138	1	40
Hexachlorobenzene			120	97.6		ug/L		81	10 - 150	2	40
Hexachlorocyclopentadiene			120	149		ug/L		124	10 - 124	6	40
Hexachloroethane			120	74.5		ug/L		62	10 - 127	8	40

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

Lab Sample ID: LCSD 400-688776/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indene			120	81.9		ug/L		68	18 - 150	3	40
Isophorone			120	97.6		ug/L		81	28 - 127	3	40
2-Methylphenol			120	94.8		ug/L		79	34 - 124	4	40
3 & 4 Methylphenol			120	76.4		ug/L		64	32 - 122	7	40
2-Nitroaniline			120	94.5		ug/L		79	24 - 139	10	40
3-Nitroaniline			120	77.0		ug/L		64	10 - 128	7	40
4-Nitroaniline			120	112		ug/L		93	28 - 118	6	40
Nitrobenzene			120	89.7		ug/L		75	29 - 120	4	40
2-Nitrophenol			120	94.0		ug/L		78	25 - 148	7	40
4-Nitrophenol			240	122		ug/L		51	12 - 129	10	40
N-Nitrosodimethylamine			120	35.3		ug/L		29	10 - 115	0	40
N-Nitrosodi-n-propylamine			120	94.6		ug/L		79	24 - 142	6	40
N-Nitrosodiphenylamine			119	90.6		ug/L		76	29 - 138	3	40
Pentachlorophenol			240	175		ug/L		73	19 - 150	2	40
Phenol			120	46.3		ug/L		39	11 - 95	0	40
Pyridine			240	39.7		ug/L		17	10 - 82	37	40
Quinoline			59.9	41.2	*1	ug/L		69	10 - 141	43	40
2,4,5-Trichlorophenol			120	87.0		ug/L		72	30 - 144	5	40
2,4,6-Trichlorophenol			120	82.6		ug/L		69	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*73*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*71*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Lab Sample ID: LCSD 400-688776/5-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	75.5		ug/L		63	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*41*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*29*		*10 - 129*
Terphenyl-d14	*75*		*13 - 150*
2,4,6-Tribromophenol	*70*		*10 - 150*

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

Lab Sample ID: MB 400-688571/1-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688571

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/21/24 08:57	10/21/24 14:19	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 08:57	10/21/24 14:19	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 08:57	10/21/24 14:19	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 08:57	10/21/24 14:19	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 14:19	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 14:19	1
Fluorene	ND		0.20	0.087	ug/L		10/21/24 08:57	10/21/24 14:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 08:57	10/21/24 14:19	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 08:57	10/21/24 14:19	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/21/24 08:57	10/21/24 14:19	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 08:57	10/21/24 14:19	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 08:57	10/21/24 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*
Nitrobenzene-d5	*100*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/21/24 08:57*	*10/21/24 14:19*	*1*

Lab Sample ID: LCS 400-688571/2-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688571

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.31		ug/L		69	50 - 150
Acenaphthylene	3.34	2.40		ug/L		72	50 - 150
Anthracene	3.34	2.35		ug/L		70	50 - 150
Benzo[a]anthracene	3.34	2.85		ug/L		85	50 - 150
Benzo[a]pyrene	3.34	2.60		ug/L		78	50 - 150
Benzo[b]fluoranthene	3.34	2.51		ug/L		75	50 - 150
Benzo[g,h,i]perylene	3.34	2.40		ug/L		72	50 - 150
Benzo[k]fluoranthene	3.34	2.71		ug/L		81	50 - 150
Chrysene	3.34	2.42		ug/L		73	50 - 150
Dibenz(a,h)anthracene	3.34	2.24		ug/L		67	50 - 150
Fluoranthene	3.34	2.32		ug/L		69	50 - 150
Fluorene	3.34	2.38		ug/L		71	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.33		ug/L		70	50 - 150
1-Methylnaphthalene	3.34	1.84		ug/L		55	50 - 150
2-Methylnaphthalene	3.34	1.59	*-	ug/L		48	50 - 150
Phenanthrene	3.34	2.19		ug/L		66	50 - 150
Pyrene	3.34	2.26		ug/L		68	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*78*		*50 - 150*

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

Lab Sample ID: LCS 400-688571/2-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688571

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	*103*		*50 - 150*
Terphenyl-d14	*83*		*50 - 150*

Lab Sample ID: LCSD 400-688571/3-A
Matrix: Water
Analysis Batch: 688617

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688571

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			3.34	2.82		ug/L		85	50 - 150	20	40
Acenaphthylene			3.34	2.88		ug/L		86	50 - 150	18	40
Anthracene			3.34	2.73		ug/L		82	50 - 150	15	40
Benzo[a]anthracene			3.34	3.32		ug/L		100	50 - 150	15	40
Benzo[a]pyrene			3.34	2.89		ug/L		87	50 - 150	10	40
Benzo[b]fluoranthene			3.34	2.85		ug/L		86	50 - 150	13	40
Benzo[g,h,i]perylene			3.34	2.65		ug/L		79	50 - 150	10	40
Benzo[k]fluoranthene			3.34	2.90		ug/L		87	50 - 150	7	40
Chrysene			3.34	2.78		ug/L		84	50 - 150	14	40
Dibenz(a,h)anthracene			3.34	2.46		ug/L		74	50 - 150	9	40
Fluoranthene			3.34	2.68		ug/L		80	50 - 150	15	40
Fluorene			3.34	2.89		ug/L		87	50 - 150	19	40
Indeno[1,2,3-cd]pyrene			3.34	2.53		ug/L		76	50 - 150	8	40
1-Methylnaphthalene			3.34	2.35		ug/L		71	50 - 150	24	40
2-Methylnaphthalene			3.34	2.08		ug/L		62	50 - 150	26	40
Phenanthrene			3.34	2.63		ug/L		79	50 - 150	18	40
Pyrene			3.34	2.60		ug/L		78	50 - 150	14	40

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	*77*		*50 - 150*
Nitrobenzene-d5	*106*		*50 - 150*
Terphenyl-d14	*88*		*50 - 150*

Lab Sample ID: MB 400-688611/1-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/21/24 12:30	10/22/24 12:39	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 12:30	10/22/24 12:39	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 12:39	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 12:39	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 12:39	1
Fluorene	ND		0.20	0.087	ug/L		10/21/24 12:30	10/22/24 12:39	1

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

Lab Sample ID: MB 400-688611/1-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 12:39	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 12:30	10/22/24 12:39	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/21/24 12:30	10/22/24 12:39	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 12:39	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*
Nitrobenzene-d5	*104*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*
Terphenyl-d14	*73*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*

Lab Sample ID: LCS 400-688611/2-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.80		ug/L		84	50 - 150
Acenaphthylene	3.34	2.98		ug/L		89	50 - 150
Anthracene	3.34	2.91		ug/L		87	50 - 150
Benzo[a]anthracene	3.34	3.24		ug/L		97	50 - 150
Benzo[a]pyrene	3.34	2.94		ug/L		88	50 - 150
Benzo[b]fluoranthene	3.34	2.86		ug/L		86	50 - 150
Benzo[g,h,i]perylene	3.34	2.53		ug/L		76	50 - 150
Benzo[k]fluoranthene	3.34	2.89		ug/L		87	50 - 150
Chrysene	3.34	2.89		ug/L		87	50 - 150
Dibenz(a,h)anthracene	3.34	2.44		ug/L		73	50 - 150
Fluoranthene	3.34	2.80		ug/L		84	50 - 150
Fluorene	3.34	2.80		ug/L		84	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.53		ug/L		76	50 - 150
1-Methylnaphthalene	3.34	2.54		ug/L		76	50 - 150
2-Methylnaphthalene	3.34	2.24		ug/L		67	50 - 150
Phenanthrene	3.34	2.75		ug/L		82	50 - 150
Pyrene	3.34	2.75		ug/L		83	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*
Nitrobenzene-d5	*112*		*50 - 150*
Terphenyl-d14	*78*		*50 - 150*

Lab Sample ID: LCSD 400-688611/3-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688611

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.34	2.27		ug/L		68	50 - 150	21	40
Acenaphthylene	3.34	2.52		ug/L		76	50 - 150	17	40
Anthracene	3.34	2.55		ug/L		77	50 - 150	13	40
Benzo[a]anthracene	3.34	2.95		ug/L		88	50 - 150	9	40

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

Lab Sample ID: LCSD 400-688611/3-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688611

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]pyrene			3.34	2.65		ug/L		79	50 - 150	10	40
Benzo[b]fluoranthene			3.34	2.48		ug/L		74	50 - 150	14	40
Benzo[g,h,i]perylene			3.34	2.38		ug/L		71	50 - 150	6	40
Benzo[k]fluoranthene			3.34	2.58		ug/L		77	50 - 150	11	40
Chrysene			3.34	2.48		ug/L		74	50 - 150	15	40
Dibenz(a,h)anthracene			3.34	2.29		ug/L		69	50 - 150	6	40
Fluoranthene			3.34	2.44		ug/L		73	50 - 150	14	40
Fluorene			3.34	2.49		ug/L		75	50 - 150	12	40
Indeno[1,2,3-cd]pyrene			3.34	2.32		ug/L		70	50 - 150	9	40
1-Methylnaphthalene			3.34	2.04		ug/L		61	50 - 150	22	40
2-Methylnaphthalene			3.34	1.78		ug/L		53	50 - 150	23	40
Phenanthrene			3.34	2.38		ug/L		71	50 - 150	14	40
Pyrene			3.34	2.36		ug/L		71	50 - 150	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*50 - 150*
Nitrobenzene-d5	*115*		*50 - 150*
Terphenyl-d14	*82*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

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		10/18/24 10:16	10/18/24 14:09	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/18/24 10:16	10/18/24 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*10/18/24 10:16*	*10/18/24 14:09*	*1*

Lab Sample ID: LCS 400-688388/2-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0904		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0839		ug/L		84	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-688388/3-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0945		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0847		ug/L		84	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/15/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): C. McDavid, T. Jenkins

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
4.6
1.1 IR1

Container PID Readings or Laboratory Notes:

400-264405 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	Container PID Readings or Laboratory Notes:
	TB-ROX-101524-8260	10/15/2024	0000	Water	2					2	X				
	TB-ROX-101524-8011	10/15/2024	0000	Water	2					2		X			
	MW28-ROX-101424-EB	10/14/2024	1345	Water	6			4		10	X	X	X	X	Collected day prior
	MW28-ROX-101524	10/15/2024	0950	Water	6			4		10	X	X	X	X	
	ROST3MW-ROX-101524	10/15/2024	1110	Water	6			4		10	X	X	X	X	
	ROST4PZE-ROX-101524	10/15/2024	1315	Water	6			4		10	X	X	X	X	

COURTNEY MCDAVID 10-15-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1883, 7252 0547 1894	10/15/2024	1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		10/16/24	9:06
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

Version: 19Sept24

CUSTODY SEALS: 1599958, 1599959, 1599960, 1599961

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Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264405-1

Login Number: 264405
List Number: 1
Creator: Beecher (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	4.6°C, 1.1°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-264405-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264408-1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/26/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/04/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-688776/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**131**/124	6	10-124/40
LCS/LCSD 400-689203/2-A/3-A	SVOCs	2,4-Dimethylphenol	127/**134**	6	38-132/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification.

2,4-Dimethylphenol in sample P56-ROX-101524 was qualified as estimated (J).

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.		X		Analytes were detected in samples that were diluted.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
The continuing calibration verification (CCV) for 2,4-dimethylphenol was above evaluation criteria, biased high. 2,4-Dimethylphenol in sample P56-ROX-101524 was previously qualified due to a laboratory control sample recovery outside evaluation criteria. No further qualification is required.					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/29/2024 1:49:08 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264408-1

Reviewed 11/26/2024
AN

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
10/29/2024 1:49:08 PM

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

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Job Narrative
400-264408-1

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 10/16/2024 9:06 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.1°C and 4.6°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-101524-8260-SS (400-264408-1), P93D-ROX-101524 (400-264408-3) and P56-ROX-101524 (400-264408-4). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689344 recovered above the upper control limit for Acrolein. 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: P56-ROX-101524 (400-264408-4). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: 2,4-Dimethylphenol. 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-688776 and analytical batch 400-689342 recovered outside control limits for the following analytes: Quinoline and Aniline.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689342 recovered above the upper control limit for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264408-1	TB-ROX-101524-8260-SS	Water	10/15/24 00:00	10/16/24 09:06
400-264408-2	TB-ROX-101524-8011-SS	Water	10/15/24 00:00	10/16/24 09:06
400-264408-3	P93D-ROX-101524	Water	10/15/24 11:11	10/16/24 09:06
400-264408-4	P56-ROX-101524	Water	10/15/24 13:05	10/16/24 09:06

Detection Summary

Client: AECOM
Job ID: 400-264408-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101524-8260-SS — Lab Sample ID: 400-264408-1

No Detections.

Client Sample ID: TB-ROX-101524-8011-SS — Lab Sample ID: 400-264408-2

No Detections.

Client Sample ID: P93D-ROX-101524 — Lab Sample ID: 400-264408-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.27	J	1.0	0.24	ug/L	1		8260D	Total/NA
Methyl tert-butyl ether	1.3		1.0	0.22	ug/L	1		8260D	Total/NA

Client Sample ID: P56-ROX-101524 — Lab Sample ID: 400-264408-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	110		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	32		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	120		25	15	ug/L	5		8260D	Total/NA
Naphthalene	16	J	25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	36		5.0	3.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	47		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	15		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	120		50	30	ug/L	5		8260D	Total/NA
2,4-Dimethylphenol	6.0	J *+ J	9.2	4.8	ug/L	1		8270E	Total/NA
Acenaphthene	1.2		0.20	0.083	ug/L	1		8270E	Total/NA
Acenaphthylene	0.12	J	0.20	0.046	ug/L	1		8270E	Total/NA
Anthracene	0.15	J	0.20	0.071	ug/L	1		8270E	Total/NA
Fluorene	0.62		0.20	0.085	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	17		0.20	0.064	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	17		0.20	0.075	ug/L	1		8270E	Total/NA
Phenanthrene	1.2		0.20	0.043	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Client Sample ID: TB-ROX-101524-8260-SS
Date Collected: 10/15/24 00:00
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-1
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			10/28/24 17:29	1
Acrolein	ND		20	3.3	ug/L			10/28/24 17:29	1
Acrylonitrile	ND		10	2.8	ug/L			10/28/24 17:29	1
Benzene	ND		1.0	0.24	ug/L			10/28/24 17:29	1
Bromobenzene	ND		1.0	0.54	ug/L			10/28/24 17:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/28/24 17:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
Bromoform	ND		5.0	0.25	ug/L			10/28/24 17:29	1
Bromomethane	ND		1.0	0.98	ug/L			10/28/24 17:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/28/24 17:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/28/24 17:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/28/24 17:29	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/28/24 17:29	1
Chloroethane	ND		1.0	0.76	ug/L			10/28/24 17:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/28/24 17:29	1
Chloroform	ND		1.0	0.90	ug/L			10/28/24 17:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/28/24 17:29	1
Chloromethane	ND		1.0	0.40	ug/L			10/28/24 17:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/28/24 17:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/28/24 17:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/28/24 17:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/28/24 17:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/28/24 17:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/28/24 17:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/28/24 17:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/28/24 17:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 17:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/28/24 17:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/28/24 17:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/28/24 17:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/28/24 17:29	1
2-Hexanone	ND		25	4.3	ug/L			10/28/24 17:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/28/24 17:29	1
Methylene bromide	ND		5.0	0.22	ug/L			10/28/24 17:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/28/24 17:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/28/24 17:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/28/24 17:29	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/28/24 17:29	1
Naphthalene	ND		5.0	3.0	ug/L			10/28/24 17:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/28/24 17:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/28/24 17:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/28/24 17:29	1
o-Xylene	ND		5.0	3.0	ug/L			10/28/24 17:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/28/24 17:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/28/24 17:29	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Client Sample ID: TB-ROX-101524-8260-SS
Date Collected: 10/15/24 00:00
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-1
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			10/28/24 17:29	1
Styrene	ND		1.0	1.0	ug/L			10/28/24 17:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/28/24 17:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/28/24 17:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/28/24 17:29	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/28/24 17:29	1
Toluene	ND		1.0	0.90	ug/L			10/28/24 17:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 17:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/28/24 17:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/28/24 17:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/28/24 17:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/28/24 17:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/28/24 17:29	1
Trichloroethene	ND		1.0	0.15	ug/L			10/28/24 17:29	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/28/24 17:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/28/24 17:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/28/24 17:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/28/24 17:29	1
Vinyl acetate	ND		25	0.93	ug/L			10/28/24 17:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/28/24 17:29	1
Xylenes, Total	ND		10	6.0	ug/L			10/28/24 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/28/24 17:29*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/28/24 17:29*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/28/24 17:29*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Client Sample ID: TB-ROX-101524-8011-SS
Date Collected: 10/15/24 00:00
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-2
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		10/18/24 10:16	10/18/24 21:10	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/18/24 10:16	10/18/24 21:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*10/18/24 10:16*	*10/18/24 21:10*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Client Sample ID: P93D-ROX-101524
Date Collected: 10/15/24 11:11
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-3
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			10/28/24 15:17	1
Acrolein	ND		20	3.3	ug/L			10/28/24 15:17	1
Acrylonitrile	ND		10	2.8	ug/L			10/28/24 15:17	1
Benzene	**0.27**	**J**	1.0	0.24	ug/L			10/28/24 15:17	1
Bromobenzene	ND		1.0	0.54	ug/L			10/28/24 15:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/28/24 15:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
Bromoform	ND		5.0	0.25	ug/L			10/28/24 15:17	1
Bromomethane	ND		1.0	0.98	ug/L			10/28/24 15:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/28/24 15:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/28/24 15:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/28/24 15:17	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/28/24 15:17	1
Chloroethane	ND		1.0	0.76	ug/L			10/28/24 15:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/28/24 15:17	1
Chloroform	ND		1.0	0.90	ug/L			10/28/24 15:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/28/24 15:17	1
Chloromethane	ND		1.0	0.40	ug/L			10/28/24 15:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/28/24 15:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/28/24 15:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/28/24 15:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/28/24 15:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/28/24 15:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/28/24 15:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/28/24 15:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/28/24 15:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 15:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/28/24 15:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/28/24 15:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/28/24 15:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/28/24 15:17	1
2-Hexanone	ND		25	4.3	ug/L			10/28/24 15:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/28/24 15:17	1
Methylene bromide	ND		5.0	0.22	ug/L			10/28/24 15:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/28/24 15:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/28/24 15:17	1
Methyl tert-butyl ether	**1.3**		1.0	0.22	ug/L			10/28/24 15:17	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/28/24 15:17	1
Naphthalene	ND		5.0	3.0	ug/L			10/28/24 15:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/28/24 15:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/28/24 15:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/28/24 15:17	1
o-Xylene	ND		5.0	3.0	ug/L			10/28/24 15:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/28/24 15:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/28/24 15:17	1

Client Sample ID: P93D-ROX-101524
Date Collected: 10/15/24 11:11
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-3
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			10/28/24 15:17	1
Styrene	ND		1.0	1.0	ug/L			10/28/24 15:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/28/24 15:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/28/24 15:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/28/24 15:17	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/28/24 15:17	1
Toluene	ND		1.0	0.90	ug/L			10/28/24 15:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 15:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/28/24 15:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/28/24 15:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/28/24 15:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/28/24 15:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/28/24 15:17	1
Trichloroethene	ND		1.0	0.15	ug/L			10/28/24 15:17	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/28/24 15:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/28/24 15:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/28/24 15:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/28/24 15:17	1
Vinyl acetate	ND		25	0.93	ug/L			10/28/24 15:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/28/24 15:17	1
Xylenes, Total	ND		10	6.0	ug/L			10/28/24 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/28/24 15:17*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*10/28/24 15:17*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/28/24 15:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.2	8.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
Benzenethiol	ND		9.2	9.1	ug/L		10/22/24 15:45	10/28/24 20:37	1
Benzoic acid	ND		28	22	ug/L		10/22/24 15:45	10/28/24 20:37	1
Benzyl alcohol	ND		9.2	6.7	ug/L		10/22/24 15:45	10/28/24 20:37	1
Bis(2-chloroethoxy)methane	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
Bis(2-chloroethyl)ether	ND		9.2	3.6	ug/L		10/22/24 15:45	10/28/24 20:37	1
bis (2-chloroisopropyl) ether	ND		9.2	1.7	ug/L		10/22/24 15:45	10/28/24 20:37	1
Bis(2-ethylhexyl) phthalate	ND		9.2	8.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Bromophenyl phenyl ether	ND		9.2	7.9	ug/L		10/22/24 15:45	10/28/24 20:37	1
Butyl benzyl phthalate	ND		9.2	5.4	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Chloroaniline	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Chloro-3-methylphenol	ND		9.2	4.9	ug/L		10/22/24 15:45	10/28/24 20:37	1
2-Chloronaphthalene	ND		9.2	3.5	ug/L		10/22/24 15:45	10/28/24 20:37	1
2-Chlorophenol	ND		9.2	3.8	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Chlorophenyl phenyl ether	ND		9.2	3.4	ug/L		10/22/24 15:45	10/28/24 20:37	1
Dibenz[a,h]acridine	ND		9.2	2.6	ug/L		10/22/24 15:45	10/28/24 20:37	1
Dibenzofuran	ND		9.2	3.7	ug/L		10/22/24 15:45	10/28/24 20:37	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4-Dichlorophenol	ND		9.2	4.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
Diethyl phthalate	ND		9.2	4.1	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4-Dimethylphenol	ND	*+	9.2	4.8	ug/L		10/22/24 15:45	10/28/24 20:37	1

Client Sample ID: P93D-ROX-101524
Date Collected: 10/15/24 11:11
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.2	3.9	ug/L		10/22/24 15:45	10/28/24 20:37	1
Di-n-butyl phthalate	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
4,6-Dinitro-ortho-cresol	ND		9.2	9.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4-Dinitrophenol	ND		28	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4-Dinitrotoluene	ND		9.2	4.7	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,6-Dinitrotoluene	ND		9.2	3.6	ug/L		10/22/24 15:45	10/28/24 20:37	1
Di-n-octyl phthalate	ND		9.2	5.5	ug/L		10/22/24 15:45	10/28/24 20:37	1
1,4-Dioxane	ND		9.2	4.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.2	3.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
Hexachlorobenzene	ND		9.2	9.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
Hexachlorocyclopentadiene	ND	*+	18	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
Hexachloroethane	ND		9.2	4.8	ug/L		10/22/24 15:45	10/28/24 20:37	1
Indene	ND		9.2	3.3	ug/L		10/22/24 15:45	10/28/24 20:37	1
Isophorone	ND		9.2	4.8	ug/L		10/22/24 15:45	10/28/24 20:37	1
2-Methylphenol	ND		9.2	3.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
3 & 4 Methylphenol	ND		18	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
2-Nitroaniline	ND		9.2	4.6	ug/L		10/22/24 15:45	10/28/24 20:37	1
3-Nitroaniline	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Nitroaniline	ND		9.2	3.8	ug/L		10/22/24 15:45	10/28/24 20:37	1
Nitrobenzene	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 20:37	1
2-Nitrophenol	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
4-Nitrophenol	ND		9.2	3.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
N-Nitrosodimethylamine	ND		9.2	2.0	ug/L		10/22/24 15:45	10/28/24 20:37	1
N-Nitrosodi-n-propylamine	ND		9.2	2.3	ug/L		10/22/24 15:45	10/28/24 20:37	1
N-Nitrosodiphenylamine	ND		9.2	3.4	ug/L		10/22/24 15:45	10/28/24 20:37	1
Pentachlorophenol	ND		18	11	ug/L		10/22/24 15:45	10/28/24 20:37	1
Phenol	ND		9.2	3.9	ug/L		10/22/24 15:45	10/28/24 20:37	1
Pyridine	ND		9.2	9.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
Quinoline	ND	*1	9.2	2.2	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4,5-Trichlorophenol	ND		9.2	3.7	ug/L		10/22/24 15:45	10/28/24 20:37	1
2,4,6-Trichlorophenol	ND		9.2	3.2	ug/L		10/22/24 15:45	10/28/24 20:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*21 - 114*	*10/22/24 15:45*	*10/28/24 20:37*	*1*
2-Fluorophenol	*35*		*10 - 105*	*10/22/24 15:45*	*10/28/24 20:37*	*1*
Nitrobenzene-d5	*67*		*16 - 127*	*10/22/24 15:45*	*10/28/24 20:37*	*1*
Phenol-d5	*21*		*10 - 129*	*10/22/24 15:45*	*10/28/24 20:37*	*1*
Terphenyl-d14	*79*		*13 - 150*	*10/22/24 15:45*	*10/28/24 20:37*	*1*
2,4,6-Tribromophenol	*79*		*10 - 150*	*10/22/24 15:45*	*10/28/24 20:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/21/24 12:30	10/22/24 17:09	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/21/24 12:30	10/22/24 17:09	1
Anthracene	ND		0.20	0.072	ug/L		10/21/24 12:30	10/22/24 17:09	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 17:09	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 17:09	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/21/24 12:30	10/22/24 17:09	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 12:30	10/22/24 17:09	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Client Sample ID: P93D-ROX-101524
Date Collected: 10/15/24 11:11
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 17:09	1
Chrysene	ND		0.20	0.038	ug/L		10/21/24 12:30	10/22/24 17:09	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 17:09	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 17:09	1
Fluorene	ND		0.20	0.086	ug/L		10/21/24 12:30	10/22/24 17:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 17:09	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/21/24 12:30	10/22/24 17:09	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/21/24 12:30	10/22/24 17:09	1
Phenanthrene	ND		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 17:09	1
Pyrene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*50 - 150*	*10/21/24 12:30*	*10/22/24 17:09*	*1*
Nitrobenzene-d5	*112*		*50 - 150*	*10/21/24 12:30*	*10/22/24 17:09*	*1*
Terphenyl-d14	*86*		*50 - 150*	*10/21/24 12:30*	*10/22/24 17:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		10/18/24 10:16	10/18/24 21:51	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*10/18/24 10:16*	*10/18/24 21:51*	*1*

Client Sample ID: P56-ROX-101524
Date Collected: 10/15/24 13:05
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			10/28/24 15:44	5
Acrolein	ND		100	17	ug/L			10/28/24 15:44	5
Acrylonitrile	ND		50	14	ug/L			10/28/24 15:44	5
Benzene	ND		5.0	1.2	ug/L			10/28/24 15:44	5
Bromobenzene	ND		5.0	2.7	ug/L			10/28/24 15:44	5
Bromochloromethane	ND		5.0	2.6	ug/L			10/28/24 15:44	5
Bromodichloromethane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
Bromoform	ND		25	1.3	ug/L			10/28/24 15:44	5
Bromomethane	ND		5.0	4.9	ug/L			10/28/24 15:44	5
2-Butanone (MEK)	ND		130	13	ug/L			10/28/24 15:44	5
Carbon disulfide	ND		5.0	2.5	ug/L			10/28/24 15:44	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			10/28/24 15:44	5
Chlorobenzene	ND		5.0	2.1	ug/L			10/28/24 15:44	5
Chloroethane	ND		5.0	3.8	ug/L			10/28/24 15:44	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			10/28/24 15:44	5
Chloroform	ND		5.0	4.5	ug/L			10/28/24 15:44	5
1-Chlorohexane	ND		5.0	1.6	ug/L			10/28/24 15:44	5
Chloromethane	ND		5.0	2.0	ug/L			10/28/24 15:44	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			10/28/24 15:44	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			10/28/24 15:44	5
Dibromochloromethane	ND		5.0	1.2	ug/L			10/28/24 15:44	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			10/28/24 15:44	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			10/28/24 15:44	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			10/28/24 15:44	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			10/28/24 15:44	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
1,2-Dichloroethane	ND		5.0	2.8	ug/L			10/28/24 15:44	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			10/28/24 15:44	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			10/28/24 15:44	5
Ethylbenzene	**110**		5.0	2.5	ug/L			10/28/24 15:44	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			10/28/24 15:44	5
Hexachlorobutadiene	ND		25	4.5	ug/L			10/28/24 15:44	5
2-Hexanone	ND		130	21	ug/L			10/28/24 15:44	5
Isopropylbenzene	**32**		5.0	2.7	ug/L			10/28/24 15:44	5
Methylene bromide	ND		25	1.1	ug/L			10/28/24 15:44	5
Methylene Chloride	ND		25	15	ug/L			10/28/24 15:44	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			10/28/24 15:44	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			10/28/24 15:44	5
m-Xylene & p-Xylene	**120**		25	15	ug/L			10/28/24 15:44	5
Naphthalene	**16**	**J**	25	15	ug/L			10/28/24 15:44	5
n-Butylbenzene	ND		5.0	3.8	ug/L			10/28/24 15:44	5
N-Propylbenzene	**36**		5.0	3.5	ug/L			10/28/24 15:44	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			10/28/24 15:44	5
o-Xylene	ND		25	15	ug/L			10/28/24 15:44	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			10/28/24 15:44	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			10/28/24 15:44	5

Client Sample ID: P56-ROX-101524
Lab Sample ID: 400-264408-4

Date Collected: 10/15/24 13:05
Matrix: Water
Date Received: 10/16/24 09:06

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			10/28/24 15:44	5
Styrene	ND		5.0	5.0	ug/L			10/28/24 15:44	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			10/28/24 15:44	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			10/28/24 15:44	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			10/28/24 15:44	5
Tetrachloroethene	ND		5.0	1.7	ug/L			10/28/24 15:44	5
Toluene	ND		5.0	4.5	ug/L			10/28/24 15:44	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			10/28/24 15:44	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			10/28/24 15:44	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			10/28/24 15:44	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			10/28/24 15:44	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			10/28/24 15:44	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			10/28/24 15:44	5
Trichloroethene	ND		5.0	0.75	ug/L			10/28/24 15:44	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			10/28/24 15:44	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			10/28/24 15:44	5
1,2,4-Trimethylbenzene	**47**		5.0	4.1	ug/L			10/28/24 15:44	5
1,3,5-Trimethylbenzene	**15**		5.0	2.8	ug/L			10/28/24 15:44	5
Vinyl acetate	ND		130	4.7	ug/L			10/28/24 15:44	5
Vinyl chloride	ND		5.0	2.5	ug/L			10/28/24 15:44	5
Xylenes, Total	**120**		50	30	ug/L			10/28/24 15:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/28/24 15:44*	*5*
Dibromofluoromethane	*101*		*75 - 126*		*10/28/24 15:44*	*5*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/28/24 15:44*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.2	8.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
Benzenethiol	ND		9.2	9.1	ug/L		10/22/24 15:45	10/28/24 21:02	1
Benzoic acid	ND		28	22	ug/L		10/22/24 15:45	10/28/24 21:02	1
Benzyl alcohol	ND		9.2	6.7	ug/L		10/22/24 15:45	10/28/24 21:02	1
Bis(2-chloroethoxy)methane	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
Bis(2-chloroethyl)ether	ND		9.2	3.6	ug/L		10/22/24 15:45	10/28/24 21:02	1
bis (2-chloroisopropyl) ether	ND		9.2	1.7	ug/L		10/22/24 15:45	10/28/24 21:02	1
Bis(2-ethylhexyl) phthalate	ND		9.2	8.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Bromophenyl phenyl ether	ND		9.2	7.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
Butyl benzyl phthalate	ND		9.2	5.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Chloroaniline	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Chloro-3-methylphenol	ND		9.2	4.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
2-Chloronaphthalene	ND		9.2	3.5	ug/L		10/22/24 15:45	10/28/24 21:02	1
2-Chlorophenol	ND		9.2	3.8	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Chlorophenyl phenyl ether	ND		9.2	3.4	ug/L		10/22/24 15:45	10/28/24 21:02	1
Dibenz[a,h]acridine	ND		9.2	2.6	ug/L		10/22/24 15:45	10/28/24 21:02	1
Dibenzofuran	ND		9.2	3.7	ug/L		10/22/24 15:45	10/28/24 21:02	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4-Dichlorophenol	ND		9.2	4.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
Diethyl phthalate	ND		9.2	4.1	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4-Dimethylphenol	**6.0**	J *+ J	9.2	4.8	ug/L		10/22/24 15:45	10/28/24 21:02	1

Client Sample ID: P56-ROX-101524
Date Collected: 10/15/24 13:05
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.2	3.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
Di-n-butyl phthalate	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
4,6-Dinitro-ortho-cresol	ND		9.2	9.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4-Dinitrophenol	ND		28	4.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4-Dinitrotoluene	ND		9.2	4.7	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,6-Dinitrotoluene	ND		9.2	3.6	ug/L		10/22/24 15:45	10/28/24 21:02	1
Di-n-octyl phthalate	ND		9.2	5.5	ug/L		10/22/24 15:45	10/28/24 21:02	1
1,4-Dioxane	ND		9.2	4.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.2	3.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
Hexachlorobenzene	ND		9.2	8.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
Hexachlorocyclopentadiene	ND	*+	18	4.1	ug/L		10/22/24 15:45	10/28/24 21:02	1
Hexachloroethane	ND		9.2	4.8	ug/L		10/22/24 15:45	10/28/24 21:02	1
Indene	ND		9.2	3.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
Isophorone	ND		9.2	4.8	ug/L		10/22/24 15:45	10/28/24 21:02	1
2-Methylphenol	ND		9.2	2.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
3 & 4 Methylphenol	ND		18	4.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
2-Nitroaniline	ND		9.2	4.6	ug/L		10/22/24 15:45	10/28/24 21:02	1
3-Nitroaniline	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Nitroaniline	ND		9.2	3.8	ug/L		10/22/24 15:45	10/28/24 21:02	1
Nitrobenzene	ND		9.2	4.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
2-Nitrophenol	ND		9.2	4.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
4-Nitrophenol	ND		9.2	3.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
N-Nitrosodimethylamine	ND		9.2	2.0	ug/L		10/22/24 15:45	10/28/24 21:02	1
N-Nitrosodi-n-propylamine	ND		9.2	2.3	ug/L		10/22/24 15:45	10/28/24 21:02	1
N-Nitrosodiphenylamine	ND		9.2	3.4	ug/L		10/22/24 15:45	10/28/24 21:02	1
Pentachlorophenol	ND		18	11	ug/L		10/22/24 15:45	10/28/24 21:02	1
Phenol	ND		9.2	3.9	ug/L		10/22/24 15:45	10/28/24 21:02	1
Pyridine	ND		9.2	9.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
Quinoline	ND	*1	9.2	2.2	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4,5-Trichlorophenol	ND		9.2	3.7	ug/L		10/22/24 15:45	10/28/24 21:02	1
2,4,6-Trichlorophenol	ND		9.2	3.2	ug/L		10/22/24 15:45	10/28/24 21:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*10/22/24 15:45*	*10/28/24 21:02*	*1*
2-Fluorophenol	*47*		*10 - 105*	*10/22/24 15:45*	*10/28/24 21:02*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/22/24 15:45*	*10/28/24 21:02*	*1*
Phenol-d5	*36*		*10 - 129*	*10/22/24 15:45*	*10/28/24 21:02*	*1*
Terphenyl-d14	*75*		*13 - 150*	*10/22/24 15:45*	*10/28/24 21:02*	*1*
2,4,6-Tribromophenol	*81*		*10 - 150*	*10/22/24 15:45*	*10/28/24 21:02*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.2**		0.20	0.083	ug/L		10/21/24 12:30	10/22/24 16:39	1
Acenaphthylene	**0.12**	**J**	0.20	0.046	ug/L		10/21/24 12:30	10/22/24 16:39	1
Anthracene	**0.15**	**J**	0.20	0.071	ug/L		10/21/24 12:30	10/22/24 16:39	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:39	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 16:39	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/21/24 12:30	10/22/24 16:39	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/21/24 12:30	10/22/24 16:39	1

Client Sample ID: P56-ROX-101524
Date Collected: 10/15/24 13:05
Date Received: 10/16/24 09:06

Lab Sample ID: 400-264408-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:39	1
Chrysene	ND		0.20	0.038	ug/L		10/21/24 12:30	10/22/24 16:39	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 16:39	1
Fluoranthene	ND		0.20	0.031	ug/L		10/21/24 12:30	10/22/24 16:39	1
Fluorene	**0.62**		0.20	0.085	ug/L		10/21/24 12:30	10/22/24 16:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/21/24 12:30	10/22/24 16:39	1
1-Methylnaphthalene	**17**		0.20	0.064	ug/L		10/21/24 12:30	10/22/24 16:39	1
2-Methylnaphthalene	**17**		0.20	0.075	ug/L		10/21/24 12:30	10/22/24 16:39	1
Phenanthrene	**1.2**		0.20	0.043	ug/L		10/21/24 12:30	10/22/24 16:39	1
Pyrene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 16:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:39*	*1*
Nitrobenzene-d5	*105*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:39*	*1*
Terphenyl-d14	*67*		*50 - 150*	*10/21/24 12:30*	*10/22/24 16:39*	*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		10/18/24 10:16	10/18/24 22:12	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/18/24 10:16	10/18/24 22:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*10/18/24 10:16*	*10/18/24 22:12*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

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)
400-264408-1	TB-ROX-101524-8260-SS	94	100	94
400-264408-3	P93D-ROX-101524	95	105	95
400-264408-4	P56-ROX-101524	95	101	96
LCS 400-689344/1002	Lab Control Sample	90	100	95
MB 400-689344/5	Method Blank	93	102	94

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)
400-264408-3	P93D-ROX-101524	59	35	67	21	79	79
400-264408-4	P56-ROX-101524	62	47	58	36	75	81
LCS 400-688776/2-A	Lab Control Sample	64	47	71	36	76	82
LCS 400-688776/4-A	Lab Control Sample	50	28	52	23	72	65
LCSD 400-688776/3-A	Lab Control Sample Dup	60	46	73	36	71	80
LCSD 400-688776/5-A	Lab Control Sample Dup	54	41	59	29	75	70
MB 400-688776/1-A	Method Blank	48	31	58	20	78	66

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264408-3	P93D-ROX-101524	82	112	86
400-264408-4	P56-ROX-101524	76	105	67
LCS 400-688611/2-A	Lab Control Sample	77	112	78
LCSD 400-688611/3-A	Lab Control Sample Dup	85	115	82
MB 400-688611/1-A	Method Blank	82	104	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM
Job ID: 400-264408-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264408-2	TB-ROX-101524-8011-SS	68
400-264408-3	P93D-ROX-101524	69
400-264408-4	P56-ROX-101524	72
LCS 400-688388/2-A	Lab Control Sample	90
LCSD 400-688388/3-A	Lab Control Sample Dup	90
MB 400-688388/1-A	Method Blank	99

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264408-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101524-8260-SS
Lab Sample ID: 400-264408-1
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689344	10/28/24 17:29	BPO	EET PEN

Client Sample ID: TB-ROX-101524-8011-SS
Lab Sample ID: 400-264408-2
Date Collected: 10/15/24 00:00
Matrix: Water
Date Received: 10/16/24 09:06

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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 21:10	KR	EET PEN

Client Sample ID: P93D-ROX-101524
Lab Sample ID: 400-264408-3
Date Collected: 10/15/24 11:11
Matrix: Water
Date Received: 10/16/24 09:06

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689344	10/28/24 15:17	BPO	EET PEN
Total/NA	Prep	3510C			270.6 mL	1 mL	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 20:37	VC1	EET PEN
Total/NA	Prep	3511			30.4 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 17:09	DS	EET PEN
Total/NA	Prep	8011			33.6 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 21:51	KR	EET PEN

Client Sample ID: P56-ROX-101524
Lab Sample ID: 400-264408-4
Date Collected: 10/15/24 13:05
Matrix: Water
Date Received: 10/16/24 09:06

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	689344	10/28/24 15:44	BPO	EET PEN
Total/NA	Prep	3510C			271.4 mL	1 mL	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 21:02	VC1	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 16:39	DS	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 22:12	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688388/1-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:09	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264408-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688611/1-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 12:39	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688776/1-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 17:15	VC1	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689344/5
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	689344	10/28/24 13:07	BPO	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688388/2-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:30	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688611/2-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1	0 mL	1.0 mL	688707	10/22/24 13:10	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688776/2-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 17:41	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264408-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688776/4-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:32	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689344/1002
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	689344	10/28/24 11:54	BPO	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688388/3-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	688388	10/18/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688421	10/18/24 14:51	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688611/3-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	3511			30 mL	2 mL	688611	10/21/24 12:30	RAW	EET PEN
Total/NA	Analysis	8270E		1			688707	10/22/24 13:40	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688776/3-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:06	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688776/5-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	688776	10/22/24 15:45	STC	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 18:57	VC1	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264408-1

GC/MS VOA

Analysis Batch: 689344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-1	TB-ROX-101524-8260-SS	Total/NA	Water	8260D	
400-264408-3	P93D-ROX-101524	Total/NA	Water	8260D	
400-264408-4	P56-ROX-101524	Total/NA	Water	8260D	
MB 400-689344/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689344/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 688611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-3	P93D-ROX-101524	Total/NA	Water	3511	
400-264408-4	P56-ROX-101524	Total/NA	Water	3511	
MB 400-688611/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688611/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688611/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 688707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-3	P93D-ROX-101524	Total/NA	Water	8270E	688611
400-264408-4	P56-ROX-101524	Total/NA	Water	8270E	688611
MB 400-688611/1-A	Method Blank	Total/NA	Water	8270E	688611
LCS 400-688611/2-A	Lab Control Sample	Total/NA	Water	8270E	688611
LCSD 400-688611/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688611

Prep Batch: 688776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-3	P93D-ROX-101524	Total/NA	Water	3510C	
400-264408-4	P56-ROX-101524	Total/NA	Water	3510C	
MB 400-688776/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688776/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688776/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688776/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688776/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 689342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-3	P93D-ROX-101524	Total/NA	Water	8270E	688776
400-264408-4	P56-ROX-101524	Total/NA	Water	8270E	688776
MB 400-688776/1-A	Method Blank	Total/NA	Water	8270E	688776
LCS 400-688776/2-A	Lab Control Sample	Total/NA	Water	8270E	688776
LCS 400-688776/4-A	Lab Control Sample	Total/NA	Water	8270E	688776
LCSD 400-688776/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688776
LCSD 400-688776/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	688776

GC Semi VOA

Prep Batch: 688388

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-2	TB-ROX-101524-8011-SS	Total/NA	Water	8011	
400-264408-3	P93D-ROX-101524	Total/NA	Water	8011	
400-264408-4	P56-ROX-101524	Total/NA	Water	8011	
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 688388 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264408-2	TB-ROX-101524-8011-SS	Total/NA	Water	8011	688388
400-264408-3	P93D-ROX-101524	Total/NA	Water	8011	688388
400-264408-4	P56-ROX-101524	Total/NA	Water	8011	688388
MB 400-688388/1-A	Method Blank	Total/NA	Water	8011	688388
LCS 400-688388/2-A	Lab Control Sample	Total/NA	Water	8011	688388
LCSD 400-688388/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688388

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

Lab Sample ID: MB 400-689344/5
Matrix: Water
Analysis Batch: 689344

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			10/28/24 13:07	1
Acrolein	ND		20	3.3	ug/L			10/28/24 13:07	1
Acrylonitrile	ND		10	2.8	ug/L			10/28/24 13:07	1
Benzene	ND		1.0	0.24	ug/L			10/28/24 13:07	1
Bromobenzene	ND		1.0	0.54	ug/L			10/28/24 13:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/28/24 13:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
Bromoform	ND		5.0	0.25	ug/L			10/28/24 13:07	1
Bromomethane	ND		1.0	0.98	ug/L			10/28/24 13:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/28/24 13:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/28/24 13:07	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/28/24 13:07	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/28/24 13:07	1
Chloroethane	ND		1.0	0.76	ug/L			10/28/24 13:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/28/24 13:07	1
Chloroform	ND		1.0	0.90	ug/L			10/28/24 13:07	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/28/24 13:07	1
Chloromethane	ND		1.0	0.40	ug/L			10/28/24 13:07	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/28/24 13:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/28/24 13:07	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/28/24 13:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/28/24 13:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/28/24 13:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/28/24 13:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/28/24 13:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/28/24 13:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 13:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/28/24 13:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/28/24 13:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/28/24 13:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/28/24 13:07	1
2-Hexanone	ND		25	4.3	ug/L			10/28/24 13:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/28/24 13:07	1
Methylene bromide	ND		5.0	0.22	ug/L			10/28/24 13:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/28/24 13:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/28/24 13:07	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/28/24 13:07	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/28/24 13:07	1
Naphthalene	ND		5.0	3.0	ug/L			10/28/24 13:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/28/24 13:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/28/24 13:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/28/24 13:07	1
o-Xylene	ND		5.0	3.0	ug/L			10/28/24 13:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/28/24 13:07	1

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

Lab Sample ID: MB 400-689344/5
Matrix: Water
Analysis Batch: 689344

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			10/28/24 13:07	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/28/24 13:07	1
Styrene	ND		1.0	1.0	ug/L			10/28/24 13:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/28/24 13:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/28/24 13:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/28/24 13:07	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/28/24 13:07	1
Toluene	ND		1.0	0.90	ug/L			10/28/24 13:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/28/24 13:07	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/28/24 13:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/28/24 13:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/28/24 13:07	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/28/24 13:07	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/28/24 13:07	1
Trichloroethene	ND		1.0	0.15	ug/L			10/28/24 13:07	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/28/24 13:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/28/24 13:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/28/24 13:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/28/24 13:07	1
Vinyl acetate	ND		25	0.93	ug/L			10/28/24 13:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/28/24 13:07	1
Xylenes, Total	ND		10	6.0	ug/L			10/28/24 13:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/28/24 13:07*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*10/28/24 13:07*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/28/24 13:07*	*1*

Lab Sample ID: LCS 400-689344/1002
Matrix: Water
Analysis Batch: 689344

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	190		ug/L		95	43 - 150
Acrolein	500	610		ug/L		122	38 - 150
Acrylonitrile	500	474		ug/L		95	64 - 142
Benzene	50.0	48.0		ug/L		96	70 - 130
Bromobenzene	50.0	47.6		ug/L		95	70 - 132
Bromochloromethane	50.0	50.9		ug/L		102	70 - 130
Bromodichloromethane	50.0	45.4		ug/L		91	67 - 133
Bromoform	50.0	41.9		ug/L		84	57 - 140
Bromomethane	50.0	43.4		ug/L		87	10 - 150
2-Butanone (MEK)	200	218		ug/L		109	61 - 145
Carbon disulfide	50.0	47.7		ug/L		95	61 - 137
Carbon tetrachloride	50.0	44.2		ug/L		88	61 - 137
Chlorobenzene	50.0	48.3		ug/L		97	70 - 130
Chloroethane	50.0	45.1		ug/L		90	55 - 141
2-Chloroethyl vinyl ether	50.0	27.5		ug/L		55	10 - 150

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

Lab Sample ID: LCS 400-689344/1002
Matrix: Water
Analysis Batch: 689344

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.0		ug/L		92	69 - 130
1-Chlorohexane	50.0	47.5		ug/L		95	69 - 130
Chloromethane	50.0	50.6		ug/L		101	58 - 137
cis-1,2-Dichloroethene	50.0	46.1		ug/L		92	68 - 130
cis-1,3-Dichloropropene	50.0	46.5		ug/L		93	69 - 132
Dibromochloromethane	50.0	45.8		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	49.6		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	42.2		ug/L		84	41 - 146
1,1-Dichloroethane	50.0	46.3		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	42.9		ug/L		86	69 - 130
1,1-Dichloroethene	50.0	46.9		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	48.7		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	45.9		ug/L		92	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	46.3		ug/L		93	70 - 130
Ethylbenzene	50.0	47.1		ug/L		94	70 - 130
Ethyl methacrylate	50.0	42.6		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	53.2		ug/L		106	53 - 140
2-Hexanone	200	205		ug/L		103	65 - 137
Isopropylbenzene	50.0	48.0		ug/L		96	70 - 130
Methylene bromide	50.0	46.2		ug/L		92	70 - 130
Methylene Chloride	50.0	50.8		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	179		ug/L		90	69 - 138
Methyl tert-butyl ether	50.0	42.7		ug/L		85	66 - 130
m-Xylene & p-Xylene	50.0	47.2		ug/L		94	70 - 130
Naphthalene	50.0	43.9		ug/L		88	47 - 149
n-Butylbenzene	50.0	49.3		ug/L		99	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	46.3		ug/L		93	70 - 130
o-Xylene	50.0	46.8		ug/L		94	70 - 130
p-Chlorotoluene	50.0	45.6		ug/L		91	70 - 130
p-Isopropyltoluene	50.0	48.7		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.3		ug/L		97	66 - 130
Styrene	50.0	48.9		ug/L		98	70 - 130
tert-Butylbenzene	50.0	43.5		ug/L		87	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.8		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	41.9		ug/L		84	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	47.1		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	48.5		ug/L		97	70 - 130
trans-1,3-Dichloropropene	50.0	43.5		ug/L		87	63 - 130
1,2,3-Trichlorobenzene	50.0	49.0		ug/L		98	60 - 138
1,2,4-Trichlorobenzene	50.0	50.8		ug/L		102	60 - 140
1,1,1-Trichloroethane	50.0	44.0		ug/L		88	68 - 130
1,1,2-Trichloroethane	50.0	45.4		ug/L		91	70 - 130
Trichloroethene	50.0	49.2		ug/L		98	70 - 130
Trichlorofluoromethane	50.0	47.8		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-689344/1002
Matrix: Water
Analysis Batch: 689344

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	41.6		ug/L		83	70 - 130
1,2,4-Trimethylbenzene	50.0	47.0		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	45.8		ug/L		92	69 - 130
Vinyl acetate	100	96.6		ug/L		97	26 - 150
Vinyl chloride	50.0	49.1		ug/L		98	59 - 136
Xylenes, Total	100	93.9		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-688776/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzenethiol	ND		10	9.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzoic acid	ND		30	24	ug/L		10/22/24 15:45	10/28/24 17:15	1
Benzyl alcohol	ND		10	7.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chloroaniline	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Chlorophenol	ND		10	4.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dibenzofuran	ND		10	4.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Diethyl phthalate	ND		10	4.4	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/22/24 15:45	10/28/24 17:15	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
1,4-Dioxane	ND		10	4.3	ug/L		10/22/24 15:45	10/28/24 17:15	1

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

Lab Sample ID: MB 400-688776/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688776

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/22/24 15:45	10/28/24 17:15	1
Hexachloroethane	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Indene	ND		10	3.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
Isophorone	ND		10	5.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Methylphenol	ND		10	3.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Nitroaniline	ND		10	5.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
3-Nitroaniline	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Nitroaniline	ND		10	4.1	ug/L		10/22/24 15:45	10/28/24 17:15	1
Nitrobenzene	ND		10	4.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
2-Nitrophenol	ND		10	4.6	ug/L		10/22/24 15:45	10/28/24 17:15	1
4-Nitrophenol	ND		10	3.3	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/22/24 15:45	10/28/24 17:15	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/22/24 15:45	10/28/24 17:15	1
Pentachlorophenol	ND		20	12	ug/L		10/22/24 15:45	10/28/24 17:15	1
Phenol	ND		10	4.2	ug/L		10/22/24 15:45	10/28/24 17:15	1
Pyridine	ND		10	10	ug/L		10/22/24 15:45	10/28/24 17:15	1
Quinoline	ND		10	2.4	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/22/24 15:45	10/28/24 17:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/22/24 15:45	10/28/24 17:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*21 - 114*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
2-Fluorophenol	*31*		*10 - 105*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Phenol-d5	*20*		*10 - 129*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
Terphenyl-d14	*78*		*13 - 150*	*10/22/24 15:45*	*10/28/24 17:15*	*1*
2,4,6-Tribromophenol	*66*		*10 - 150*	*10/22/24 15:45*	*10/28/24 17:15*	*1*

Lab Sample ID: LCS 400-688776/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	22.6		ug/L		19	10 - 127
Benzoic acid	493	118		ug/L		24	19 - 126
Benzyl alcohol	120	57.6		ug/L		48	17 - 109
Bis(2-chloroethoxy)methane	120	95.8		ug/L		80	24 - 125
Bis(2-chloroethyl)ether	120	124		ug/L		104	10 - 121
bis (2-chloroisopropyl) ether	120	124		ug/L		104	14 - 123
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	16 - 150
4-Bromophenyl phenyl ether	120	96.4		ug/L		80	17 - 150
Butyl benzyl phthalate	120	106		ug/L		88	21 - 150
4-Chloroaniline	120	60.8		ug/L		51	10 - 124
4-Chloro-3-methylphenol	120	85.5		ug/L		71	37 - 131

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

Lab Sample ID: LCS 400-688776/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	93.4		ug/L		78	24 - 132
2-Chlorophenol	120	92.9		ug/L		77	27 - 124
4-Chlorophenyl phenyl ether	120	100		ug/L		83	27 - 147
Dibenz[a,h]acridine	59.9	64.5		ug/L		108	40 - 140
Dibenzofuran	120	102		ug/L		85	30 - 135
3,3'-Dichlorobenzidine	160	143		ug/L		89	10 - 150
2,4-Dichlorophenol	120	81.3		ug/L		68	33 - 132
Diethyl phthalate	120	106		ug/L		89	37 - 145
2,4-Dimethylphenol	120	152		ug/L		127	38 - 132
Dimethyl phthalate	120	105		ug/L		87	32 - 137
Di-n-butyl phthalate	120	112		ug/L		93	27 - 150
4,6-Dinitro-ortho-cresol	240	210		ug/L		88	14 - 150
2,4-Dinitrophenol	240	235		ug/L		98	15 - 150
2,4-Dinitrotoluene	120	108		ug/L		90	35 - 136
2,6-Dinitrotoluene	120	99.5		ug/L		83	29 - 140
Di-n-octyl phthalate	120	115		ug/L		96	26 - 150
1,4-Dioxane	120	35.6		ug/L		30	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	105		ug/L		88	23 - 138
Hexachlorobenzene	120	99.7		ug/L		83	10 - 150
Hexachlorocyclopentadiene	120	158	*+	ug/L		131	10 - 124
Hexachloroethane	120	80.8		ug/L		67	10 - 127
Indene	120	84.7		ug/L		71	18 - 150
Isophorone	120	95.1		ug/L		79	28 - 127
2-Methylphenol	120	98.8		ug/L		82	34 - 124
3 & 4 Methylphenol	120	82.2		ug/L		69	32 - 122
2-Nitroaniline	120	104		ug/L		87	24 - 139
3-Nitroaniline	120	71.6		ug/L		60	10 - 128
4-Nitroaniline	120	106		ug/L		88	28 - 118
Nitrobenzene	120	86.6		ug/L		72	29 - 120
2-Nitrophenol	120	87.7		ug/L		73	25 - 148
4-Nitrophenol	240	110		ug/L		46	12 - 129
N-Nitrosodimethylamine	120	35.3		ug/L		29	10 - 115
N-Nitrosodi-n-propylamine	120	101		ug/L		84	24 - 142
N-Nitrosodiphenylamine	119	93.2		ug/L		78	29 - 138
Pentachlorophenol	240	172		ug/L		72	19 - 150
Phenol	120	46.5		ug/L		39	11 - 95
Pyridine	240	27.3		ug/L		11	10 - 82
Quinoline	59.9	26.7		ug/L		45	10 - 141
2,4,5-Trichlorophenol	120	91.0		ug/L		76	30 - 144
2,4,6-Trichlorophenol	120	87.3		ug/L		73	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*21 - 114*
2-Fluorophenol	*47*		*10 - 105*
Nitrobenzene-d5	*71*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*76*		*13 - 150*

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

Lab Sample ID: LCS 400-688776/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCS 400-688776/4-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	69.4		ug/L		58	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*21 - 114*
2-Fluorophenol	*28*		*10 - 105*
Nitrobenzene-d5	*52*		*16 - 127*
Phenol-d5	*23*		*10 - 129*
Terphenyl-d14	*72*		*13 - 150*
2,4,6-Tribromophenol	*65*		*10 - 150*

Lab Sample ID: LCSD 400-688776/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	36.2	*1	ug/L		30	10 - 127	46	40
Benzoic acid			493	134		ug/L		27	19 - 126	13	40
Benzyl alcohol			120	55.2		ug/L		46	17 - 109	4	40
Bis(2-chloroethoxy)methane			120	99.9		ug/L		83	24 - 125	4	40
Bis(2-chloroethyl)ether			120	103		ug/L		86	10 - 121	19	40
bis (2-chloroisopropyl) ether			120	104		ug/L		87	14 - 123	17	40
Bis(2-ethylhexyl) phthalate			120	107		ug/L		89	16 - 150	2	40
4-Bromophenyl phenyl ether			120	92.2		ug/L		77	17 - 150	4	40
Butyl benzyl phthalate			120	106		ug/L		88	21 - 150	0	40
4-Chloroaniline			120	70.2		ug/L		59	10 - 124	14	40
4-Chloro-3-methylphenol			120	94.0		ug/L		78	37 - 131	9	40
2-Chloronaphthalene			120	89.9		ug/L		75	24 - 132	4	40
2-Chlorophenol			120	86.7		ug/L		72	27 - 124	7	40
4-Chlorophenyl phenyl ether			120	98.0		ug/L		82	27 - 147	2	40
Dibenz[a,h]acridine			59.9	53.9		ug/L		90	40 - 140	18	40
Dibenzofuran			120	98.7		ug/L		82	30 - 135	4	40
3,3'-Dichlorobenzidine			160	138		ug/L		87	10 - 150	3	40
2,4-Dichlorophenol			120	90.3		ug/L		75	33 - 132	11	40
Diethyl phthalate			120	104		ug/L		87	37 - 145	2	40
2,4-Dimethylphenol			120	161	*+	ug/L		134	38 - 132	6	40
Dimethyl phthalate			120	97.3		ug/L		81	32 - 137	8	40
Di-n-butyl phthalate			120	110		ug/L		91	27 - 150	2	40
4,6-Dinitro-ortho-cresol			240	213		ug/L		89	14 - 150	1	40
2,4-Dinitrophenol			240	242		ug/L		101	15 - 150	3	40
2,4-Dinitrotoluene			120	104		ug/L		86	35 - 136	5	40
2,6-Dinitrotoluene			120	93.4		ug/L		78	29 - 140	6	40

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

Lab Sample ID: LCSD 400-688776/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	109		ug/L		91	26 - 150	5	40
1,4-Dioxane			120	34.2		ug/L		28	10 - 87	4	40
1,2-Diphenylhydrazine (as Azobenzene)			120	104		ug/L		87	23 - 138	1	40
Hexachlorobenzene			120	97.6		ug/L		81	10 - 150	2	40
Hexachlorocyclopentadiene			120	149		ug/L		124	10 - 124	6	40
Hexachloroethane			120	74.5		ug/L		62	10 - 127	8	40
Indene			120	81.9		ug/L		68	18 - 150	3	40
Isophorone			120	97.6		ug/L		81	28 - 127	3	40
2-Methylphenol			120	94.8		ug/L		79	34 - 124	4	40
3 & 4 Methylphenol			120	76.4		ug/L		64	32 - 122	7	40
2-Nitroaniline			120	94.5		ug/L		79	24 - 139	10	40
3-Nitroaniline			120	77.0		ug/L		64	10 - 128	7	40
4-Nitroaniline			120	112		ug/L		93	28 - 118	6	40
Nitrobenzene			120	89.7		ug/L		75	29 - 120	4	40
2-Nitrophenol			120	94.0		ug/L		78	25 - 148	7	40
4-Nitrophenol			240	122		ug/L		51	12 - 129	10	40
N-Nitrosodimethylamine			120	35.3		ug/L		29	10 - 115	0	40
N-Nitrosodi-n-propylamine			120	94.6		ug/L		79	24 - 142	6	40
N-Nitrosodiphenylamine			119	90.6		ug/L		76	29 - 138	3	40
Pentachlorophenol			240	175		ug/L		73	19 - 150	2	40
Phenol			120	46.3		ug/L		39	11 - 95	0	40
Pyridine			240	39.7		ug/L		17	10 - 82	37	40
Quinoline			59.9	41.2	*1	ug/L		69	10 - 141	43	40
2,4,5-Trichlorophenol			120	87.0		ug/L		72	30 - 144	5	40
2,4,6-Trichlorophenol			120	82.6		ug/L		69	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*73*		*16 - 127*
Phenol-d5	*36*		*10 - 129*
Terphenyl-d14	*71*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Lab Sample ID: LCSD 400-688776/5-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	75.5		ug/L		63	10 - 140	9	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*21 - 114*
2-Fluorophenol	*41*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*29*		*10 - 129*
Terphenyl-d14	*75*		*13 - 150*

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

Lab Sample ID: LCSD 400-688776/5-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688776

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*70*		*10 - 150*

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

Lab Sample ID: MB 400-688611/1-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688611

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/21/24 12:30	10/22/24 12:39	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/21/24 12:30	10/22/24 12:39	1
Anthracene	ND		0.20	0.073	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/21/24 12:30	10/22/24 12:39	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1
Chrysene	ND		0.20	0.039	ug/L		10/21/24 12:30	10/22/24 12:39	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 12:39	1
Fluoranthene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 12:39	1
Fluorene	ND		0.20	0.087	ug/L		10/21/24 12:30	10/22/24 12:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/21/24 12:30	10/22/24 12:39	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/21/24 12:30	10/22/24 12:39	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/21/24 12:30	10/22/24 12:39	1
Phenanthrene	ND		0.20	0.044	ug/L		10/21/24 12:30	10/22/24 12:39	1
Pyrene	ND		0.20	0.040	ug/L		10/21/24 12:30	10/22/24 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*
Nitrobenzene-d5	*104*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*
Terphenyl-d14	*73*		*50 - 150*	*10/21/24 12:30*	*10/22/24 12:39*	*1*

Lab Sample ID: LCS 400-688611/2-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.80		ug/L		84	50 - 150
Acenaphthylene	3.34	2.98		ug/L		89	50 - 150
Anthracene	3.34	2.91		ug/L		87	50 - 150
Benzo[a]anthracene	3.34	3.24		ug/L		97	50 - 150
Benzo[a]pyrene	3.34	2.94		ug/L		88	50 - 150
Benzo[b]fluoranthene	3.34	2.86		ug/L		86	50 - 150
Benzo[g,h,i]perylene	3.34	2.53		ug/L		76	50 - 150
Benzo[k]fluoranthene	3.34	2.89		ug/L		87	50 - 150
Chrysene	3.34	2.89		ug/L		87	50 - 150
Dibenz(a,h)anthracene	3.34	2.44		ug/L		73	50 - 150
Fluoranthene	3.34	2.80		ug/L		84	50 - 150

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

Lab Sample ID: LCS 400-688611/2-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688611

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	3.34	2.80		ug/L		84	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.53		ug/L		76	50 - 150
1-Methylnaphthalene	3.34	2.54		ug/L		76	50 - 150
2-Methylnaphthalene	3.34	2.24		ug/L		67	50 - 150
Phenanthrene	3.34	2.75		ug/L		82	50 - 150
Pyrene	3.34	2.75		ug/L		83	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*50 - 150*
Nitrobenzene-d5	*112*		*50 - 150*
Terphenyl-d14	*78*		*50 - 150*

Lab Sample ID: LCSD 400-688611/3-A
Matrix: Water
Analysis Batch: 688707

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688611

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.34	2.27		ug/L		68	50 - 150	21	40
Acenaphthylene	3.34	2.52		ug/L		76	50 - 150	17	40
Anthracene	3.34	2.55		ug/L		77	50 - 150	13	40
Benzo[a]anthracene	3.34	2.95		ug/L		88	50 - 150	9	40
Benzo[a]pyrene	3.34	2.65		ug/L		79	50 - 150	10	40
Benzo[b]fluoranthene	3.34	2.48		ug/L		74	50 - 150	14	40
Benzo[g,h,i]perylene	3.34	2.38		ug/L		71	50 - 150	6	40
Benzo[k]fluoranthene	3.34	2.58		ug/L		77	50 - 150	11	40
Chrysene	3.34	2.48		ug/L		74	50 - 150	15	40
Dibenz(a,h)anthracene	3.34	2.29		ug/L		69	50 - 150	6	40
Fluoranthene	3.34	2.44		ug/L		73	50 - 150	14	40
Fluorene	3.34	2.49		ug/L		75	50 - 150	12	40
Indeno[1,2,3-cd]pyrene	3.34	2.32		ug/L		70	50 - 150	9	40
1-Methylnaphthalene	3.34	2.04		ug/L		61	50 - 150	22	40
2-Methylnaphthalene	3.34	1.78		ug/L		53	50 - 150	23	40
Phenanthrene	3.34	2.38		ug/L		71	50 - 150	14	40
Pyrene	3.34	2.36		ug/L		71	50 - 150	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*50 - 150*
Nitrobenzene-d5	*115*		*50 - 150*
Terphenyl-d14	*82*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

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		10/18/24 10:16	10/18/24 14:09	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-688388/1-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688388

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/18/24 10:16	10/18/24 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*10/18/24 10:16*	*10/18/24 14:09*	*1*

Lab Sample ID: LCS 400-688388/2-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0904		ug/L		90	60 - 140		
1,2-Dibromoethane			0.100	0.0839		ug/L		84	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: LCSD 400-688388/3-A
Matrix: Water
Analysis Batch: 688421

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688388

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0945		ug/L		94	60 - 140	4	30
1,2-Dibromoethane			0.100	0.0847		ug/L		84	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/15/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): Sahoi McLean, Tony Jones

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

SPLIT REPORT

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** Send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

REQUESTED ANALYSIS
60721927 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 1.1 4.6 IR11

Container PID Readings or Laboratory Notes:

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270 SIMS	FIELD NOTES
	TB-ROX-101524-8260-SS	10/15/2024	0000	Water	2					2	X				SPLIT REPORT
	TB-ROX-101524-8011-SS	10/15/2024	0000	Water	2					2		X			
	P93D-ROX-101524	10/15/2024	1111	Water	6			4		10	X	X	X	X	SPLIT REPORT
	P56-ROX-101524	10/15/2024	1305	Water	6			4		10	X	X	X	X	SPLIT REPORT

400-264408 COC

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Sahoi McLean	FEDEX: 7252 0547 1883, 7252 0547 1894	10/15/2024	1600
		10/16/24	9:06

CUSTODY SEALS: 1599958, 1599959, 1599960, 1599961

Version: 19Sept24

Page 38 of 40

10/29/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264408-1

Login Number: 264408
List Number: 1
Creator: Beecher (Roberts), Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1°C, 4.6°C IR11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have 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
Job ID: 400-264408-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264429-1

Site Name: Roxana

Prepared By and Date: Andreia Vladimirescu, 11/28/24

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.	X			
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-689460/1002	VOCs	Acetone	**173**	NA	43-150
LCS 400-689460/1002	VOCs	2-Butanone (MEK)	**166**	NA	61-145
LCS 400-689599/1002	VOCs	Acetone	**193**	NA	43-150
LCS 400-689599/1002	VOCs	2-Butanone (MEK)	**191**	NA	61-145
LCS/LCSD 400-687852/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**186/155**	18	10-124/40
LCS/LCSD 400-688972/2-A/3-A	SVOCs	Dibenz[a,h]acridine	**180/180**	0	40-140/40
LCS/LCSD 400-688972/2-A/3-A	SVOCs	2,4-Dimethylphenol	**135**/128	5	38-132/40
LCS/LCSD 400-688972/2-A/3-A	SVOCs	2,4-Dinitrophenol	**171/180**	5	15-150/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**		**Quality Condition**			**Comments**
			Pass	**Fail[1]**	**N/A**	
LCS/LCSD 400-688972/2-A/3-A	SVOCs	Hexachlorocyclopentadiene		**243/253**	4	10-124/40
LCS/LCSD 400-688972/2-A/3-A	SVOCs	Pyridine		**6/2**	**104**	10-82/40
LCS/LCSD 400-688972/2-A/3-A	SVOCs	Aniline		34/18	**61**	10-127/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Trip blanks are quality control samples that do not require qualification.

Method 8270E (SVOCs)
2,4-Dimethylphenol in sample MW22-ROX-101624 was qualified as estimated (J).

Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples ROST4PZC-ROX-101624, ROST4PZC-ROX-101624-DUP, ROST4PZG-ROX-101624, and MW22-ROX-101624 was qualified as estimated (UJ).

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MB 400-688972/1-A	SVOCs	Di-n-butyl phthalate	82.2 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Method 8270E (SVOCs)
Di-n-butyl phthalate in samples ROST4PZC-ROX-101624, ROST4PZC-ROX-101624-DUP, ROST4PZG-ROX-101624, and MW22-ROX-101624 was qualified as non-detect (U) at the reported sample concentration.

Detection Limits[2]	No results were reported as non-detect at elevated detection limits.		X		Analytes were detected in samples that were diluted.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.		X		
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			**X**	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			**X**	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8260D (VOCs) The continuing calibration verification (CCV) for chloroethane, 2,2-dichloropropane, 1,1,1-trichloroethane, 1,2-dichloroethane, and trans-1,3-dichloropropene were outside evaluation criteria, biased low. The associated results for samples ROST4PZC-ROX-101624, ROST4PZC-ROX-101624-DUP, ROST4PZG-ROX-101624, and MW22-ROX-101624 were qualified as estimated (UJ).					

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Method 8270E (SVOCs) The initial calibration verification (ICV) for 2,4-dimethylphenol was outside evaluation criteria, biased high. 2,4-Dimethylphenol in sample MW22-ROX-101624 was previously qualified due to LCS/LCSD recovery outside evaluation criteria; no further qualification is required.					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.

[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/31/2024 11:21:16 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264429-1

Reviewed 11/28/2024
VA

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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10/31/2024 11:21:16 AM

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Job Narrative
400-264429-1

Receipt
The samples were received on 10/17/2024 9:43 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.0º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689460 recovered above the upper control limit for 2-Butanone (MEK) and Acetone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689460 recovered outside acceptance criteria, low biased, for 1,1,1-Trichloroethane, 1,2-Dichloroethane, 2,2-Dichloropropane, Chloroethane and trans-1,3-Dichloropropene. 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 400-689460 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 matrix spike (MS) recoveries for analytical batch 400-689460 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689460 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 400-689460 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: ROST4PZC-ROX-101624 (400-264429-3), ROST4PZC-ROX-101624-DUP (400-264429-4) and ROST4PZG-ROX-101624 (400-264429-5). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW22-ROX-101624 (400-264429-6). Elevated reporting limits (RLs) are provided.

Method 8260D: The laboratory control sample (LCS) for analytical batch 400-689599 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689599 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following sample was received preserved with hydrochloric acid: TB-ROX-101624-8260 (400-264429-1). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689599 recovered above the upper control limit for 2-Butanone (MEK), Acetone and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-688972 and analytical batch 400-689180 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689180 recovered above the upper control limit for 2,4-Dinitrophenol and 4,6-Dinitro-ortho-cresol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688972 and analytical batch 400-689180 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dimethylphenol, Dibenz[a,h]acridine and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688972 and analytical batch 400-689180 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, Dibenz[a,h]acridine and Hexachlorocyclopentadiene. 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-688972 and analytical batch 400-689180 recovered outside control limits for the following analytes: Aniline and Pyridine.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689180 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The following samples and corresponding method blank contained common lab contaminant di-n-butyl phthalate above the reporting limit (RL) but less than regulatory limits. Data has been reported accordingly and can be re-extracted upon request. ROST4PZC-ROX-101624 (400-264429-3), ROST4PZC-ROX-101624-DUP (400-264429-4), ROST4PZG-ROX-101624 (400-264429-5), MW22-ROX-101624 (400-264429-6) and (MB 400-688972/1-A)

Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-689180 was outside method criteria for the following analyte(s): 2,4-Dinitrophenol. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

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

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

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264429-1	TB-ROX-101624-8260	Water	10/16/24 00:00	10/17/24 09:43
400-264429-2	TB-ROX-101624-8011	Water	10/16/24 00:00	10/17/24 09:43
400-264429-3	ROST4PZC-ROX-101624	Water	10/16/24 09:45	10/17/24 09:43
400-264429-4	ROST4PZC-ROX-101624-DUP	Water	10/16/24 09:45	10/17/24 09:43
400-264429-5	ROST4PZG-ROX-101624	Water	10/16/24 11:30	10/17/24 09:43
400-264429-6	MW22-ROX-101624	Water	10/16/24 12:50	10/17/24 09:43

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: TB-ROX-101624-8260 — Lab Sample ID: 400-264429-1

No Detections.

Client Sample ID: TB-ROX-101624-8011 — Lab Sample ID: 400-264429-2

No Detections.

Client Sample ID: ROST4PZC-ROX-101624 — Lab Sample ID: 400-264429-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.6		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	4.4		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	24		5.0	3.0	ug/L	1		8260D	Total/NA
Naphthalene	49		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	6.6		1.0	0.69	ug/L	1		8260D	Total/NA
Toluene	8.8		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	6.4		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	0.94	J	1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	26		10	6.0	ug/L	1		8260D	Total/NA
Di-n-butyl phthalate	~~97~~ 97	~~B~~ U	~~9.3~~ 9.7	4.3	ug/L	1		8270E	Total/NA
Acenaphthene	1.0		0.20	0.084	ug/L	1		8270E	Total/NA
Acenaphthylene	0.13	J	0.20	0.047	ug/L	1		8270E	Total/NA
Anthracene	0.35		0.20	0.073	ug/L	1		8270E	Total/NA
Fluoranthene	0.034	J	0.20	0.032	ug/L	1		8270E	Total/NA
Fluorene	0.80		0.20	0.086	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	18		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	2.0		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.71		0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.065	J	0.20	0.040	ug/L	1		8270E	Total/NA

Client Sample ID: ROST4PZC-ROX-101624-DUP — Lab Sample ID: 400-264429-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.7		1.0	0.24	ug/L	1		8260D	Total/NA
Ethylbenzene	0.71	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	3.7		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	22		5.0	3.0	ug/L	1		8260D	Total/NA
Naphthalene	50		5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	5.5		1.0	0.69	ug/L	1		8260D	Total/NA
Toluene	7.8		1.0	0.90	ug/L	1		8260D	Total/NA
1,2,4-Trimethylbenzene	5.9		1.0	0.82	ug/L	1		8260D	Total/NA
1,3,5-Trimethylbenzene	0.97	J	1.0	0.56	ug/L	1		8260D	Total/NA
Xylenes, Total	24		10	6.0	ug/L	1		8260D	Total/NA
Di-n-butyl phthalate	~~94~~ 94	~~B~~ U	~~9.3~~ 9.4	4.3	ug/L	1		8270E	Total/NA
Acenaphthene	0.93		0.20	0.084	ug/L	1		8270E	Total/NA
Acenaphthylene	0.10	J	0.20	0.047	ug/L	1		8270E	Total/NA
Anthracene	0.31		0.20	0.073	ug/L	1		8270E	Total/NA
Fluorene	0.87		0.20	0.086	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	15		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	1.6		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.62		0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.066	J	0.20	0.040	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZG-ROX-101624 — Lab Sample ID: 400-264429-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.6		1.0	0.24	ug/L	1		8260D	Total/NA
Ethylbenzene	0.93	J	1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	4.1		1.0	0.53	ug/L	1		8260D	Total/NA
m-Xylene & p-Xylene	8.1		5.0	3.0	ug/L	1		8260D	Total/NA
Naphthalene	4.0	J	5.0	3.0	ug/L	1		8260D	Total/NA
N-Propylbenzene	5.5		1.0	0.69	ug/L	1		8260D	Total/NA
Toluene	1.4		1.0	0.90	ug/L	1		8260D	Total/NA
Xylenes, Total	9.3	J	10	6.0	ug/L	1		8260D	Total/NA
Di-n-butyl phthalate	76	B U	9.4	76 4.3	ug/L	1		8270E	Total/NA
Acenaphthene	0.10	J	0.20	0.085	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	1.5		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	0.24		0.20	0.077	ug/L	1		8270E	Total/NA
Phenanthrene	0.19	J	0.20	0.044	ug/L	1		8270E	Total/NA

Client Sample ID: MW22-ROX-101624 — Lab Sample ID: 400-264429-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	18		5.0	1.2	ug/L	5		8260D	Total/NA
Ethylbenzene	440		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	68		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	850		25	15	ug/L	5		8260D	Total/NA
Naphthalene	160		25	15	ug/L	5		8260D	Total/NA
n-Butylbenzene	12		5.0	3.8	ug/L	5		8260D	Total/NA
N-Propylbenzene	140		5.0	3.5	ug/L	5		8260D	Total/NA
o-Xylene	46		25	15	ug/L	5		8260D	Total/NA
p-Isopropyltoluene	3.8	J	5.0	3.6	ug/L	5		8260D	Total/NA
sec-Butylbenzene	7.4		5.0	3.5	ug/L	5		8260D	Total/NA
tert-Butylbenzene	8.3		5.0	3.2	ug/L	5		8260D	Total/NA
Tetrachloroethene	2.5	J	5.0	1.7	ug/L	5		8260D	Total/NA
Toluene	48		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	170		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	110		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	890		50	30	ug/L	5		8260D	Total/NA
2,4-Dimethylphenol	7.1	J *+ J	9.4	4.9	ug/L	1		8270E	Total/NA
Di-n-butyl phthalate	76	B U	9.4	76 4.3	ug/L	1		8270E	Total/NA
Acenaphthene	0.12	J	0.20	0.085	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	18		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	26		0.20	0.077	ug/L	1		8270E	Total/NA
Phenanthrene	0.087	J	0.20	0.044	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: TB-ROX-101624-8260
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-1
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			10/30/24 10:09	1
Acrolein	ND		20	3.3	ug/L			10/30/24 10:09	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 10:09	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 10:09	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 10:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 10:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 10:09	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 10:09	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/30/24 10:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 10:09	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 10:09	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 10:09	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 10:09	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 10:09	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 10:09	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 10:09	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 10:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 10:09	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 10:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 10:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 10:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 10:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 10:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 10:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 10:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 10:09	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 10:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 10:09	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 10:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 10:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 10:09	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 10:09	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 10:09	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 10:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 10:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 10:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 10:09	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 10:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 10:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 10:09	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: TB-ROX-101624-8260
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-1
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			10/30/24 10:09	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 10:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 10:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 10:09	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 10:09	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 10:09	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 10:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 10:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 10:09	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 10:09	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 10:09	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 10:09	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 10:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 10:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 10:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 10:09	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 10:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 10:09	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*10/30/24 10:09*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*10/30/24 10:09*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/30/24 10:09*	*1*

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101624-8011
Lab Sample ID: 400-264429-2
Date Collected: 10/16/24 00:00
Matrix: Water
Date Received: 10/17/24 09:43

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		10/21/24 10:50	10/21/24 15:07	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/21/24 10:50	10/21/24 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*71*		*51 - 149*	*10/21/24 10:50*	*10/21/24 15:07*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZC-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-3
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			10/29/24 10:17	1
Acrolein	ND		20	3.3	ug/L			10/29/24 10:17	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 10:17	1
Benzene	**1.6**		1.0	0.24	ug/L			10/29/24 10:17	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 10:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 10:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 10:17	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 10:17	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 10:17	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/29/24 10:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 10:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 10:17	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 10:17	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/29/24 10:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 10:17	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 10:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 10:17	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 10:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 10:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 10:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 10:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 10:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 10:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 10:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 10:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 10:17	1
1,2-Dichloroethane	ND	UJ	1.0	0.55	ug/L			10/29/24 10:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 10:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 10:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 10:17	1
2,2-Dichloropropane	ND	UJ	1.0	0.50	ug/L			10/29/24 10:17	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 10:17	1
Ethylbenzene	**0.54**	**J**	1.0	0.50	ug/L			10/29/24 10:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 10:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 10:17	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 10:17	1
Isopropylbenzene	**4.4**		1.0	0.53	ug/L			10/29/24 10:17	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 10:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 10:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 10:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 10:17	1
m-Xylene & p-Xylene	**24**		5.0	3.0	ug/L			10/29/24 10:17	1
Naphthalene	**49**		5.0	3.0	ug/L			10/29/24 10:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 10:17	1
N-Propylbenzene	**6.6**		1.0	0.69	ug/L			10/29/24 10:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 10:17	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 10:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 10:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 10:17	1

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: ROST4PZC-ROX-101624
Lab Sample ID: 400-264429-3
Date Collected: 10/16/24 09:45
Matrix: Water
Date Received: 10/17/24 09:43

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			10/29/24 10:17	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 10:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 10:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 10:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 10:17	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 10:17	1
Toluene	**8.8**		1.0	0.90	ug/L			10/29/24 10:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 10:17	1
trans-1,3-Dichloropropene	ND	UJ	5.0	0.20	ug/L			10/29/24 10:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 10:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 10:17	1
1,1,1-Trichloroethane	ND	UJ	1.0	0.18	ug/L			10/29/24 10:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 10:17	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 10:17	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 10:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 10:17	1
1,2,4-Trimethylbenzene	**6.4**		1.0	0.82	ug/L			10/29/24 10:17	1
1,3,5-Trimethylbenzene	**0.94**	J	1.0	0.56	ug/L			10/29/24 10:17	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 10:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 10:17	1
Xylenes, Total	**26**		10	6.0	ug/L			10/29/24 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/29/24 10:17*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*10/29/24 10:17*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/29/24 10:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.3	8.1	ug/L		10/23/24 08:17	10/25/24 17:35	1
Benzenethiol	ND		9.3	9.2	ug/L		10/23/24 08:17	10/25/24 17:35	1
Benzoic acid	ND		28	22	ug/L		10/23/24 08:17	10/25/24 17:35	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/23/24 08:17	10/25/24 17:35	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/23/24 08:17	10/25/24 17:35	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/23/24 08:17	10/25/24 17:35	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/23/24 08:17	10/25/24 17:35	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/23/24 08:17	10/25/24 17:35	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
Dibenz[a,h]acridine	ND	*+	9.3	2.6	ug/L		10/23/24 08:17	10/25/24 17:35	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/23/24 08:17	10/25/24 17:35	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/23/24 08:17	10/25/24 17:35	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:35	1

Client Sample ID: ROST4PZC-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/23/24 08:17	10/25/24 17:35	1
Di-n-butyl phthalate	~~97~~	~~B~~ U	~~9.3~~ 97	4.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/23/24 08:17	10/25/24 17:35	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/23/24 08:17	10/25/24 17:35	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/23/24 08:17	10/25/24 17:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/23/24 08:17	10/25/24 17:35	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/23/24 08:17	10/25/24 17:35	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/23/24 08:17	10/25/24 17:35	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
Indene	ND		9.3	3.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
Isophorone	ND		9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/23/24 08:17	10/25/24 17:35	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/23/24 08:17	10/25/24 17:35	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/23/24 08:17	10/25/24 17:35	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/23/24 08:17	10/25/24 17:35	1
N-Nitrosodimethylamine	ND		9.3	2.1	ug/L		10/23/24 08:17	10/25/24 17:35	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/23/24 08:17	10/25/24 17:35	1
Pentachlorophenol	ND		19	11	ug/L		10/23/24 08:17	10/25/24 17:35	1
Phenol	ND		9.3	3.9	ug/L		10/23/24 08:17	10/25/24 17:35	1
Pyridine	ND	*- *1 UJ	9.3	9.3	ug/L		10/23/24 08:17	10/25/24 17:35	1
Quinoline	ND		9.3	2.2	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/23/24 08:17	10/25/24 17:35	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/23/24 08:17	10/25/24 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*21 - 114*	*10/23/24 08:17*	*10/25/24 17:35*	*1*
2-Fluorophenol	*49*		*10 - 105*	*10/23/24 08:17*	*10/25/24 17:35*	*1*
Nitrobenzene-d5	*64*		*16 - 127*	*10/23/24 08:17*	*10/25/24 17:35*	*1*
Phenol-d5	*38*		*10 - 129*	*10/23/24 08:17*	*10/25/24 17:35*	*1*
Terphenyl-d14	*66*		*13 - 150*	*10/23/24 08:17*	*10/25/24 17:35*	*1*
2,4,6-Tribromophenol	*85*		*10 - 150*	*10/23/24 08:17*	*10/25/24 17:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.0**		0.20	0.084	ug/L		10/23/24 10:22	10/23/24 18:11	1
Acenaphthylene	**0.13**	**J**	0.20	0.047	ug/L		10/23/24 10:22	10/23/24 18:11	1
Anthracene	**0.35**		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 18:11	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:11	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 18:11	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 18:11	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 18:11	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZC-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:11	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 18:11	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 18:11	1
Fluoranthene	**0.034**	**J**	0.20	0.032	ug/L		10/23/24 10:22	10/23/24 18:11	1
Fluorene	**0.80**		0.20	0.086	ug/L		10/23/24 10:22	10/23/24 18:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 18:11	1
1-Methylnaphthalene	**18**		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 18:11	1
2-Methylnaphthalene	**2.0**		0.20	0.076	ug/L		10/23/24 10:22	10/23/24 18:11	1
Phenanthrene	**0.71**		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 18:11	1
Pyrene	**0.065**	**J**	0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:11*	*1*
Nitrobenzene-d5	*101*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:11*	*1*
Terphenyl-d14	*89*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:11*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/21/24 10:50	10/21/24 15:28	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/21/24 10:50	10/21/24 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/21/24 10:50*	*10/21/24 15:28*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZC-ROX-101624-DUP
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-4
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			10/29/24 10:39	1
Acrolein	ND		20	3.3	ug/L			10/29/24 10:39	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 10:39	1
Benzene	**1.7**		1.0	0.24	ug/L			10/29/24 10:39	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 10:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 10:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 10:39	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 10:39	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 10:39	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/29/24 10:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 10:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 10:39	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 10:39	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/29/24 10:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 10:39	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 10:39	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 10:39	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 10:39	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 10:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 10:39	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 10:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 10:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 10:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 10:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 10:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 10:39	1
1,2-Dichloroethane	ND	UJ	1.0	0.55	ug/L			10/29/24 10:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 10:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 10:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 10:39	1
2,2-Dichloropropane	ND	UJ	1.0	0.50	ug/L			10/29/24 10:39	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 10:39	1
Ethylbenzene	**0.71**	**J**	1.0	0.50	ug/L			10/29/24 10:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 10:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 10:39	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 10:39	1
Isopropylbenzene	**3.7**		1.0	0.53	ug/L			10/29/24 10:39	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 10:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 10:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 10:39	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 10:39	1
m-Xylene & p-Xylene	**22**		5.0	3.0	ug/L			10/29/24 10:39	1
Naphthalene	**50**		5.0	3.0	ug/L			10/29/24 10:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 10:39	1
N-Propylbenzene	**5.5**		1.0	0.69	ug/L			10/29/24 10:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 10:39	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 10:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 10:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 10:39	1

Client Sample ID: ROST4PZC-ROX-101624-DUP
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-4
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			10/29/24 10:39	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 10:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 10:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 10:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 10:39	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 10:39	1
Toluene	**7.8**		1.0	0.90	ug/L			10/29/24 10:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 10:39	1
trans-1,3-Dichloropropene	ND	UJ	5.0	0.20	ug/L			10/29/24 10:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 10:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 10:39	1
1,1,1-Trichloroethane	ND	UJ	1.0	0.18	ug/L			10/29/24 10:39	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 10:39	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 10:39	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 10:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 10:39	1
1,2,4-Trimethylbenzene	**5.9**		1.0	0.82	ug/L			10/29/24 10:39	1
1,3,5-Trimethylbenzene	**0.97**	**J**	1.0	0.56	ug/L			10/29/24 10:39	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 10:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 10:39	1
Xylenes, Total	**24**		10	6.0	ug/L			10/29/24 10:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/29/24 10:39*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*10/29/24 10:39*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*10/29/24 10:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.3	8.1	ug/L		10/23/24 08:17	10/25/24 17:57	1
Benzenethiol	ND		9.3	9.2	ug/L		10/23/24 08:17	10/25/24 17:57	1
Benzoic acid	ND		28	22	ug/L		10/23/24 08:17	10/25/24 17:57	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/23/24 08:17	10/25/24 17:57	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/23/24 08:17	10/25/24 17:57	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/23/24 08:17	10/25/24 17:57	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/23/24 08:17	10/25/24 17:57	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/23/24 08:17	10/25/24 17:57	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
Dibenz[a,h]acridine	ND	*+	9.3	2.6	ug/L		10/23/24 08:17	10/25/24 17:57	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/23/24 08:17	10/25/24 17:57	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:57	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZC-ROX-101624-DUP
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/23/24 08:17	10/25/24 17:57	1
Di-n-butyl phthalate	~~94~~	~~B~~ U	~~9.3~~	94 4.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/23/24 08:17	10/25/24 17:57	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/23/24 08:17	10/25/24 17:57	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/23/24 08:17	10/25/24 17:57	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/23/24 08:17	10/25/24 17:57	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:57	1
Indene	ND		9.3	3.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
Isophorone	ND		9.3	4.8	ug/L		10/23/24 08:17	10/25/24 17:57	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
2-Nitroaniline	ND		9.3	4.6	ug/L		10/23/24 08:17	10/25/24 17:57	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/23/24 08:17	10/25/24 17:57	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/23/24 08:17	10/25/24 17:57	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/23/24 08:17	10/25/24 17:57	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/23/24 08:17	10/25/24 17:57	1
Pentachlorophenol	ND		19	11	ug/L		10/23/24 08:17	10/25/24 17:57	1
Phenol	ND		9.3	3.9	ug/L		10/23/24 08:17	10/25/24 17:57	1
Pyridine	ND	*- *1 UJ	9.3	9.3	ug/L		10/23/24 08:17	10/25/24 17:57	1
Quinoline	ND		9.3	2.2	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/23/24 08:17	10/25/24 17:57	1
2,4,6-Trichlorophenol	ND		9.3	3.2	ug/L		10/23/24 08:17	10/25/24 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*21 - 114*	*10/23/24 08:17*	*10/25/24 17:57*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/23/24 08:17*	*10/25/24 17:57*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*10/23/24 08:17*	*10/25/24 17:57*	*1*
Phenol-d5	*36*		*10 - 129*	*10/23/24 08:17*	*10/25/24 17:57*	*1*
Terphenyl-d14	*65*		*13 - 150*	*10/23/24 08:17*	*10/25/24 17:57*	*1*
2,4,6-Tribromophenol	*90*		*10 - 150*	*10/23/24 08:17*	*10/25/24 17:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.93**		0.20	0.084	ug/L		10/23/24 10:22	10/23/24 17:41	1
Acenaphthylene	**0.10**	**J**	0.20	0.047	ug/L		10/23/24 10:22	10/23/24 17:41	1
Anthracene	**0.31**		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 17:41	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 17:41	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 17:41	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 17:41	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 17:41	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZC-ROX-101624-DUP
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 17:41	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 17:41	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 17:41	1
Fluoranthene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 17:41	1
Fluorene	**0.87**		0.20	0.086	ug/L		10/23/24 10:22	10/23/24 17:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 17:41	1
1-Methylnaphthalene	**15**		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 17:41	1
2-Methylnaphthalene	**1.6**		0.20	0.076	ug/L		10/23/24 10:22	10/23/24 17:41	1
Phenanthrene	**0.62**		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 17:41	1
Pyrene	**0.066**	**J**	0.20	0.040	ug/L		10/23/24 10:22	10/23/24 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*50 - 150*	*10/23/24 10:22*	*10/23/24 17:41*	*1*
Nitrobenzene-d5	*92*		*50 - 150*	*10/23/24 10:22*	*10/23/24 17:41*	*1*
Terphenyl-d14	*83*		*50 - 150*	*10/23/24 10:22*	*10/23/24 17:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		10/21/24 10:50	10/21/24 15:49	1
1,2-Dibromoethane	ND		0.022	0.017	ug/L		10/21/24 10:50	10/21/24 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*10/21/24 10:50*	*10/21/24 15:49*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZG-ROX-101624
Date Collected: 10/16/24 11:30
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-5
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			10/29/24 11:01	1
Acrolein	ND		20	3.3	ug/L			10/29/24 11:01	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 11:01	1
Benzene	**5.6**		1.0	0.24	ug/L			10/29/24 11:01	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 11:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 11:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 11:01	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 11:01	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 11:01	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/29/24 11:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 11:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 11:01	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 11:01	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/29/24 11:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 11:01	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 11:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 11:01	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 11:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 11:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 11:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 11:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 11:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 11:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 11:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 11:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 11:01	1
1,2-Dichloroethane	ND	UJ	1.0	0.55	ug/L			10/29/24 11:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 11:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 11:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 11:01	1
2,2-Dichloropropane	ND	UJ	1.0	0.50	ug/L			10/29/24 11:01	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 11:01	1
Ethylbenzene	**0.93**	**J**	1.0	0.50	ug/L			10/29/24 11:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 11:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 11:01	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 11:01	1
Isopropylbenzene	**4.1**		1.0	0.53	ug/L			10/29/24 11:01	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 11:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 11:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 11:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 11:01	1
m-Xylene & p-Xylene	**8.1**		5.0	3.0	ug/L			10/29/24 11:01	1
Naphthalene	**4.0**	**J**	5.0	3.0	ug/L			10/29/24 11:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 11:01	1
N-Propylbenzene	**5.5**		1.0	0.69	ug/L			10/29/24 11:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 11:01	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 11:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 11:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 11:01	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZG-ROX-101624
Date Collected: 10/16/24 11:30
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-5
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			10/29/24 11:01	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 11:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 11:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 11:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 11:01	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 11:01	1
Toluene	**1.4**		1.0	0.90	ug/L			10/29/24 11:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 11:01	1
trans-1,3-Dichloropropene	ND	UJ	5.0	0.20	ug/L			10/29/24 11:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 11:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 11:01	1
1,1,1-Trichloroethane	ND	UJ	1.0	0.18	ug/L			10/29/24 11:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 11:01	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 11:01	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 11:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 11:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 11:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 11:01	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 11:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 11:01	1
Xylenes, Total	**9.3**	**J**	10	6.0	ug/L			10/29/24 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*10/29/24 11:01*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*10/29/24 11:01*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*10/29/24 11:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.4	8.2	ug/L		10/23/24 08:17	10/25/24 18:20	1
Benzenethiol	ND		9.4	9.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
Benzoic acid	ND		28	23	ug/L		10/23/24 08:17	10/25/24 18:20	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/23/24 08:17	10/25/24 18:20	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/23/24 08:17	10/25/24 18:20	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/23/24 08:17	10/25/24 18:20	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
Butyl benzyl phthalate	ND		9.4	5.5	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/23/24 08:17	10/25/24 18:20	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/23/24 08:17	10/25/24 18:20	1
2-Chlorophenol	ND		9.4	3.9	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/23/24 08:17	10/25/24 18:20	1
Dibenz[a,h]acridine	ND	*+	9.4	2.6	ug/L		10/23/24 08:17	10/25/24 18:20	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:20	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4-Dichlorophenol	ND		9.4	4.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
Diethyl phthalate	ND		9.4	4.2	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4-Dimethylphenol	ND	*+	9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:20	1

Client Sample ID: ROST4PZG-ROX-101624
Date Collected: 10/16/24 11:30
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	4.0	ug/L		10/23/24 08:17	10/25/24 18:20	1
Di-n-butyl phthalate	~~76~~	~~B~~ U	~~9.4~~	76 4.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/23/24 08:17	10/25/24 18:20	1
Di-n-octyl phthalate	ND		9.4	5.7	ug/L		10/23/24 08:17	10/25/24 18:20	1
1,4-Dioxane	ND		9.4	4.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
Hexachlorobenzene	ND		9.4	9.2	ug/L		10/23/24 08:17	10/25/24 18:20	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/23/24 08:17	10/25/24 18:20	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:20	1
Indene	ND		9.4	3.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
Isophorone	ND		9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:20	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/23/24 08:17	10/25/24 18:20	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/23/24 08:17	10/25/24 18:20	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Nitroaniline	ND		9.4	3.9	ug/L		10/23/24 08:17	10/25/24 18:20	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/23/24 08:17	10/25/24 18:20	1
N-Nitrosodi-n-propylamine	ND		9.4	2.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/23/24 08:17	10/25/24 18:20	1
Pentachlorophenol	ND		19	11	ug/L		10/23/24 08:17	10/25/24 18:20	1
Phenol	ND		9.4	4.0	ug/L		10/23/24 08:17	10/25/24 18:20	1
Pyridine	ND	*- *1 UJ	9.4	9.4	ug/L		10/23/24 08:17	10/25/24 18:20	1
Quinoline	ND		9.4	2.3	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:20	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/23/24 08:17	10/25/24 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*21 - 114*	*10/23/24 08:17*	*10/25/24 18:20*	*1*
2-Fluorophenol	*41*		*10 - 105*	*10/23/24 08:17*	*10/25/24 18:20*	*1*
Nitrobenzene-d5	*58*		*16 - 127*	*10/23/24 08:17*	*10/25/24 18:20*	*1*
Phenol-d5	*31*		*10 - 129*	*10/23/24 08:17*	*10/25/24 18:20*	*1*
Terphenyl-d14	*53*		*13 - 150*	*10/23/24 08:17*	*10/25/24 18:20*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/23/24 08:17*	*10/25/24 18:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.10	J	0.20	0.085	ug/L		10/23/24 10:22	10/23/24 18:41	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/23/24 10:22	10/23/24 18:41	1
Anthracene	ND		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 18:41	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:41	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 18:41	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 18:41	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 18:41	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: ROST4PZG-ROX-101624
Date Collected: 10/16/24 11:30
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:41	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 18:41	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 18:41	1
Fluoranthene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 18:41	1
Fluorene	ND		0.20	0.087	ug/L		10/23/24 10:22	10/23/24 18:41	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 18:41	1
1-Methylnaphthalene	**1.5**		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 18:41	1
2-Methylnaphthalene	**0.24**		0.20	0.077	ug/L		10/23/24 10:22	10/23/24 18:41	1
Phenanthrene	**0.19**	**J**	0.20	0.044	ug/L		10/23/24 10:22	10/23/24 18:41	1
Pyrene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:41*	*1*
Nitrobenzene-d5	*98*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:41*	*1*
Terphenyl-d14	*91*		*50 - 150*	*10/23/24 10:22*	*10/23/24 18:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		10/21/24 10:50	10/21/24 16:10	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/21/24 10:50	10/21/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*10/21/24 10:50*	*10/21/24 16:10*	*1*

Client Sample ID: MW22-ROX-101624
Date Collected: 10/16/24 12:50
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	130	50	ug/L			10/29/24 17:48	5
Acrolein	ND		100	17	ug/L			10/29/24 17:48	5
Acrylonitrile	ND		50	14	ug/L			10/29/24 17:48	5
Benzene	**18**		5.0	1.2	ug/L			10/29/24 17:48	5
Bromobenzene	ND		5.0	2.7	ug/L			10/29/24 17:48	5
Bromochloromethane	ND		5.0	2.6	ug/L			10/29/24 17:48	5
Bromodichloromethane	ND		5.0	2.5	ug/L			10/29/24 17:48	5
Bromoform	ND		25	1.3	ug/L			10/29/24 17:48	5
Bromomethane	ND		5.0	4.9	ug/L			10/29/24 17:48	5
2-Butanone (MEK)	ND	*+	130	13	ug/L			10/29/24 17:48	5
Carbon disulfide	ND		5.0	2.5	ug/L			10/29/24 17:48	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			10/29/24 17:48	5
Chlorobenzene	ND		5.0	2.1	ug/L			10/29/24 17:48	5
Chloroethane	ND	UJ	5.0	3.8	ug/L			10/29/24 17:48	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			10/29/24 17:48	5
Chloroform	ND		5.0	4.5	ug/L			10/29/24 17:48	5
1-Chlorohexane	ND		5.0	1.6	ug/L			10/29/24 17:48	5
Chloromethane	ND		5.0	2.0	ug/L			10/29/24 17:48	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			10/29/24 17:48	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			10/29/24 17:48	5
Dibromochloromethane	ND		5.0	1.2	ug/L			10/29/24 17:48	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			10/29/24 17:48	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			10/29/24 17:48	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			10/29/24 17:48	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			10/29/24 17:48	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			10/29/24 17:48	5
1,2-Dichloroethane	ND	UJ	5.0	2.8	ug/L			10/29/24 17:48	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			10/29/24 17:48	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			10/29/24 17:48	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			10/29/24 17:48	5
2,2-Dichloropropane	ND	UJ	5.0	2.5	ug/L			10/29/24 17:48	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			10/29/24 17:48	5
Ethylbenzene	**440**		5.0	2.5	ug/L			10/29/24 17:48	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			10/29/24 17:48	5
Hexachlorobutadiene	ND		25	4.5	ug/L			10/29/24 17:48	5
2-Hexanone	ND		130	21	ug/L			10/29/24 17:48	5
Isopropylbenzene	**68**		5.0	2.7	ug/L			10/29/24 17:48	5
Methylene bromide	ND		25	1.1	ug/L			10/29/24 17:48	5
Methylene Chloride	ND		25	15	ug/L			10/29/24 17:48	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			10/29/24 17:48	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			10/29/24 17:48	5
m-Xylene & p-Xylene	**850**		25	15	ug/L			10/29/24 17:48	5
Naphthalene	**160**		25	15	ug/L			10/29/24 17:48	5
n-Butylbenzene	**12**		5.0	3.8	ug/L			10/29/24 17:48	5
N-Propylbenzene	**140**		5.0	3.5	ug/L			10/29/24 17:48	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			10/29/24 17:48	5
o-Xylene	**46**		25	15	ug/L			10/29/24 17:48	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			10/29/24 17:48	5
p-Isopropyltoluene	**3.8**	**J**	5.0	3.6	ug/L			10/29/24 17:48	5

Client Sample ID: MW22-ROX-101624
Date Collected: 10/16/24 12:50
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-6
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	**7.4**		5.0	3.5	ug/L			10/29/24 17:48	5
Styrene	ND		5.0	5.0	ug/L			10/29/24 17:48	5
tert-Butylbenzene	**8.3**		5.0	3.2	ug/L			10/29/24 17:48	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			10/29/24 17:48	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			10/29/24 17:48	5
Tetrachloroethene	**2.5**	J	5.0	1.7	ug/L			10/29/24 17:48	5
Toluene	**48**		5.0	4.5	ug/L			10/29/24 17:48	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			10/29/24 17:48	5
trans-1,3-Dichloropropene	ND	UJ	25	1.0	ug/L			10/29/24 17:48	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			10/29/24 17:48	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			10/29/24 17:48	5
1,1,1-Trichloroethane	ND	UJ	5.0	0.90	ug/L			10/29/24 17:48	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			10/29/24 17:48	5
Trichloroethene	ND		5.0	0.75	ug/L			10/29/24 17:48	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			10/29/24 17:48	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			10/29/24 17:48	5
1,2,4-Trimethylbenzene	**170**		5.0	4.1	ug/L			10/29/24 17:48	5
1,3,5-Trimethylbenzene	**110**		5.0	2.8	ug/L			10/29/24 17:48	5
Vinyl acetate	ND		130	4.7	ug/L			10/29/24 17:48	5
Vinyl chloride	ND		5.0	2.5	ug/L			10/29/24 17:48	5
Xylenes, Total	**890**		50	30	ug/L			10/29/24 17:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 17:48*	*5*
Dibromofluoromethane	*99*		*75 - 126*		*10/29/24 17:48*	*5*
Toluene-d8 (Surr)	*93*		*64 - 132*		*10/29/24 17:48*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.4	8.2	ug/L		10/23/24 08:17	10/25/24 18:42	1
Benzenethiol	ND		9.4	9.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
Benzoic acid	ND		28	23	ug/L		10/23/24 08:17	10/25/24 18:42	1
Benzyl alcohol	ND		9.4	6.9	ug/L		10/23/24 08:17	10/25/24 18:42	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/23/24 08:17	10/25/24 18:42	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/23/24 08:17	10/25/24 18:42	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
Butyl benzyl phthalate	ND		9.4	5.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/23/24 08:17	10/25/24 18:42	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/23/24 08:17	10/25/24 18:42	1
2-Chlorophenol	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/23/24 08:17	10/25/24 18:42	1
Dibenz[a,h]acridine	ND	*+	9.4	2.6	ug/L		10/23/24 08:17	10/25/24 18:42	1
Dibenzofuran	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:42	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/23/24 08:17	10/25/24 18:42	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4-Dimethylphenol	**7.1**	J *+ J	9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:42	1

Client Sample ID: MW22-ROX-101624
Date Collected: 10/16/24 12:50
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/23/24 08:17	10/25/24 18:42	1
Di-n-butyl phthalate	~~76~~	~~B~~ U	~~9.4~~ 76	4.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/23/24 08:17	10/25/24 18:42	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/23/24 08:17	10/25/24 18:42	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/23/24 08:17	10/25/24 18:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/23/24 08:17	10/25/24 18:42	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:42	1
Indene	ND		9.4	3.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
Isophorone	ND		9.4	4.9	ug/L		10/23/24 08:17	10/25/24 18:42	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/23/24 08:17	10/25/24 18:42	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/23/24 08:17	10/25/24 18:42	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Nitroaniline	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:42	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/23/24 08:17	10/25/24 18:42	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/23/24 08:17	10/25/24 18:42	1
Pentachlorophenol	ND		19	11	ug/L		10/23/24 08:17	10/25/24 18:42	1
Phenol	ND		9.4	3.9	ug/L		10/23/24 08:17	10/25/24 18:42	1
Pyridine	ND	*- *1 UJ	9.4	9.4	ug/L		10/23/24 08:17	10/25/24 18:42	1
Quinoline	ND		9.4	2.3	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4,5-Trichlorophenol	ND		9.4	3.8	ug/L		10/23/24 08:17	10/25/24 18:42	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/23/24 08:17	10/25/24 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*21 - 114*	*10/23/24 08:17*	*10/25/24 18:42*	*1*
2-Fluorophenol	*42*		*10 - 105*	*10/23/24 08:17*	*10/25/24 18:42*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*10/23/24 08:17*	*10/25/24 18:42*	*1*
Phenol-d5	*34*		*10 - 129*	*10/23/24 08:17*	*10/25/24 18:42*	*1*
Terphenyl-d14	*72*		*13 - 150*	*10/23/24 08:17*	*10/25/24 18:42*	*1*
2,4,6-Tribromophenol	*85*		*10 - 150*	*10/23/24 08:17*	*10/25/24 18:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.12	J	0.20	0.085	ug/L		10/23/24 10:22	10/23/24 19:12	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/23/24 10:22	10/23/24 19:12	1
Anthracene	ND		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 19:12	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 19:12	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 19:12	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 19:12	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 19:12	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Client Sample ID: MW22-ROX-101624
Date Collected: 10/16/24 12:50
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264429-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 19:12	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 19:12	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 19:12	1
Fluoranthene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 19:12	1
Fluorene	ND		0.20	0.087	ug/L		10/23/24 10:22	10/23/24 19:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 19:12	1
1-Methylnaphthalene	**18**		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 19:12	1
2-Methylnaphthalene	**26**		0.20	0.077	ug/L		10/23/24 10:22	10/23/24 19:12	1
Phenanthrene	**0.087**	**J**	0.20	0.044	ug/L		10/23/24 10:22	10/23/24 19:12	1
Pyrene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*50 - 150*	*10/23/24 10:22*	*10/23/24 19:12*	*1*
Nitrobenzene-d5	*97*		*50 - 150*	*10/23/24 10:22*	*10/23/24 19:12*	*1*
Terphenyl-d14	*90*		*50 - 150*	*10/23/24 10:22*	*10/23/24 19:12*	*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		10/21/24 10:50	10/21/24 16:31	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/21/24 10:50	10/21/24 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*66*		*51 - 149*	*10/21/24 10:50*	*10/21/24 16:31*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	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.
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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

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)
400-264429-1	TB-ROX-101624-8260	90	109	94
400-264429-3	ROST4PZC-ROX-101624	93	100	94
400-264429-4	ROST4PZC-ROX-101624-DUP	92	99	93
400-264429-5	ROST4PZG-ROX-101624	90	93	92
400-264429-6	MW22-ROX-101624	94	99	93
LCS 400-689460/1002	Lab Control Sample	99	93	96
LCS 400-689599/1002	Lab Control Sample	99	93	97
MB 400-689460/5	Method Blank	92	106	98
MB 400-689599/5	Method Blank	93	107	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)
400-264429-3	ROST4PZC-ROX-101624	62	49	64	38	66	85
400-264429-4	ROST4PZC-ROX-101624-DUP	64	48	63	36	65	90
400-264429-5	ROST4PZG-ROX-101624	48	41	58	31	53	74
400-264429-6	MW22-ROX-101624	59	42	62	34	72	85
LCS 400-688972/22-A	Lab Control Sample	58	45	61	34	67	80
LCS 400-688972/2-A	Lab Control Sample	59	47	68	37	66	82
LCSD 400-688972/23-A	Lab Control Sample Dup	61	43	60	34	67	81
LCSD 400-688972/3-A	Lab Control Sample Dup	58	50	64	43	68	88
MB 400-688972/1-A	Method Blank	52	34	49	23	56	76

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264429-3	ROST4PZC-ROX-101624	92	101	89
400-264429-4	ROST4PZC-ROX-101624-DUP	88	92	83
400-264429-5	ROST4PZG-ROX-101624	97	98	91
400-264429-6	MW22-ROX-101624	90	97	90
LCS 400-688847/2-A	Lab Control Sample	85	88	89
LCSD 400-688847/3-A	Lab Control Sample Dup	98	91	93

Surrogate Summary

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
MB 400-688847/1-A	Method Blank	84	88	87

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264429-2	TB-ROX-101624-8011	71
400-264429-3	ROST4PZC-ROX-101624	65
400-264429-4	ROST4PZC-ROX-101624-DUP	64
400-264429-5	ROST4PZG-ROX-101624	64
400-264429-6	MW22-ROX-101624	66
LCS 400-688591/2-A	Lab Control Sample	87
LCSD 400-688591/3-A	Lab Control Sample Dup	93
MB 400-688591/1-A	Method Blank	90

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101624-8260
Lab Sample ID: 400-264429-1
Date Collected: 10/16/24 00:00
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689599	10/30/24 10:09	WPD	EET PEN

Client Sample ID: TB-ROX-101624-8011
Lab Sample ID: 400-264429-2
Date Collected: 10/16/24 00:00
Matrix: Water
Date Received: 10/17/24 09:43

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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 15:07	KR	EET PEN

Client Sample ID: ROST4PZC-ROX-101624
Lab Sample ID: 400-264429-3
Date Collected: 10/16/24 09:45
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689460	10/29/24 10:17	WPD	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 18:11	DS	EET PEN
Total/NA	Prep	3510C			268.2 mL	1 mL	688972	10/23/24 08:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 17:35	S1B	EET PEN
Total/NA	Prep	8011			33 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 15:28	KR	EET PEN

Client Sample ID: ROST4PZC-ROX-101624-DUP
Lab Sample ID: 400-264429-4
Date Collected: 10/16/24 09:45
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689460	10/29/24 10:39	WPD	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 17:41	DS	EET PEN
Total/NA	Prep	3510C			269.6 mL	1 mL	688972	10/23/24 08:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 17:57	S1B	EET PEN
Total/NA	Prep	8011			31.7 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 15:49	KR	EET PEN

Client Sample ID: ROST4PZG-ROX-101624
Lab Sample ID: 400-264429-5
Date Collected: 10/16/24 11:30
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689460	10/29/24 11:01	WPD	EET PEN
Total/NA	Prep	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 18:41	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: ROST4PZG-ROX-101624
Lab Sample ID: 400-264429-5
Date Collected: 10/16/24 11:30
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			265 mL	1 mL	688972	10/23/24 08:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 18:20	S1B	EET PEN
Total/NA	Prep	8011			33.7 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 16:10	KR	EET PEN

Client Sample ID: MW22-ROX-101624
Lab Sample ID: 400-264429-6
Date Collected: 10/16/24 12:50
Matrix: Water
Date Received: 10/17/24 09:43

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	689460	10/29/24 17:48	WPD	EET PEN
Total/NA	Prep	3511			30.1 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 19:12	DS	EET PEN
Total/NA	Prep	3510C			266.4 mL	1 mL	688972	10/23/24 08:17	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 18:42	S1B	EET PEN
Total/NA	Prep	8011			32.5 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 16:31	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688591/1-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 13:22	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688847/1-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 16:10	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688972/1-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	688972	10/23/24 08:16	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 15:42	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689460/5
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	689460	10/29/24 08:27	WPD	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689599/5
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	689599	10/30/24 08:19	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688591/2-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 13:43	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688847/2-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 16:40	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688972/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688972	10/24/24 08:21	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 16:49	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688972/2-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	688972	10/23/24 08:16	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 16:04	S1B	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689460/1002
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	689460	10/29/24 07:21	WPD	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689599/1002
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	689599	10/30/24 07:13	WPD	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688591/3-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 14:04	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688847/3-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 17:11	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688972/23-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688972	10/24/24 08:21	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 17:12	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688972/3-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	688972	10/23/24 08:16	BKL	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689180	10/25/24 16:27	S1B	EET PEN

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

QC Association Summary

Client: AECOM
Job ID: 400-264429-1
Project/Site: ROXANA QUARTERLY GW

GC/MS VOA

Analysis Batch: 689460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	8260D	
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	8260D	
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	8260D	
400-264429-6	MW22-ROX-101624	Total/NA	Water	8260D	
MB 400-689460/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689460/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 689599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-1	TB-ROX-101624-8260	Total/NA	Water	8260D	
MB 400-689599/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689599/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 688847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	3511	
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	3511	
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	3511	
400-264429-6	MW22-ROX-101624	Total/NA	Water	3511	
MB 400-688847/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688847/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688847/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 688917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	8270E	688847
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	8270E	688847
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	8270E	688847
400-264429-6	MW22-ROX-101624	Total/NA	Water	8270E	688847
MB 400-688847/1-A	Method Blank	Total/NA	Water	8270E	688847
LCS 400-688847/2-A	Lab Control Sample	Total/NA	Water	8270E	688847
LCSD 400-688847/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688847

Prep Batch: 688972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	3510C	
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	3510C	
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	3510C	
400-264429-6	MW22-ROX-101624	Total/NA	Water	3510C	
MB 400-688972/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688972/22-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688972/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688972/23-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688972/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 689180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	8270E	688972
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	8270E	688972

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264429-1

GC/MS Semi VOA (Continued)

Analysis Batch: 689180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	8270E	688972
400-264429-6	MW22-ROX-101624	Total/NA	Water	8270E	688972
MB 400-688972/1-A	Method Blank	Total/NA	Water	8270E	688972
LCS 400-688972/22-A	Lab Control Sample	Total/NA	Water	8270E	688972
LCS 400-688972/2-A	Lab Control Sample	Total/NA	Water	8270E	688972
LCSD 400-688972/23-A	Lab Control Sample Dup	Total/NA	Water	8270E	688972
LCSD 400-688972/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688972

GC Semi VOA

Prep Batch: 688591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-2	TB-ROX-101624-8011	Total/NA	Water	8011	
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	8011	
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	8011	
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	8011	
400-264429-6	MW22-ROX-101624	Total/NA	Water	8011	
MB 400-688591/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688591/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688591/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264429-2	TB-ROX-101624-8011	Total/NA	Water	8011	688591
400-264429-3	ROST4PZC-ROX-101624	Total/NA	Water	8011	688591
400-264429-4	ROST4PZC-ROX-101624-DUP	Total/NA	Water	8011	688591
400-264429-5	ROST4PZG-ROX-101624	Total/NA	Water	8011	688591
400-264429-6	MW22-ROX-101624	Total/NA	Water	8011	688591
MB 400-688591/1-A	Method Blank	Total/NA	Water	8011	688591
LCS 400-688591/2-A	Lab Control Sample	Total/NA	Water	8011	688591
LCSD 400-688591/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688591

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

Lab Sample ID: MB 400-689460/5
Matrix: Water
Analysis Batch: 689460

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			10/29/24 08:27	1
Acrolein	ND		20	3.3	ug/L			10/29/24 08:27	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 08:27	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 08:27	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 08:27	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 08:27	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 08:27	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 08:27	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 08:27	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 08:27	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 08:27	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 08:27	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 08:27	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 08:27	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 08:27	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 08:27	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 08:27	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 08:27	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 08:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 08:27	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 08:27	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 08:27	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 08:27	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 08:27	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 08:27	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 08:27	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 08:27	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 08:27	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 08:27	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 08:27	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 08:27	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 08:27	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 08:27	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 08:27	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 08:27	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 08:27	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 08:27	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 08:27	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 08:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 08:27	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 08:27	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 08:27	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 08:27	1

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

Lab Sample ID: MB 400-689460/5
Matrix: Water
Analysis Batch: 689460

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			10/29/24 08:27	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/29/24 08:27	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 08:27	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 08:27	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 08:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 08:27	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 08:27	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 08:27	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 08:27	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 08:27	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 08:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 08:27	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 08:27	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 08:27	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 08:27	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 08:27	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 08:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 08:27	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 08:27	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 08:27	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 08:27	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 08:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/29/24 08:27*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*10/29/24 08:27*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/29/24 08:27*	*1*

Lab Sample ID: LCS 400-689460/1002
Matrix: Water
Analysis Batch: 689460

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	346	*+	ug/L		173	43 - 150
Acrolein	200	199		ug/L		100	38 - 150
Acrylonitrile	500	419		ug/L		84	64 - 142
Benzene	50.0	44.4		ug/L		89	70 - 130
Bromobenzene	50.0	48.1		ug/L		96	70 - 132
Bromochloromethane	50.0	45.9		ug/L		92	70 - 130
Bromodichloromethane	50.0	42.2		ug/L		84	67 - 133
Bromoform	50.0	43.9		ug/L		88	57 - 140
Bromomethane	20.0	20.6		ug/L		103	10 - 150
2-Butanone (MEK)	200	332	*+	ug/L		166	61 - 145
Carbon disulfide	50.0	41.3		ug/L		83	61 - 137
Carbon tetrachloride	50.0	40.2		ug/L		80	61 - 137
Chlorobenzene	50.0	46.7		ug/L		93	70 - 130
Chloroethane	20.0	14.2		ug/L		71	55 - 141
2-Chloroethyl vinyl ether	20.0	12.9		ug/L		65	10 - 150

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

Lab Sample ID: LCS 400-689460/1002
Matrix: Water
Analysis Batch: 689460

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	40.4		ug/L		81	69 - 130
1-Chlorohexane	50.0	40.4		ug/L		81	69 - 130
Chloromethane	20.0	18.8		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	43.4		ug/L		87	68 - 130
cis-1,3-Dichloropropene	50.0	45.1		ug/L		90	69 - 132
Dibromochloromethane	50.0	41.8		ug/L		84	67 - 135
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	20.0	21.4		ug/L		107	41 - 146
1,1-Dichloroethane	50.0	43.6		ug/L		87	70 - 130
1,2-Dichloroethane	50.0	37.7		ug/L		75	69 - 130
1,1-Dichloroethene	50.0	47.9		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	48.0		ug/L		96	70 - 130
1,3-Dichloropropane	50.0	43.9		ug/L		88	70 - 130
2,2-Dichloropropane	50.0	38.3		ug/L		77	52 - 135
1,1-Dichloropropene	50.0	43.7		ug/L		87	70 - 130
Ethylbenzene	50.0	45.2		ug/L		90	70 - 130
Ethyl methacrylate	50.0	45.4		ug/L		91	68 - 130
Hexachlorobutadiene	50.0	59.1		ug/L		118	53 - 140
2-Hexanone	200	220		ug/L		110	65 - 137
Isopropylbenzene	50.0	42.3		ug/L		85	70 - 130
Methylene bromide	50.0	44.3		ug/L		89	70 - 130
Methylene Chloride	50.0	49.3		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	166		ug/L		83	69 - 138
Methyl tert-butyl ether	50.0	44.1		ug/L		88	66 - 130
m-Xylene & p-Xylene	50.0	43.7		ug/L		87	70 - 130
Naphthalene	50.0	49.8		ug/L		100	47 - 149
n-Butylbenzene	50.0	50.5		ug/L		101	67 - 130
N-Propylbenzene	50.0	48.2		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
o-Xylene	50.0	43.4		ug/L		87	70 - 130
p-Chlorotoluene	50.0	43.1		ug/L		86	70 - 130
p-Isopropyltoluene	50.0	52.8		ug/L		106	65 - 130
sec-Butylbenzene	50.0	51.0		ug/L		102	66 - 130
Styrene	50.0	45.5		ug/L		91	70 - 130
tert-Butylbenzene	50.0	46.7		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.6		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/L		91	70 - 131
Tetrachloroethene	50.0	40.2		ug/L		80	65 - 130
Toluene	50.0	45.0		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	45.8		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	39.7		ug/L		79	63 - 130
1,2,3-Trichlorobenzene	50.0	55.4		ug/L		111	60 - 138
1,2,4-Trichlorobenzene	50.0	56.5		ug/L		113	60 - 140
1,1,1-Trichloroethane	50.0	39.0		ug/L		78	68 - 130
1,1,2-Trichloroethane	50.0	43.8		ug/L		88	70 - 130
Trichloroethene	50.0	45.7		ug/L		91	70 - 130
Trichlorofluoromethane	20.0	17.4		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-689460/1002
Matrix: Water
Analysis Batch: 689460

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	44.4		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	50.0	50.5		ug/L		101	70 - 130
1,3,5-Trimethylbenzene	50.0	48.8		ug/L		98	69 - 130
Vinyl acetate	40.0	37.5		ug/L		94	26 - 150
Vinyl chloride	20.0	19.9		ug/L		99	59 - 136
Xylenes, Total	100	87.1		ug/L		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Lab Sample ID: MB 400-689599/5
Matrix: Water
Analysis Batch: 689599

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			10/30/24 08:19	1
Acrolein	ND		20	3.3	ug/L			10/30/24 08:19	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 08:19	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 08:19	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 08:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 08:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 08:19	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 08:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 08:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 08:19	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 08:19	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 08:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 08:19	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 08:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 08:19	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 08:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 08:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 08:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 08:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 08:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 08:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 08:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 08:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1

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

Lab Sample ID: MB 400-689599/5
Matrix: Water
Analysis Batch: 689599

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			10/30/24 08:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 08:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 08:19	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 08:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 08:19	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 08:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 08:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 08:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 08:19	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 08:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 08:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 08:19	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 08:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 08:19	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/30/24 08:19	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 08:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 08:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 08:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 08:19	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 08:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 08:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 08:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 08:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 08:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 08:19	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 08:19	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 08:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 08:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 08:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 08:19	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 08:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 08:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/30/24 08:19*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*10/30/24 08:19*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/30/24 08:19*	*1*

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

Lab Sample ID: LCS 400-689599/1002
Matrix: Water
Analysis Batch: 689599

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	386	*+	ug/L		193	43 - 150
Acrolein	200	208		ug/L		104	38 - 150
Acrylonitrile	500	459		ug/L		92	64 - 142
Benzene	50.0	47.5		ug/L		95	70 - 130
Bromobenzene	50.0	51.8		ug/L		104	70 - 132
Bromochloromethane	50.0	48.5		ug/L		97	70 - 130
Bromodichloromethane	50.0	44.2		ug/L		88	67 - 133
Bromoform	50.0	48.3		ug/L		97	57 - 140
Bromomethane	20.0	27.3		ug/L		137	10 - 150
2-Butanone (MEK)	200	382	*+	ug/L		191	61 - 145
Carbon disulfide	50.0	43.8		ug/L		88	61 - 137
Carbon tetrachloride	50.0	42.8		ug/L		86	61 - 137
Chlorobenzene	50.0	49.8		ug/L		100	70 - 130
Chloroethane	20.0	16.7		ug/L		84	55 - 141
2-Chloroethyl vinyl ether	20.0	13.6		ug/L		68	10 - 150
Chloroform	50.0	43.0		ug/L		86	69 - 130
1-Chlorohexane	50.0	43.6		ug/L		87	69 - 130
Chloromethane	20.0	20.3		ug/L		102	58 - 137
cis-1,2-Dichloroethene	50.0	46.5		ug/L		93	68 - 130
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	69 - 132
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	54.2		ug/L		108	67 - 130
1,3-Dichlorobenzene	50.0	54.7		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	54.6		ug/L		109	70 - 130
Dichlorodifluoromethane	20.0	21.3		ug/L		106	41 - 146
1,1-Dichloroethane	50.0	46.3		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	40.0		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	51.3		ug/L		103	63 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	47.4		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	41.0		ug/L		82	52 - 135
1,1-Dichloropropene	50.0	46.0		ug/L		92	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	50.3		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	61.5		ug/L		123	53 - 140
2-Hexanone	200	252		ug/L		126	65 - 137
Isopropylbenzene	50.0	44.8		ug/L		90	70 - 130
Methylene bromide	50.0	47.8		ug/L		96	70 - 130
Methylene Chloride	50.0	52.6		ug/L		105	66 - 135
4-Methyl-2-pentanone (MIBK)	200	188		ug/L		94	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/L		93	70 - 130
Naphthalene	50.0	53.7		ug/L		107	47 - 149
n-Butylbenzene	50.0	53.6		ug/L		107	67 - 130
N-Propylbenzene	50.0	52.3		ug/L		105	70 - 130
o-Chlorotoluene	50.0	50.8		ug/L		102	70 - 130
o-Xylene	50.0	46.4		ug/L		93	70 - 130
p-Chlorotoluene	50.0	49.5		ug/L		99	70 - 130

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

Lab Sample ID: LCS 400-689599/1002
Matrix: Water
Analysis Batch: 689599

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	56.1		ug/L		112	65 - 130
sec-Butylbenzene	50.0	54.9		ug/L		110	66 - 130
Styrene	50.0	49.0		ug/L		98	70 - 130
tert-Butylbenzene	50.0	49.8		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.4		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.4		ug/L		103	70 - 131
Tetrachloroethene	50.0	42.4		ug/L		85	65 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	43.3		ug/L		87	63 - 130
1,2,3-Trichlorobenzene	50.0	59.2		ug/L		118	60 - 138
1,2,4-Trichlorobenzene	50.0	59.6		ug/L		119	60 - 140
1,1,1-Trichloroethane	50.0	41.3		ug/L		83	68 - 130
1,1,2-Trichloroethane	50.0	47.9		ug/L		96	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	20.0	17.2		ug/L		86	65 - 138
1,2,3-Trichloropropane	50.0	49.4		ug/L		99	70 - 130
1,2,4-Trimethylbenzene	50.0	54.4		ug/L		109	70 - 130
1,3,5-Trimethylbenzene	50.0	53.2		ug/L		106	69 - 130
Vinyl acetate	40.0	39.6		ug/L		99	26 - 150
Vinyl chloride	20.0	20.3		ug/L		101	59 - 136
Xylenes, Total	100	92.9		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

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

Lab Sample ID: MB 400-688972/1-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
Benzenethiol	ND		10	9.9	ug/L		10/23/24 08:16	10/25/24 15:42	1
Benzoic acid	ND		30	24	ug/L		10/23/24 08:16	10/25/24 15:42	1
Benzyl alcohol	ND		10	7.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/23/24 08:16	10/25/24 15:42	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/23/24 08:16	10/25/24 15:42	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/23/24 08:16	10/25/24 15:42	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/23/24 08:16	10/25/24 15:42	1
4-Chloroaniline	ND		10	4.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/23/24 08:16	10/25/24 15:42	1
2-Chlorophenol	ND		10	4.1	ug/L		10/23/24 08:16	10/25/24 15:42	1

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

Lab Sample ID: MB 400-688972/1-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688972

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/23/24 08:16	10/25/24 15:42	1
Dibenzofuran	ND		10	4.0	ug/L		10/23/24 08:16	10/25/24 15:42	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
Diethyl phthalate	ND		10	4.4	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
Di-n-butyl phthalate	82.2		10	4.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/23/24 08:16	10/25/24 15:42	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/23/24 08:16	10/25/24 15:42	1
1,4-Dioxane	ND		10	4.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/23/24 08:16	10/25/24 15:42	1
Hexachloroethane	ND		10	5.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
Indene	ND		10	3.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
Isophorone	ND		10	5.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
2-Methylphenol	ND		10	3.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
2-Nitroaniline	ND		10	5.0	ug/L		10/23/24 08:16	10/25/24 15:42	1
3-Nitroaniline	ND		10	4.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
4-Nitroaniline	ND		10	4.1	ug/L		10/23/24 08:16	10/25/24 15:42	1
Nitrobenzene	ND		10	4.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
2-Nitrophenol	ND		10	4.6	ug/L		10/23/24 08:16	10/25/24 15:42	1
4-Nitrophenol	ND		10	3.3	ug/L		10/23/24 08:16	10/25/24 15:42	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/23/24 08:16	10/25/24 15:42	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/23/24 08:16	10/25/24 15:42	1
Pentachlorophenol	ND		20	12	ug/L		10/23/24 08:16	10/25/24 15:42	1
Phenol	ND		10	4.2	ug/L		10/23/24 08:16	10/25/24 15:42	1
Pyridine	ND		10	10	ug/L		10/23/24 08:16	10/25/24 15:42	1
Quinoline	ND		10	2.4	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/23/24 08:16	10/25/24 15:42	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/23/24 08:16	10/25/24 15:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*21 - 114*	*10/23/24 08:16*	*10/25/24 15:42*	*1*
2-Fluorophenol	*34*		*10 - 105*	*10/23/24 08:16*	*10/25/24 15:42*	*1*
Nitrobenzene-d5	*49*		*16 - 127*	*10/23/24 08:16*	*10/25/24 15:42*	*1*
Phenol-d5	*23*		*10 - 129*	*10/23/24 08:16*	*10/25/24 15:42*	*1*
Terphenyl-d14	*56*		*13 - 150*	*10/23/24 08:16*	*10/25/24 15:42*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*10/23/24 08:16*	*10/25/24 15:42*	*1*

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

Lab Sample ID: LCS 400-688972/22-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	128		ug/L		106	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*21 - 114*
2-Fluorophenol	*45*		*10 - 105*
Nitrobenzene-d5	*61*		*16 - 127*
Phenol-d5	*34*		*10 - 129*
Terphenyl-d14	*67*		*13 - 150*
2,4,6-Tribromophenol	*80*		*10 - 150*

Lab Sample ID: LCS 400-688972/2-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Aniline			120	41.2		ug/L		34	10 - 127		
Benzoic acid			493	190		ug/L		39	19 - 126		
Benzyl alcohol			120	76.6		ug/L		64	17 - 109		
Bis(2-chloroethoxy)methane			120	81.1		ug/L		68	24 - 125		
Bis(2-chloroethyl)ether			120	67.6		ug/L		56	10 - 121		
bis (2-chloroisopropyl) ether			120	89.1		ug/L		74	14 - 123		
Bis(2-ethylhexyl) phthalate			120	91.9		ug/L		77	16 - 150		
4-Bromophenyl phenyl ether			120	88.7		ug/L		74	17 - 150		
Butyl benzyl phthalate			120	91.1		ug/L		76	21 - 150		
4-Chloroaniline			120	78.7		ug/L		66	10 - 124		
4-Chloro-3-methylphenol			120	97.8		ug/L		82	37 - 131		
2-Chloronaphthalene			120	86.4		ug/L		72	24 - 132		
2-Chlorophenol			120	88.9		ug/L		74	27 - 124		
4-Chlorophenyl phenyl ether			120	88.8		ug/L		74	27 - 147		
Dibenz[a,h]acridine			59.9	108	*+	ug/L		180	40 - 140		
Dibenzofuran			120	88.0		ug/L		73	30 - 135		
3,3'-Dichlorobenzidine			160	134		ug/L		84	10 - 150		
2,4-Dichlorophenol			120	93.9		ug/L		78	33 - 132		
Diethyl phthalate			120	97.5		ug/L		81	37 - 145		
2,4-Dimethylphenol			120	162	*+	ug/L		135	38 - 132		
Dimethyl phthalate			120	91.8		ug/L		77	32 - 137		
Di-n-butyl phthalate			120	178		ug/L		148	27 - 150		
4,6-Dinitro-ortho-cresol			240	274		ug/L		114	14 - 150		
2,4-Dinitrophenol			240	411	*+	ug/L		171	15 - 150		
2,4-Dinitrotoluene			120	93.0		ug/L		78	35 - 136		
2,6-Dinitrotoluene			120	88.6		ug/L		74	29 - 140		
Di-n-octyl phthalate			120	87.2		ug/L		73	26 - 150		
1,4-Dioxane			120	38.9		ug/L		32	10 - 87		
1,2-Diphenylhydrazine (as Azobenzene)			120	94.0		ug/L		78	23 - 138		
Hexachlorobenzene			120	97.0		ug/L		81	10 - 150		
Hexachlorocyclopentadiene			120	292	*+	ug/L		243	10 - 124		
Hexachloroethane			120	77.3		ug/L		64	10 - 127		

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

Lab Sample ID: LCS 400-688972/2-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688972

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Indene			120	93.8		ug/L		78	18 - 150		
Isophorone			120	83.1		ug/L		69	28 - 127		
2-Methylphenol			120	91.6		ug/L		76	34 - 124		
3 & 4 Methylphenol			120	86.2		ug/L		72	32 - 122		
2-Nitroaniline			120	93.9		ug/L		78	24 - 139		
3-Nitroaniline			120	76.5		ug/L		64	10 - 128		
4-Nitroaniline			120	93.6		ug/L		78	28 - 118		
Nitrobenzene			120	76.7		ug/L		64	29 - 120		
2-Nitrophenol			120	90.9		ug/L		76	25 - 148		
4-Nitrophenol			240	170		ug/L		71	12 - 129		
N-Nitrosodimethylamine			120	48.0		ug/L		40	10 - 115		
N-Nitrosodi-n-propylamine			120	91.8		ug/L		77	24 - 142		
N-Nitrosodiphenylamine			119	86.5		ug/L		73	29 - 138		
Pentachlorophenol			240	232		ug/L		97	19 - 150		
Phenol			120	49.9		ug/L		42	11 - 95		
Pyridine			240	14.3	*-	ug/L		6	10 - 82		
Quinoline			59.9	69.3		ug/L		116	10 - 141		
2,4,5-Trichlorophenol			120	94.3		ug/L		79	30 - 144		
2,4,6-Trichlorophenol			120	92.1		ug/L		77	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*21 - 114*
2-Fluorophenol	*47*		*10 - 105*
Nitrobenzene-d5	*68*		*16 - 127*
Phenol-d5	*37*		*10 - 129*
Terphenyl-d14	*66*		*13 - 150*
2,4,6-Tribromophenol	*82*		*10 - 150*

Lab Sample ID: LCSD 400-688972/23-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	110		ug/L		92	10 - 140	15	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*43*		*10 - 105*
Nitrobenzene-d5	*60*		*16 - 127*
Phenol-d5	*34*		*10 - 129*
Terphenyl-d14	*67*		*13 - 150*
2,4,6-Tribromophenol	*81*		*10 - 150*

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

Lab Sample ID: LCSD 400-688972/3-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688972

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	22.0	*1	ug/L		18	10 - 127	61	40
Benzoic acid	493	236		ug/L		48	19 - 126	22	40
Benzyl alcohol	120	77.4		ug/L		64	17 - 109	1	40
Bis(2-chloroethoxy)methane	120	77.3		ug/L		64	24 - 125	5	40
Bis(2-chloroethyl)ether	120	61.7		ug/L		51	10 - 121	9	40
bis (2-chloroisopropyl) ether	120	83.9		ug/L		70	14 - 123	6	40
Bis(2-ethylhexyl) phthalate	120	89.1		ug/L		74	16 - 150	3	40
4-Bromophenyl phenyl ether	120	86.7		ug/L		72	17 - 150	2	40
Butyl benzyl phthalate	120	92.5		ug/L		77	21 - 150	2	40
4-Chloroaniline	120	73.9		ug/L		62	10 - 124	6	40
4-Chloro-3-methylphenol	120	96.3		ug/L		80	37 - 131	2	40
2-Chloronaphthalene	120	82.7		ug/L		69	24 - 132	4	40
2-Chlorophenol	120	85.5		ug/L		71	27 - 124	4	40
4-Chlorophenyl phenyl ether	120	87.5		ug/L		73	27 - 147	1	40
Dibenz[a,h]acridine	59.9	108	*+	ug/L		180	40 - 140	0	40
Dibenzofuran	120	87.0		ug/L		73	30 - 135	1	40
3,3'-Dichlorobenzidine	160	131		ug/L		82	10 - 150	2	40
2,4-Dichlorophenol	120	89.2		ug/L		74	33 - 132	5	40
Diethyl phthalate	120	94.9		ug/L		79	37 - 145	3	40
2,4-Dimethylphenol	120	154		ug/L		128	38 - 132	5	40
Dimethyl phthalate	120	90.5		ug/L		75	32 - 137	1	40
Di-n-butyl phthalate	120	160		ug/L		133	27 - 150	11	40
4,6-Dinitro-ortho-cresol	240	272		ug/L		113	14 - 150	1	40
2,4-Dinitrophenol	240	431	*+	ug/L		180	15 - 150	5	40
2,4-Dinitrotoluene	120	93.1		ug/L		78	35 - 136	0	40
2,6-Dinitrotoluene	120	88.5		ug/L		74	29 - 140	0	40
Di-n-octyl phthalate	120	85.3		ug/L		71	26 - 150	2	40
1,4-Dioxane	120	40.4		ug/L		34	10 - 87	4	40
1,2-Diphenylhydrazine (as Azobenzene)	120	87.3		ug/L		73	23 - 138	7	40
Hexachlorobenzene	120	97.1		ug/L		81	10 - 150	0	40
Hexachlorocyclopentadiene	120	303	*+	ug/L		253	10 - 124	4	40
Hexachloroethane	120	73.2		ug/L		61	10 - 127	5	40
Indene	120	88.2		ug/L		73	18 - 150	6	40
Isophorone	120	79.3		ug/L		66	28 - 127	5	40
2-Methylphenol	120	90.7		ug/L		76	34 - 124	1	40
3 & 4 Methylphenol	120	86.3		ug/L		72	32 - 122	0	40
2-Nitroaniline	120	91.0		ug/L		76	24 - 139	3	40
3-Nitroaniline	120	75.4		ug/L		63	10 - 128	1	40
4-Nitroaniline	120	95.1		ug/L		79	28 - 118	2	40
Nitrobenzene	120	71.9		ug/L		60	29 - 120	6	40
2-Nitrophenol	120	88.0		ug/L		73	25 - 148	3	40
4-Nitrophenol	240	191		ug/L		80	12 - 129	12	40
N-Nitrosodimethylamine	120	50.0		ug/L		42	10 - 115	4	40
N-Nitrosodi-n-propylamine	120	86.8		ug/L		72	24 - 142	6	40
N-Nitrosodiphenylamine	119	83.4		ug/L		70	29 - 138	4	40
Pentachlorophenol	240	230		ug/L		96	19 - 150	1	40
Phenol	120	56.2		ug/L		47	11 - 95	12	40
Pyridine	240	ND	*- *1	ug/L		2	10 - 82	104	40

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

Lab Sample ID: LCSD 400-688972/3-A
Matrix: Water
Analysis Batch: 689180

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688972

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			59.9	50.6		ug/L		85	10 - 141	31	40
2,4,5-Trichlorophenol			120	93.5		ug/L		78	30 - 144	1	40
2,4,6-Trichlorophenol			120	90.6		ug/L		76	27 - 147	2	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*21 - 114*
2-Fluorophenol	*50*		*10 - 105*
Nitrobenzene-d5	*64*		*16 - 127*
Phenol-d5	*43*		*10 - 129*
Terphenyl-d14	*68*		*13 - 150*
2,4,6-Tribromophenol	*88*		*10 - 150*

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

Lab Sample ID: MB 400-688847/1-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/23/24 10:22	10/23/24 16:10	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/23/24 10:22	10/23/24 16:10	1
Anthracene	ND		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 16:10	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 16:10	1
Fluoranthene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 16:10	1
Fluorene	ND		0.20	0.087	ug/L		10/23/24 10:22	10/23/24 16:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 16:10	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 16:10	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/23/24 10:22	10/23/24 16:10	1
Phenanthrene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 16:10	1
Pyrene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*
Nitrobenzene-d5	*88*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*
Terphenyl-d14	*87*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*

Lab Sample ID: LCS 400-688847/2-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene			3.34	2.84		ug/L		85	50 - 150		

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

Lab Sample ID: LCS 400-688847/2-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688847

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthylene			3.34	3.00		ug/L		90	50 - 150		
Anthracene			3.34	3.01		ug/L		90	50 - 150		
Benzo[a]anthracene			3.34	2.88		ug/L		86	50 - 150		
Benzo[a]pyrene			3.34	2.88		ug/L		86	50 - 150		
Benzo[b]fluoranthene			3.34	3.01		ug/L		90	50 - 150		
Benzo[g,h,i]perylene			3.34	2.90		ug/L		87	50 - 150		
Benzo[k]fluoranthene			3.34	2.94		ug/L		88	50 - 150		
Chrysene			3.34	3.09		ug/L		93	50 - 150		
Dibenz(a,h)anthracene			3.34	2.84		ug/L		85	50 - 150		
Fluoranthene			3.34	2.88		ug/L		86	50 - 150		
Fluorene			3.34	2.90		ug/L		87	50 - 150		
Indeno[1,2,3-cd]pyrene			3.34	3.05		ug/L		91	50 - 150		
1-Methylnaphthalene			3.34	2.74		ug/L		82	50 - 150		
2-Methylnaphthalene			3.34	2.44		ug/L		73	50 - 150		
Phenanthrene			3.34	3.12		ug/L		93	50 - 150		
Pyrene			3.34	2.90		ug/L		87	50 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*50 - 150*
Nitrobenzene-d5	*88*		*50 - 150*
Terphenyl-d14	*89*		*50 - 150*

Lab Sample ID: LCSD 400-688847/3-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688847

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			3.34	2.36		ug/L		71	50 - 150	19	40
Acenaphthylene			3.34	2.64		ug/L		79	50 - 150	13	40
Anthracene			3.34	2.50		ug/L		75	50 - 150	18	40
Benzo[a]anthracene			3.34	2.65		ug/L		79	50 - 150	8	40
Benzo[a]pyrene			3.34	2.56		ug/L		77	50 - 150	12	40
Benzo[b]fluoranthene			3.34	2.75		ug/L		82	50 - 150	9	40
Benzo[g,h,i]perylene			3.34	2.64		ug/L		79	50 - 150	9	40
Benzo[k]fluoranthene			3.34	2.68		ug/L		80	50 - 150	9	40
Chrysene			3.34	2.62		ug/L		79	50 - 150	16	40
Dibenz(a,h)anthracene			3.34	2.64		ug/L		79	50 - 150	7	40
Fluoranthene			3.34	2.45		ug/L		73	50 - 150	16	40
Fluorene			3.34	2.47		ug/L		74	50 - 150	16	40
Indeno[1,2,3-cd]pyrene			3.34	2.79		ug/L		84	50 - 150	9	40
1-Methylnaphthalene			3.34	2.23		ug/L		67	50 - 150	21	40
2-Methylnaphthalene			3.34	1.96		ug/L		59	50 - 150	22	40
Phenanthrene			3.34	2.57		ug/L		77	50 - 150	19	40
Pyrene			3.34	2.46		ug/L		74	50 - 150	16	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*50 - 150*
Nitrobenzene-d5	*91*		*50 - 150*

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

Lab Sample ID: LCSD 400-688847/3-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688847

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*93*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688591/1-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688591

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		10/21/24 10:50	10/21/24 13:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/21/24 10:50	10/21/24 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*10/21/24 10:50*	*10/21/24 13:22*	*1*

Lab Sample ID: LCS 400-688591/2-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688591

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0846		ug/L		84	60 - 140		
1,2-Dibromoethane			0.100	0.0784		ug/L		78	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Lab Sample ID: LCSD 400-688591/3-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688591

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0903		ug/L		90	60 - 140	6	30
1,2-Dibromoethane			0.100	0.0879		ug/L		88	60 - 140	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/16/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	Bill To Contact E-MAIL:	SAMPLER NAME(S) (Print):	LAB USE ONLY
Melissa Remiger, Mary Massa, Brett Howell	314-429-0100	314-429-0462	melissa.remiger@aecom.com	C. McDavid, T. Jenkins	

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° | Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

400-264429 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-101624-8260	10/16/2024	0000	Water	2					2	X			
	TB-ROX-101624-8011	10/16/2024	0000	Water	2					2		X		
	ROST4PZC-ROX-101624	10/16/2024	0945	Water	6			4		10	X	X	X	X
	ROST4PZC-ROX-101624-DUP	10/16/2024	0945	Water	6			4		10	X	X	X	X
	ROST4PZG-ROX-101624	10/16/2024	1130	Water	6			4		10	X	X	X	X
	MW22-ROX-101624	10/16/2024	1250	Water	6			4		10	X	X	X	X

C McDavid 10-16-24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
COURTNEY MCDAVID	FEDEX: 7252 0547 1861, 7252 0547 1872	10/16/2024	1600
Relinquished by: (Signature)	Received by: (Signature) BP	Date: 10/17/24	Time: 943
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: 1599962, 1599963, 1599964, 1599965

Version: 19Sept24

OK'd IR6 9.0°C

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Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264429-1

Login Number: 264429
List Number: 1
Creator: Roberts, Darrien

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C 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
Job ID: 400-264429-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264437-1

Site Name: Roxana

Prepared By and Date: Adelina Gita 11/28/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/04/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-688946/21-A/22-A	SVOCs	2,4-Dimethylphenol	**134** /97	32	38–132/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	2,4-Dinitrophenol	**158**/106	40	15–150/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Hexachlorocyclopentadiene	**239/165**	36	10-124/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Pyridine	**8/9**	6	10-82/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	4-Bromophenyl phenyl ether	74/47	**45**	17-150/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	4-Chlorophenyl phenyl ether	72/47	**42**	27-147/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Dibenz[a,h]acridine	91/58	**44**	40-140/40

Stage 2A Validation						
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**	
		Pass	**Fail[1]**	**N/A**		
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Di-n-octyl phthalate		77/51	**41**	26-150/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Hexachlorobenzene		78/48	**48**	10-150/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	N-Nitrosodiphenylamine		75/49	**42**	29-138/40
LCS/LCSD 400-688946/21-A/22-A	SVOCs	Pentachlorophenol		91/60	**41**	19-150/40

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Method 8270E
Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine in samples T12-ROX-10162 and P59-ROX-101624 was qualified as estimated (UJ).

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.		X		

Blank ID	Parameter	Analyte	Concentration/Amount
MB 400-688667/1-A	SVOCs	Di-n-butyl phthalate	34.2 µg/L

Qualifications due to blank contamination are referenced below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification.

Method 8270E (SVOCs)
Di-n-butyl phthalate results for samples T12-ROX-101624 and P59-ROX-101624 were qualified as non-detect (U) at the reported sample concentration.

Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Analytes were detected in samples that were diluted.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method	X			
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.				
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

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ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 10/30/2024 7:38:02 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264437-1

Reviewed 11/28/2024
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
400-264437-1

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 10/17/2024 9:43 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 0.8°C.

GC/MS VOA
Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: T12-ROX-101624 (400-264437-3) and P59-ROX-101624 (400-264437-4). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689506 recovered above the upper control limit for Acrolein. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101624-8260-SS (400-264437-1), T12-ROX-101624 (400-264437-3) and P59-ROX-101624 (400-264437-4). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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 400-689044 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-methylphenol, Hexachlorocyclopentadiene and 2-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-688946 and analytical batch 400-689044 recovered outside control limits for the following analytes: 2,4-Dinitrophenol, 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 laboratory control sample duplicate (LCSD) for preparation batch 400-688946 and analytical batch 400-689044 recovered outside control limits for the following analytes: Hexachlorocyclopentadiene. 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 laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-688946 and analytical batch 400-689044 recovered outside control limits for the following analyte(s): Pyridine. Pyridine has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-688946 and analytical batch 400-689044 recovered outside control limits for the following analytes: 4-Chlorophenyl phenyl ether, Dibenz[a,h]acridine, Hexachlorobenzene, Pentachlorophenol, 4-Bromophenyl phenyl ether, Di-n-octyl phthalate and N-Nitrosodiphenylamine.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689044 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The following samples and corresponding method blank contained common lab contaminant di-n-butyl phthalate above the reporting limit (RL) but less than regulatory limits. Data has been reported accordingly and can be re-extracted upon request. T12-ROX-101624 (400-264437-3), P59-ROX-101624 (400-264437-4) and (MB 400-688946/1-A)

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

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264437-1	TB-ROX-101624-8260-SS	Water	10/16/24 00:00	10/17/24 09:43
400-264437-2	TB-ROX-101624-8011-SS	Water	10/16/24 00:00	10/17/24 09:43
400-264437-3	T12-ROX-101624	Water	10/16/24 09:45	10/17/24 09:43
400-264437-4	P59-ROX-101624	Water	10/16/24 12:45	10/17/24 09:43

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: TB-ROX-101624-8260-SS — Lab Sample ID: 400-264437-1

No Detections.

Client Sample ID: TB-ROX-101624-8011-SS — Lab Sample ID: 400-264437-2

No Detections.

Client Sample ID: T12-ROX-101624 — Lab Sample ID: 400-264437-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1400		10	2.4	ug/L	10		8260D	Total/NA
Ethylbenzene	44		10	5.0	ug/L	10		8260D	Total/NA
Isopropylbenzene	19		10	5.3	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	230		50	30	ug/L	10		8260D	Total/NA
N-Propylbenzene	33		10	6.9	ug/L	10		8260D	Total/NA
Toluene	100		10	9.0	ug/L	10		8260D	Total/NA
1,3,5-Trimethylbenzene	12		10	5.6	ug/L	10		8260D	Total/NA
Xylenes, Total	250		100	60	ug/L	10		8260D	Total/NA
Di-n-butyl phthalate	~~32~~ 32	~~B~~ U	~~9.2~~	4.2	ug/L	1		8270E	Total/NA
Phenol	5.0	J	9.2	3.9	ug/L	1		8270E	Total/NA
Acenaphthene	0.47		0.19	0.083	ug/L	1		8270E	Total/NA
Acenaphthylene	0.050	J	0.19	0.046	ug/L	1		8270E	Total/NA
Anthracene	0.073	J	0.19	0.071	ug/L	1		8270E	Total/NA
Fluorene	0.28		0.19	0.084	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	21		0.19	0.064	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	32		0.19	0.075	ug/L	1		8270E	Total/NA
Phenanthrene	0.62		0.19	0.043	ug/L	1		8270E	Total/NA

Client Sample ID: P59-ROX-101624 — Lab Sample ID: 400-264437-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	910		5.0	1.2	ug/L	5		8260D	Total/NA
Ethylbenzene	300		5.0	2.5	ug/L	5		8260D	Total/NA
Isopropylbenzene	23		5.0	2.7	ug/L	5		8260D	Total/NA
m-Xylene & p-Xylene	370		25	15	ug/L	5		8260D	Total/NA
Naphthalene	55		25	15	ug/L	5		8260D	Total/NA
N-Propylbenzene	34		5.0	3.5	ug/L	5		8260D	Total/NA
Toluene	120		5.0	4.5	ug/L	5		8260D	Total/NA
1,2,4-Trimethylbenzene	120		5.0	4.1	ug/L	5		8260D	Total/NA
1,3,5-Trimethylbenzene	21		5.0	2.8	ug/L	5		8260D	Total/NA
Xylenes, Total	380		50	30	ug/L	5		8260D	Total/NA
Di-n-butyl phthalate	~~40~~	~~B~~ U	~~9.3~~ 40	4.3	ug/L	1		8270E	Total/NA
Phenol	20		9.3	3.9	ug/L	1		8270E	Total/NA
Acenaphthene	0.78		0.20	0.086	ug/L	1		8270E	Total/NA
Anthracene	0.099	J	0.20	0.073	ug/L	1		8270E	Total/NA
Chrysene	0.059	J	0.20	0.039	ug/L	1		8270E	Total/NA
Fluoranthene	0.11	J	0.20	0.032	ug/L	1		8270E	Total/NA
Fluorene	0.39		0.20	0.088	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	16		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	17		0.20	0.078	ug/L	1		8270E	Total/NA
Phenanthrene	0.40		0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.25		0.20	0.040	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: TB-ROX-101624-8260-SS
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-1
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			10/29/24 18:28	1
Acrolein	ND		20	3.3	ug/L			10/29/24 18:28	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 18:28	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 18:28	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 18:28	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 18:28	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 18:28	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 18:28	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 18:28	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 18:28	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 18:28	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 18:28	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 18:28	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 18:28	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 18:28	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 18:28	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 18:28	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 18:28	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 18:28	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 18:28	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 18:28	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 18:28	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 18:28	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 18:28	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 18:28	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 18:28	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 18:28	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 18:28	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 18:28	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 18:28	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 18:28	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 18:28	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 18:28	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 18:28	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 18:28	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 18:28	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 18:28	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 18:28	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 18:28	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 18:28	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 18:28	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 18:28	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 18:28	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 18:28	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: TB-ROX-101624-8260-SS
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-1
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			10/29/24 18:28	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 18:28	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 18:28	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 18:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 18:28	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 18:28	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 18:28	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 18:28	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 18:28	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 18:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 18:28	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 18:28	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 18:28	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 18:28	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 18:28	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 18:28	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 18:28	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 18:28	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 18:28	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 18:28	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 18:28*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/29/24 18:28*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/29/24 18:28*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: TB-ROX-101624-8011-SS
Date Collected: 10/16/24 00:00
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-2
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		10/21/24 10:50	10/21/24 16:52	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/21/24 10:50	10/21/24 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*10/21/24 10:50*	*10/21/24 16:52*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: T12-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			10/29/24 21:06	10
Acrolein	ND		200	33	ug/L			10/29/24 21:06	10
Acrylonitrile	ND		100	28	ug/L			10/29/24 21:06	10
Benzene	**1400**		10	2.4	ug/L			10/29/24 21:06	10
Bromobenzene	ND		10	5.4	ug/L			10/29/24 21:06	10
Bromochloromethane	ND		10	5.2	ug/L			10/29/24 21:06	10
Bromodichloromethane	ND		10	5.0	ug/L			10/29/24 21:06	10
Bromoform	ND		50	2.5	ug/L			10/29/24 21:06	10
Bromomethane	ND		10	9.8	ug/L			10/29/24 21:06	10
2-Butanone (MEK)	ND		250	26	ug/L			10/29/24 21:06	10
Carbon disulfide	ND		10	5.0	ug/L			10/29/24 21:06	10
Carbon tetrachloride	ND		10	1.9	ug/L			10/29/24 21:06	10
Chlorobenzene	ND		10	4.2	ug/L			10/29/24 21:06	10
Chloroethane	ND		10	7.6	ug/L			10/29/24 21:06	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			10/29/24 21:06	10
Chloroform	ND		10	9.0	ug/L			10/29/24 21:06	10
1-Chlorohexane	ND		10	3.2	ug/L			10/29/24 21:06	10
Chloromethane	ND		10	4.0	ug/L			10/29/24 21:06	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			10/29/24 21:06	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			10/29/24 21:06	10
Dibromochloromethane	ND		10	2.4	ug/L			10/29/24 21:06	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			10/29/24 21:06	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			10/29/24 21:06	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			10/29/24 21:06	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			10/29/24 21:06	10
1,1-Dichloroethane	ND		10	5.0	ug/L			10/29/24 21:06	10
1,2-Dichloroethane	ND		10	5.5	ug/L			10/29/24 21:06	10
1,1-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:06	10
1,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:06	10
1,3-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:06	10
2,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:06	10
1,1-Dichloropropene	ND		10	0.90	ug/L			10/29/24 21:06	10
Ethylbenzene	**44**		10	5.0	ug/L			10/29/24 21:06	10
Ethyl methacrylate	ND		10	6.0	ug/L			10/29/24 21:06	10
Hexachlorobutadiene	ND		50	9.0	ug/L			10/29/24 21:06	10
2-Hexanone	ND		250	43	ug/L			10/29/24 21:06	10
Isopropylbenzene	**19**		10	5.3	ug/L			10/29/24 21:06	10
Methylene bromide	ND		50	2.2	ug/L			10/29/24 21:06	10
Methylene Chloride	ND		50	30	ug/L			10/29/24 21:06	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			10/29/24 21:06	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			10/29/24 21:06	10
m-Xylene & p-Xylene	**230**		50	30	ug/L			10/29/24 21:06	10
Naphthalene	ND		50	30	ug/L			10/29/24 21:06	10
n-Butylbenzene	ND		10	7.6	ug/L			10/29/24 21:06	10
N-Propylbenzene	**33**		10	6.9	ug/L			10/29/24 21:06	10
o-Chlorotoluene	ND		10	5.7	ug/L			10/29/24 21:06	10
o-Xylene	ND		50	30	ug/L			10/29/24 21:06	10
p-Chlorotoluene	ND		10	5.6	ug/L			10/29/24 21:06	10
p-Isopropyltoluene	ND		10	7.1	ug/L			10/29/24 21:06	10

Client Sample ID: T12-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-3
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		10	7.0	ug/L			10/29/24 21:06	10
Styrene	ND		10	10	ug/L			10/29/24 21:06	10
tert-Butylbenzene	ND		10	6.3	ug/L			10/29/24 21:06	10
1,1,1,2-Tetrachloroethane	ND		10	3.8	ug/L			10/29/24 21:06	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			10/29/24 21:06	10
Tetrachloroethene	ND		10	3.3	ug/L			10/29/24 21:06	10
Toluene	**100**		10	9.0	ug/L			10/29/24 21:06	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:06	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			10/29/24 21:06	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			10/29/24 21:06	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			10/29/24 21:06	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			10/29/24 21:06	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			10/29/24 21:06	10
Trichloroethene	ND		10	1.5	ug/L			10/29/24 21:06	10
Trichlorofluoromethane	ND		10	2.5	ug/L			10/29/24 21:06	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			10/29/24 21:06	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			10/29/24 21:06	10
1,3,5-Trimethylbenzene	**12**		10	5.6	ug/L			10/29/24 21:06	10
Vinyl acetate	ND		250	9.3	ug/L			10/29/24 21:06	10
Vinyl chloride	ND		10	5.0	ug/L			10/29/24 21:06	10
Xylenes, Total	**250**		100	60	ug/L			10/29/24 21:06	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/29/24 21:06*	*10*
Dibromofluoromethane	*101*		*75 - 126*		*10/29/24 21:06*	*10*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/29/24 21:06*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.2	8.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
Benzenethiol	ND		9.2	9.1	ug/L		10/23/24 18:19	10/24/24 16:21	1
Benzoic acid	ND		28	22	ug/L		10/23/24 18:19	10/24/24 16:21	1
Benzyl alcohol	ND		9.2	6.7	ug/L		10/23/24 18:19	10/24/24 16:21	1
Bis(2-chloroethoxy)methane	ND		9.2	4.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
Bis(2-chloroethyl)ether	ND		9.2	3.6	ug/L		10/23/24 18:19	10/24/24 16:21	1
bis (2-chloroisopropyl) ether	ND		9.2	1.7	ug/L		10/23/24 18:19	10/24/24 16:21	1
Bis(2-ethylhexyl) phthalate	ND		9.2	8.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Bromophenyl phenyl ether	ND	*1	9.2	7.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
Butyl benzyl phthalate	ND		9.2	5.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Chloroaniline	ND		9.2	4.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Chloro-3-methylphenol	ND		9.2	4.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
2-Chloronaphthalene	ND		9.2	3.5	ug/L		10/23/24 18:19	10/24/24 16:21	1
2-Chlorophenol	ND		9.2	3.8	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Chlorophenyl phenyl ether	ND	*1	9.2	3.4	ug/L		10/23/24 18:19	10/24/24 16:21	1
Dibenz[a,h]acridine	ND	*1	9.2	2.6	ug/L		10/23/24 18:19	10/24/24 16:21	1
Dibenzofuran	ND		9.2	3.7	ug/L		10/23/24 18:19	10/24/24 16:21	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4-Dichlorophenol	ND		9.2	4.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
Diethyl phthalate	ND		9.2	4.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4-Dimethylphenol	ND	*+	9.2	4.8	ug/L		10/23/24 18:19	10/24/24 16:21	1

Client Sample ID: T12-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.2	3.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
Di-n-butyl phthalate	**32**	**B** U	~~9.2~~ 32	4.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
4,6-Dinitro-ortho-cresol	ND		9.2	9.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4-Dinitrophenol	ND	*+	28	4.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4-Dinitrotoluene	ND		9.2	4.7	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,6-Dinitrotoluene	ND		9.2	3.6	ug/L		10/23/24 18:19	10/24/24 16:21	1
Di-n-octyl phthalate	ND	*1	9.2	5.5	ug/L		10/23/24 18:19	10/24/24 16:21	1
1,4-Dioxane	ND		9.2	4.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.2	3.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
Hexachlorobenzene	ND	*1	9.2	8.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
Hexachlorocyclopentadiene	ND	*+	18	4.1	ug/L		10/23/24 18:19	10/24/24 16:21	1
Hexachloroethane	ND		9.2	4.8	ug/L		10/23/24 18:19	10/24/24 16:21	1
Indene	ND		9.2	3.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
Isophorone	ND		9.2	4.8	ug/L		10/23/24 18:19	10/24/24 16:21	1
2-Methylphenol	ND		9.2	2.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
3 & 4 Methylphenol	ND		18	4.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
2-Nitroaniline	ND		9.2	4.6	ug/L		10/23/24 18:19	10/24/24 16:21	1
3-Nitroaniline	ND		9.2	4.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Nitroaniline	ND		9.2	3.8	ug/L		10/23/24 18:19	10/24/24 16:21	1
Nitrobenzene	ND		9.2	4.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
2-Nitrophenol	ND		9.2	4.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
4-Nitrophenol	ND		9.2	3.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
N-Nitrosodimethylamine	ND		9.2	2.0	ug/L		10/23/24 18:19	10/24/24 16:21	1
N-Nitrosodi-n-propylamine	ND		9.2	2.3	ug/L		10/23/24 18:19	10/24/24 16:21	1
N-Nitrosodiphenylamine	ND	*1	9.2	3.4	ug/L		10/23/24 18:19	10/24/24 16:21	1
Pentachlorophenol	ND	*1	18	11	ug/L		10/23/24 18:19	10/24/24 16:21	1
Phenol	**5.0**	**J**	9.2	3.9	ug/L		10/23/24 18:19	10/24/24 16:21	1
Pyridine	ND	*- UJ	9.2	9.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
Quinoline	ND		9.2	2.2	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4,5-Trichlorophenol	ND		9.2	3.7	ug/L		10/23/24 18:19	10/24/24 16:21	1
2,4,6-Trichlorophenol	ND		9.2	3.2	ug/L		10/23/24 18:19	10/24/24 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*21 - 114*	*10/23/24 18:19*	*10/24/24 16:21*	*1*
2-Fluorophenol	*35*		*10 - 105*	*10/23/24 18:19*	*10/24/24 16:21*	*1*
Nitrobenzene-d5	*48*		*16 - 127*	*10/23/24 18:19*	*10/24/24 16:21*	*1*
Phenol-d5	*33*		*10 - 129*	*10/23/24 18:19*	*10/24/24 16:21*	*1*
Terphenyl-d14	*62*		*13 - 150*	*10/23/24 18:19*	*10/24/24 16:21*	*1*
2,4,6-Tribromophenol	*84*		*10 - 150*	*10/23/24 18:19*	*10/24/24 16:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.47**		0.19	0.083	ug/L		10/23/24 10:22	10/23/24 20:42	1
Acenaphthylene	**0.050**	**J**	0.19	0.046	ug/L		10/23/24 10:22	10/23/24 20:42	1
Anthracene	**0.073**	**J**	0.19	0.071	ug/L		10/23/24 10:22	10/23/24 20:42	1
Benzo[a]anthracene	ND		0.19	0.039	ug/L		10/23/24 10:22	10/23/24 20:42	1
Benzo[a]pyrene	ND		0.19	0.044	ug/L		10/23/24 10:22	10/23/24 20:42	1
Benzo[b]fluoranthene	ND		0.19	0.041	ug/L		10/23/24 10:22	10/23/24 20:42	1
Benzo[g,h,i]perylene	ND		0.19	0.050	ug/L		10/23/24 10:22	10/23/24 20:42	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: T12-ROX-101624
Date Collected: 10/16/24 09:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.19	0.039	ug/L		10/23/24 10:22	10/23/24 20:42	1
Chrysene	ND		0.19	0.038	ug/L		10/23/24 10:22	10/23/24 20:42	1
Dibenz(a,h)anthracene	ND		0.19	0.043	ug/L		10/23/24 10:22	10/23/24 20:42	1
Fluoranthene	ND		0.19	0.031	ug/L		10/23/24 10:22	10/23/24 20:42	1
Fluorene	**0.28**		0.19	0.084	ug/L		10/23/24 10:22	10/23/24 20:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.031	ug/L		10/23/24 10:22	10/23/24 20:42	1
1-Methylnaphthalene	**21**		0.19	0.064	ug/L		10/23/24 10:22	10/23/24 20:42	1
2-Methylnaphthalene	**32**		0.19	0.075	ug/L		10/23/24 10:22	10/23/24 20:42	1
Phenanthrene	**0.62**		0.19	0.043	ug/L		10/23/24 10:22	10/23/24 20:42	1
Pyrene	ND		0.19	0.039	ug/L		10/23/24 10:22	10/23/24 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*50 - 150*	*10/23/24 10:22*	*10/23/24 20:42*	*1*
Nitrobenzene-d5	*94*		*50 - 150*	*10/23/24 10:22*	*10/23/24 20:42*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/23/24 10:22*	*10/23/24 20:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.034	0.019	ug/L		10/21/24 10:50	10/21/24 17:13	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/21/24 10:50	10/21/24 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*66*		*51 - 149*	*10/21/24 10:50*	*10/21/24 17:13*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Client Sample ID: P59-ROX-101624
Date Collected: 10/16/24 12:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			10/29/24 20:40	5
Acrolein	ND		100	17	ug/L			10/29/24 20:40	5
Acrylonitrile	ND		50	14	ug/L			10/29/24 20:40	5
Benzene	**910**		5.0	1.2	ug/L			10/29/24 20:40	5
Bromobenzene	ND		5.0	2.7	ug/L			10/29/24 20:40	5
Bromochloromethane	ND		5.0	2.6	ug/L			10/29/24 20:40	5
Bromodichloromethane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
Bromoform	ND		25	1.3	ug/L			10/29/24 20:40	5
Bromomethane	ND		5.0	4.9	ug/L			10/29/24 20:40	5
2-Butanone (MEK)	ND		130	13	ug/L			10/29/24 20:40	5
Carbon disulfide	ND		5.0	2.5	ug/L			10/29/24 20:40	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			10/29/24 20:40	5
Chlorobenzene	ND		5.0	2.1	ug/L			10/29/24 20:40	5
Chloroethane	ND		5.0	3.8	ug/L			10/29/24 20:40	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			10/29/24 20:40	5
Chloroform	ND		5.0	4.5	ug/L			10/29/24 20:40	5
1-Chlorohexane	ND		5.0	1.6	ug/L			10/29/24 20:40	5
Chloromethane	ND		5.0	2.0	ug/L			10/29/24 20:40	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			10/29/24 20:40	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			10/29/24 20:40	5
Dibromochloromethane	ND		5.0	1.2	ug/L			10/29/24 20:40	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			10/29/24 20:40	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			10/29/24 20:40	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			10/29/24 20:40	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			10/29/24 20:40	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
1,2-Dichloroethane	ND		5.0	2.8	ug/L			10/29/24 20:40	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			10/29/24 20:40	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
1,1-Dichloropropene	ND		5.0	0.45	ug/L			10/29/24 20:40	5
Ethylbenzene	**300**		5.0	2.5	ug/L			10/29/24 20:40	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			10/29/24 20:40	5
Hexachlorobutadiene	ND		25	4.5	ug/L			10/29/24 20:40	5
2-Hexanone	ND		130	21	ug/L			10/29/24 20:40	5
Isopropylbenzene	**23**		5.0	2.7	ug/L			10/29/24 20:40	5
Methylene bromide	ND		25	1.1	ug/L			10/29/24 20:40	5
Methylene Chloride	ND		25	15	ug/L			10/29/24 20:40	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			10/29/24 20:40	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			10/29/24 20:40	5
m-Xylene & p-Xylene	**370**		25	15	ug/L			10/29/24 20:40	5
Naphthalene	**55**		25	15	ug/L			10/29/24 20:40	5
n-Butylbenzene	ND		5.0	3.8	ug/L			10/29/24 20:40	5
N-Propylbenzene	**34**		5.0	3.5	ug/L			10/29/24 20:40	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			10/29/24 20:40	5
o-Xylene	ND		25	15	ug/L			10/29/24 20:40	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			10/29/24 20:40	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			10/29/24 20:40	5

Client Sample ID: P59-ROX-101624
Date Collected: 10/16/24 12:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-4
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		5.0	3.5	ug/L			10/29/24 20:40	5
Styrene	ND		5.0	5.0	ug/L			10/29/24 20:40	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			10/29/24 20:40	5
1,1,1,2-Tetrachloroethane	ND		5.0	1.9	ug/L			10/29/24 20:40	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			10/29/24 20:40	5
Tetrachloroethene	ND		5.0	1.7	ug/L			10/29/24 20:40	5
Toluene	**120**		5.0	4.5	ug/L			10/29/24 20:40	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			10/29/24 20:40	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			10/29/24 20:40	5
1,2,3-Trichlorobenzene	ND		5.0	4.5	ug/L			10/29/24 20:40	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			10/29/24 20:40	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			10/29/24 20:40	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			10/29/24 20:40	5
Trichloroethene	ND		5.0	0.75	ug/L			10/29/24 20:40	5
Trichlorofluoromethane	ND		5.0	1.3	ug/L			10/29/24 20:40	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			10/29/24 20:40	5
1,2,4-Trimethylbenzene	**120**		5.0	4.1	ug/L			10/29/24 20:40	5
1,3,5-Trimethylbenzene	**21**		5.0	2.8	ug/L			10/29/24 20:40	5
Vinyl acetate	ND		130	4.7	ug/L			10/29/24 20:40	5
Vinyl chloride	ND		5.0	2.5	ug/L			10/29/24 20:40	5
Xylenes, Total	**380**		50	30	ug/L			10/29/24 20:40	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 20:40*	*5*
Dibromofluoromethane	*99*		*75 - 126*		*10/29/24 20:40*	*5*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/29/24 20:40*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.3	8.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
Benzenethiol	ND		9.3	9.2	ug/L		10/23/24 18:19	10/24/24 16:44	1
Benzoic acid	ND		28	22	ug/L		10/23/24 18:19	10/24/24 16:44	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/23/24 18:19	10/24/24 16:44	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/23/24 18:19	10/24/24 16:44	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/23/24 18:19	10/24/24 16:44	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.2	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Bromophenyl phenyl ether	ND	*1	9.3	8.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Chloroaniline	ND		9.3	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/23/24 18:19	10/24/24 16:44	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/23/24 18:19	10/24/24 16:44	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Chlorophenyl phenyl ether	ND	*1	9.3	3.4	ug/L		10/23/24 18:19	10/24/24 16:44	1
Dibenz[a,h]acridine	ND	*1	9.3	2.6	ug/L		10/23/24 18:19	10/24/24 16:44	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/23/24 18:19	10/24/24 16:44	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/23/24 18:19	10/24/24 16:44	1

Client Sample ID: P59-ROX-101624
Date Collected: 10/16/24 12:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/23/24 18:19	10/24/24 16:44	1
Di-n-butyl phthalate	~~40~~	~~B~~ U	~~9.3~~ 40	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4-Dinitrophenol	ND	*+	28	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/23/24 18:19	10/24/24 16:44	1
Di-n-octyl phthalate	ND	*1	9.3	5.6	ug/L		10/23/24 18:19	10/24/24 16:44	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/23/24 18:19	10/24/24 16:44	1
Hexachlorobenzene	ND	*1	9.3	9.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/23/24 18:19	10/24/24 16:44	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/23/24 18:19	10/24/24 16:44	1
Indene	ND		9.3	3.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
Isophorone	ND		9.3	4.8	ug/L		10/23/24 18:19	10/24/24 16:44	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
2-Nitroaniline	ND		9.3	4.6	ug/L		10/23/24 18:19	10/24/24 16:44	1
3-Nitroaniline	ND		9.3	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/23/24 18:19	10/24/24 16:44	1
Nitrobenzene	ND		9.3	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/23/24 18:19	10/24/24 16:44	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/23/24 18:19	10/24/24 16:44	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
N-Nitrosodiphenylamine	ND	*1	9.3	3.4	ug/L		10/23/24 18:19	10/24/24 16:44	1
Pentachlorophenol	ND	*1	19	11	ug/L		10/23/24 18:19	10/24/24 16:44	1
Phenol	20		9.3	3.9	ug/L		10/23/24 18:19	10/24/24 16:44	1
Pyridine	ND	*- UJ	9.3	9.3	ug/L		10/23/24 18:19	10/24/24 16:44	1
Quinoline	ND		9.3	2.2	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/23/24 18:19	10/24/24 16:44	1
2,4,6-Trichlorophenol	ND		9.3	3.2	ug/L		10/23/24 18:19	10/24/24 16:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*21 - 114*	*10/23/24 18:19*	*10/24/24 16:44*	*1*
2-Fluorophenol	*45*		*10 - 105*	*10/23/24 18:19*	*10/24/24 16:44*	*1*
Nitrobenzene-d5	*59*		*16 - 127*	*10/23/24 18:19*	*10/24/24 16:44*	*1*
Phenol-d5	*39*		*10 - 129*	*10/23/24 18:19*	*10/24/24 16:44*	*1*
Terphenyl-d14	*63*		*13 - 150*	*10/23/24 18:19*	*10/24/24 16:44*	*1*
2,4,6-Tribromophenol	*86*		*10 - 150*	*10/23/24 18:19*	*10/24/24 16:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.78		0.20	0.086	ug/L		10/23/24 10:22	10/23/24 21:12	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/23/24 10:22	10/23/24 21:12	1
Anthracene	0.099	J	0.20	0.073	ug/L		10/23/24 10:22	10/23/24 21:12	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 21:12	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 21:12	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 21:12	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 21:12	1

Client Sample ID: P59-ROX-101624
Date Collected: 10/16/24 12:45
Date Received: 10/17/24 09:43

Lab Sample ID: 400-264437-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 21:12	1
Chrysene	**0.059**	**J**	0.20	0.039	ug/L		10/23/24 10:22	10/23/24 21:12	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 21:12	1
Fluoranthene	**0.11**	**J**	0.20	0.032	ug/L		10/23/24 10:22	10/23/24 21:12	1
Fluorene	**0.39**		0.20	0.088	ug/L		10/23/24 10:22	10/23/24 21:12	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 21:12	1
1-Methylnaphthalene	**16**		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 21:12	1
2-Methylnaphthalene	**17**		0.20	0.078	ug/L		10/23/24 10:22	10/23/24 21:12	1
Phenanthrene	**0.40**		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 21:12	1
Pyrene	**0.25**		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*50 - 150*	*10/23/24 10:22*	*10/23/24 21:12*	*1*
Nitrobenzene-d5	*96*		*50 - 150*	*10/23/24 10:22*	*10/23/24 21:12*	*1*
Terphenyl-d14	*82*		*50 - 150*	*10/23/24 10:22*	*10/23/24 21:12*	*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		10/21/24 10:50	10/21/24 17:34	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/21/24 10:50	10/21/24 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*10/21/24 10:50*	*10/21/24 17:34*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264437-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
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.

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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

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)
400-264437-1	TB-ROX-101624-8260-SS	94	104	94
400-264437-3	T12-ROX-101624	93	101	96
400-264437-4	P59-ROX-101624	94	99	94
LCS 400-689506/1002	Lab Control Sample	91	100	95
MB 400-689506/5	Method Blank	93	101	92

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)
400-264437-3	T12-ROX-101624	54	35	48	33	62	84
400-264437-4	P59-ROX-101624	58	45	59	39	63	86
LCS 400-688946/21-A	Lab Control Sample	59	46	70	38	61	80
LCS 400-688946/23-A	Lab Control Sample	50	35	50	27	63	75
LCSD 400-688946/22-A	Lab Control Sample Dup	39	38	48	33	46	65
LCSD 400-688946/24-A	Lab Control Sample Dup	59	43	59	32	71	80
MB 400-688946/1-A	Method Blank	55	41	51	32	58	74

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264437-3	T12-ROX-101624	93	94	84
400-264437-4	P59-ROX-101624	88	96	82
LCS 400-688847/2-A	Lab Control Sample	85	88	89
LCSD 400-688847/3-A	Lab Control Sample Dup	98	91	93
MB 400-688847/1-A	Method Blank	84	88	87

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Surrogate Summary

Client: AECOM
Job ID: 400-264437-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264437-2	TB-ROX-101624-8011-SS	72
400-264437-3	T12-ROX-101624	66
400-264437-4	P59-ROX-101624	67
LCS 400-688591/2-A	Lab Control Sample	87
LCSD 400-688591/3-A	Lab Control Sample Dup	93
MB 400-688591/1-A	Method Blank	90

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264437-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101624-8260-SS
Lab Sample ID: 400-264437-1
Date Collected: 10/16/24 00:00
Matrix: Water
Date Received: 10/17/24 09:43

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689506	10/29/24 18:28	CAR	EET PEN

Client Sample ID: TB-ROX-101624-8011-SS
Lab Sample ID: 400-264437-2
Date Collected: 10/16/24 00:00
Matrix: Water
Date Received: 10/17/24 09:43

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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 16:52	KR	EET PEN

Client Sample ID: T12-ROX-101624
Lab Sample ID: 400-264437-3
Date Collected: 10/16/24 09:45
Matrix: Water
Date Received: 10/17/24 09:43

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	689506	10/29/24 21:06	CAR	EET PEN
Total/NA	Prep	3511			30.9 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 20:42	DS	EET PEN
Total/NA	Prep	3510C			271.8 mL	1 mL	688946	10/23/24 18:19	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 16:21	S1B	EET PEN
Total/NA	Prep	8011			31.1 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 17:13	KR	EET PEN

Client Sample ID: P59-ROX-101624
Lab Sample ID: 400-264437-4
Date Collected: 10/16/24 12:45
Matrix: Water
Date Received: 10/17/24 09:43

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	689506	10/29/24 20:40	CAR	EET PEN
Total/NA	Prep	3511			29.8 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 21:12	DS	EET PEN
Total/NA	Prep	3510C			270.2 mL	1 mL	688946	10/23/24 18:19	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 16:44	S1B	EET PEN
Total/NA	Prep	8011			32.6 mL	35 mL	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 17:34	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688591/1-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 13:22	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264437-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688847/1-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 16:10	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688946/1-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	688946	10/23/24 18:19	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 18:14	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689506/5
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	689506	10/29/24 12:12	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688591/2-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 13:43	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688847/2-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 16:40	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688946/21-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	688946	10/24/24 14:24	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 18:36	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688946/23-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688946	10/24/24 14:30	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 19:21	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689506/1002
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	689506	10/29/24 11:02	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688591/3-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	688591	10/21/24 10:50	KR	EET PEN
Total/NA	Analysis	8011		1			688622	10/21/24 14:04	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688847/3-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	3511			30 mL	2 mL	688847	10/23/24 10:22	RAW	EET PEN
Total/NA	Analysis	8270E		1			688917	10/23/24 17:11	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688946/22-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			250 mL	1 mL	688946	10/24/24 14:24	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 18:59	S1B	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688946/24-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	688946	10/24/24 14:30	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689044	10/24/24 19:44	S1B	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264437-1

GC/MS VOA

Analysis Batch: 689506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-1	TB-ROX-101624-8260-SS	Total/NA	Water	8260D	
400-264437-3	T12-ROX-101624	Total/NA	Water	8260D	
400-264437-4	P59-ROX-101624	Total/NA	Water	8260D	
MB 400-689506/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689506/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 688847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-3	T12-ROX-101624	Total/NA	Water	3511	
400-264437-4	P59-ROX-101624	Total/NA	Water	3511	
MB 400-688847/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-688847/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-688847/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 688917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-3	T12-ROX-101624	Total/NA	Water	8270E	688847
400-264437-4	P59-ROX-101624	Total/NA	Water	8270E	688847
MB 400-688847/1-A	Method Blank	Total/NA	Water	8270E	688847
LCS 400-688847/2-A	Lab Control Sample	Total/NA	Water	8270E	688847
LCSD 400-688847/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	688847

Prep Batch: 688946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-3	T12-ROX-101624	Total/NA	Water	3510C	
400-264437-4	P59-ROX-101624	Total/NA	Water	3510C	
MB 400-688946/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-688946/21-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-688946/23-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-688946/22-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-688946/24-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 689044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-3	T12-ROX-101624	Total/NA	Water	8270E	688946
400-264437-4	P59-ROX-101624	Total/NA	Water	8270E	688946
MB 400-688946/1-A	Method Blank	Total/NA	Water	8270E	688946
LCS 400-688946/21-A	Lab Control Sample	Total/NA	Water	8270E	688946
LCS 400-688946/23-A	Lab Control Sample	Total/NA	Water	8270E	688946
LCSD 400-688946/22-A	Lab Control Sample Dup	Total/NA	Water	8270E	688946
LCSD 400-688946/24-A	Lab Control Sample Dup	Total/NA	Water	8270E	688946

GC Semi VOA

Prep Batch: 688591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-2	TB-ROX-101624-8011-SS	Total/NA	Water	8011	
400-264437-3	T12-ROX-101624	Total/NA	Water	8011	
400-264437-4	P59-ROX-101624	Total/NA	Water	8011	
MB 400-688591/1-A	Method Blank	Total/NA	Water	8011	

GC Semi VOA (Continued)

Prep Batch: 688591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-688591/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688591/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264437-2	TB-ROX-101624-8011-SS	Total/NA	Water	8011	688591
400-264437-3	T12-ROX-101624	Total/NA	Water	8011	688591
400-264437-4	P59-ROX-101624	Total/NA	Water	8011	688591
MB 400-688591/1-A	Method Blank	Total/NA	Water	8011	688591
LCS 400-688591/2-A	Lab Control Sample	Total/NA	Water	8011	688591
LCSD 400-688591/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688591

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

Lab Sample ID: MB 400-689506/5
Matrix: Water
Analysis Batch: 689506

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			10/29/24 12:12	1
Acrolein	ND		20	3.3	ug/L			10/29/24 12:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 12:12	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 12:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 12:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 12:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 12:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 12:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 12:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 12:12	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 12:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 12:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 12:12	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 12:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 12:12	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 12:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 12:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 12:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 12:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 12:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 12:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 12:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 12:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 12:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 12:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 12:12	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 12:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 12:12	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 12:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 12:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 12:12	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 12:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 12:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 12:12	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 12:12	1

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

Lab Sample ID: MB 400-689506/5
Matrix: Water
Analysis Batch: 689506

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			10/29/24 12:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/29/24 12:12	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 12:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 12:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 12:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 12:12	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 12:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 12:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 12:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 12:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 12:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 12:12	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 12:12	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 12:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 12:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 12:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 12:12	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 12:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/29/24 12:12*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/29/24 12:12*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*10/29/24 12:12*	*1*

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	184		ug/L		92	43 - 150
Acrolein	500	612		ug/L		122	38 - 150
Acrylonitrile	500	474		ug/L		95	64 - 142
Benzene	50.0	48.3		ug/L		97	70 - 130
Bromobenzene	50.0	47.3		ug/L		95	70 - 132
Bromochloromethane	50.0	50.2		ug/L		100	70 - 130
Bromodichloromethane	50.0	45.1		ug/L		90	67 - 133
Bromoform	50.0	42.1		ug/L		84	57 - 140
Bromomethane	50.0	35.3		ug/L		71	10 - 150
2-Butanone (MEK)	200	205		ug/L		102	61 - 145
Carbon disulfide	50.0	45.7		ug/L		91	61 - 137
Carbon tetrachloride	50.0	44.7		ug/L		89	61 - 137
Chlorobenzene	50.0	47.8		ug/L		96	70 - 130
Chloroethane	50.0	46.1		ug/L		92	55 - 141
2-Chloroethyl vinyl ether	50.0	30.3		ug/L		61	10 - 150

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

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.4		ug/L		93	69 - 130
1-Chlorohexane	50.0	47.9		ug/L		96	69 - 130
Chloromethane	50.0	54.4		ug/L		109	58 - 137
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	68 - 130
cis-1,3-Dichloropropene	50.0	45.5		ug/L		91	69 - 132
Dibromochloromethane	50.0	45.5		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	43.7		ug/L		87	41 - 146
1,1-Dichloroethane	50.0	46.7		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	43.4		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	47.6		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	45.5		ug/L		91	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	46.5		ug/L		93	70 - 130
Ethylbenzene	50.0	46.9		ug/L		94	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	53.0		ug/L		106	53 - 140
2-Hexanone	200	193		ug/L		96	65 - 137
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 130
Methylene bromide	50.0	45.5		ug/L		91	70 - 130
Methylene Chloride	50.0	51.6		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		87	69 - 138
Methyl tert-butyl ether	50.0	41.6		ug/L		83	66 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/L		93	70 - 130
Naphthalene	50.0	42.1		ug/L		84	47 - 149
n-Butylbenzene	50.0	48.7		ug/L		97	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	46.7		ug/L		93	70 - 130
o-Xylene	50.0	46.3		ug/L		93	70 - 130
p-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	48.9		ug/L		98	65 - 130
sec-Butylbenzene	50.0	48.8		ug/L		98	66 - 130
Styrene	50.0	47.6		ug/L		95	70 - 130
tert-Butylbenzene	50.0	44.1		ug/L		88	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.2		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	41.8		ug/L		84	70 - 131
Tetrachloroethene	50.0	48.5		ug/L		97	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	43.1		ug/L		86	63 - 130
1,2,3-Trichlorobenzene	50.0	47.5		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	49.9		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	44.4		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	50.0	47.9		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	40.9		ug/L		82	70 - 130
1,2,4-Trimethylbenzene	50.0	47.8		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	46.3		ug/L		93	69 - 130
Vinyl acetate	100	94.8		ug/L		95	26 - 150
Vinyl chloride	50.0	51.0		ug/L		102	59 - 136
Xylenes, Total	100	92.8		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-688946/1-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688946

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
Benzenethiol	ND		10	9.9	ug/L		10/23/24 18:19	10/24/24 18:14	1
Benzoic acid	ND		30	24	ug/L		10/23/24 18:19	10/24/24 18:14	1
Benzyl alcohol	ND		10	7.3	ug/L		10/23/24 18:19	10/24/24 18:14	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/23/24 18:19	10/24/24 18:14	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/23/24 18:19	10/24/24 18:14	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Chloroaniline	ND		10	4.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/23/24 18:19	10/24/24 18:14	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/23/24 18:19	10/24/24 18:14	1
2-Chlorophenol	ND		10	4.1	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/23/24 18:19	10/24/24 18:14	1
Dibenzofuran	ND		10	4.0	ug/L		10/23/24 18:19	10/24/24 18:14	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/23/24 18:19	10/24/24 18:14	1
Diethyl phthalate	ND		10	4.4	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
Di-n-butyl phthalate	34.2		10	4.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/23/24 18:19	10/24/24 18:14	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/23/24 18:19	10/24/24 18:14	1
1,4-Dioxane	ND		10	4.3	ug/L		10/23/24 18:19	10/24/24 18:14	1

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

Lab Sample ID: MB 400-688946/1-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688946

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/23/24 18:19	10/24/24 18:14	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/23/24 18:19	10/24/24 18:14	1
Hexachloroethane	ND		10	5.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
Indene	ND		10	3.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
Isophorone	ND		10	5.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
2-Methylphenol	ND		10	3.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
2-Nitroaniline	ND		10	5.0	ug/L		10/23/24 18:19	10/24/24 18:14	1
3-Nitroaniline	ND		10	4.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Nitroaniline	ND		10	4.1	ug/L		10/23/24 18:19	10/24/24 18:14	1
Nitrobenzene	ND		10	4.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
2-Nitrophenol	ND		10	4.6	ug/L		10/23/24 18:19	10/24/24 18:14	1
4-Nitrophenol	ND		10	3.3	ug/L		10/23/24 18:19	10/24/24 18:14	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/23/24 18:19	10/24/24 18:14	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/23/24 18:19	10/24/24 18:14	1
Pentachlorophenol	ND		20	12	ug/L		10/23/24 18:19	10/24/24 18:14	1
Phenol	ND		10	4.2	ug/L		10/23/24 18:19	10/24/24 18:14	1
Pyridine	ND		10	10	ug/L		10/23/24 18:19	10/24/24 18:14	1
Quinoline	ND		10	2.4	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/23/24 18:19	10/24/24 18:14	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/23/24 18:19	10/24/24 18:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*21 - 114*	*10/23/24 18:19*	*10/24/24 18:14*	*1*
2-Fluorophenol	*41*		*10 - 105*	*10/23/24 18:19*	*10/24/24 18:14*	*1*
Nitrobenzene-d5	*51*		*16 - 127*	*10/23/24 18:19*	*10/24/24 18:14*	*1*
Phenol-d5	*32*		*10 - 129*	*10/23/24 18:19*	*10/24/24 18:14*	*1*
Terphenyl-d14	*58*		*13 - 150*	*10/23/24 18:19*	*10/24/24 18:14*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/23/24 18:19*	*10/24/24 18:14*	*1*

Lab Sample ID: LCS 400-688946/21-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	45.1		ug/L		38	10 - 127
Benzoic acid	493	245		ug/L		50	19 - 126
Benzyl alcohol	120	73.3		ug/L		61	17 - 109
Bis(2-chloroethoxy)methane	120	84.2		ug/L		70	24 - 125
Bis(2-chloroethyl)ether	120	70.9		ug/L		59	10 - 121
bis (2-chloroisopropyl) ether	120	92.5		ug/L		77	14 - 123
Bis(2-ethylhexyl) phthalate	120	92.4		ug/L		77	16 - 150
4-Bromophenyl phenyl ether	120	89.1		ug/L		74	17 - 150
Butyl benzyl phthalate	120	92.6		ug/L		77	21 - 150
4-Chloroaniline	120	75.6		ug/L		63	10 - 124
4-Chloro-3-methylphenol	120	96.2		ug/L		80	37 - 131

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

Lab Sample ID: LCS 400-688946/21-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chloronaphthalene	120	83.3		ug/L		69	24 - 132
2-Chlorophenol	120	86.4		ug/L		72	27 - 124
4-Chlorophenyl phenyl ether	120	86.6		ug/L		72	27 - 147
Dibenz[a,h]acridine	59.9	54.3		ug/L		91	40 - 140
Dibenzofuran	120	85.3		ug/L		71	30 - 135
3,3'-Dichlorobenzidine	160	127		ug/L		80	10 - 150
2,4-Dichlorophenol	120	91.8		ug/L		76	33 - 132
Diethyl phthalate	120	94.8		ug/L		79	37 - 145
2,4-Dimethylphenol	120	160	*+	ug/L		134	38 - 132
Dimethyl phthalate	120	91.0		ug/L		76	32 - 137
Di-n-butyl phthalate	120	131		ug/L		109	27 - 150
4,6-Dinitro-ortho-cresol	240	267		ug/L		111	14 - 150
2,4-Dinitrophenol	240	380	*+	ug/L		158	15 - 150
2,4-Dinitrotoluene	120	88.6		ug/L		74	35 - 136
2,6-Dinitrotoluene	120	87.1		ug/L		73	29 - 140
Di-n-octyl phthalate	120	91.9		ug/L		77	26 - 150
1,4-Dioxane	120	33.0		ug/L		28	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	93.6		ug/L		78	23 - 138
Hexachlorobenzene	120	93.2		ug/L		78	10 - 150
Hexachlorocyclopentadiene	120	287	*+	ug/L		239	10 - 124
Hexachloroethane	120	76.2		ug/L		64	10 - 127
Indene	120	92.3		ug/L		77	18 - 150
Isophorone	120	86.5		ug/L		72	28 - 127
2-Methylphenol	120	87.8		ug/L		73	34 - 124
3 & 4 Methylphenol	120	81.8		ug/L		68	32 - 122
2-Nitroaniline	120	91.9		ug/L		77	24 - 139
3-Nitroaniline	120	71.8		ug/L		60	10 - 128
4-Nitroaniline	120	83.0		ug/L		69	28 - 118
Nitrobenzene	120	81.0		ug/L		68	29 - 120
2-Nitrophenol	120	93.1		ug/L		78	25 - 148
4-Nitrophenol	240	165		ug/L		69	12 - 129
N-Nitrosodimethylamine	120	39.3		ug/L		33	10 - 115
N-Nitrosodi-n-propylamine	120	90.1		ug/L		75	24 - 142
N-Nitrosodiphenylamine	119	89.1		ug/L		75	29 - 138
Pentachlorophenol	240	218		ug/L		91	19 - 150
Phenol	120	49.7		ug/L		41	11 - 95
Pyridine	240	19.9	*-	ug/L		8	10 - 82
Quinoline	59.9	36.3		ug/L		61	10 - 141
2,4,5-Trichlorophenol	120	89.1		ug/L		74	30 - 144
2,4,6-Trichlorophenol	120	88.7		ug/L		74	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*70*		*16 - 127*
Phenol-d5	*38*		*10 - 129*
Terphenyl-d14	*61*		*13 - 150*

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

Lab Sample ID: LCS 400-688946/21-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688946

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*80*		*10 - 150*

Lab Sample ID: LCS 400-688946/23-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688946

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	102		ug/L		85	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*21 - 114*
2-Fluorophenol	*35*		*10 - 105*
Nitrobenzene-d5	*50*		*16 - 127*
Phenol-d5	*27*		*10 - 129*
Terphenyl-d14	*63*		*13 - 150*
2,4,6-Tribromophenol	*75*		*10 - 150*

Lab Sample ID: LCSD 400-688946/22-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688946

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline			120	35.0		ug/L		29	10 - 127	25	40
Benzoic acid			493	232		ug/L		47	19 - 126	5	40
Benzyl alcohol			120	65.4		ug/L		54	17 - 109	11	40
Bis(2-chloroethoxy)methane			120	58.8		ug/L		49	24 - 125	36	40
Bis(2-chloroethyl)ether			120	48.6		ug/L		40	10 - 121	37	40
bis (2-chloroisopropyl) ether			120	64.2		ug/L		53	14 - 123	36	40
Bis(2-ethylhexyl) phthalate			120	62.1		ug/L		52	16 - 150	39	40
4-Bromophenyl phenyl ether			120	56.7	*1	ug/L		47	17 - 150	45	40
Butyl benzyl phthalate			120	62.9		ug/L		52	21 - 150	38	40
4-Chloroaniline			120	68.0		ug/L		57	10 - 124	11	40
4-Chloro-3-methylphenol			120	68.1		ug/L		57	37 - 131	34	40
2-Chloronaphthalene			120	55.7		ug/L		46	24 - 132	40	40
2-Chlorophenol			120	61.8		ug/L		51	27 - 124	33	40
4-Chlorophenyl phenyl ether			120	56.6	*1	ug/L		47	27 - 147	42	40
Dibenz[a,h]acridine			59.9	34.8	*1	ug/L		58	40 - 140	44	40
Dibenzofuran			120	57.2		ug/L		48	30 - 135	39	40
3,3'-Dichlorobenzidine			160	101		ug/L		63	10 - 150	23	40
2,4-Dichlorophenol			120	63.4		ug/L		53	33 - 132	37	40
Diethyl phthalate			120	64.2		ug/L		54	37 - 145	38	40
2,4-Dimethylphenol			120	116		ug/L		97	38 - 132	32	40
Dimethyl phthalate			120	61.2		ug/L		51	32 - 137	39	40
Di-n-butyl phthalate			120	89.2		ug/L		74	27 - 150	38	40
4,6-Dinitro-ortho-cresol			240	181		ug/L		75	14 - 150	39	40
2,4-Dinitrophenol			240	254		ug/L		106	15 - 150	40	40
2,4-Dinitrotoluene			120	60.7		ug/L		51	35 - 136	37	40
2,6-Dinitrotoluene			120	59.3		ug/L		49	29 - 140	38	40

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

Lab Sample ID: LCSD 400-688946/22-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688946

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Di-n-octyl phthalate			120	60.8	*1	ug/L		51	26 - 150	41	40
1,4-Dioxane			120	35.2		ug/L		29	10 - 87	6	40
1,2-Diphenylhydrazine (as Azobenzene)			120	66.0		ug/L		55	23 - 138	35	40
Hexachlorobenzene			120	57.2	*1	ug/L		48	10 - 150	48	40
Hexachlorocyclopentadiene			120	198	*+	ug/L		165	10 - 124	36	40
Hexachloroethane			120	51.3		ug/L		43	10 - 127	39	40
Indene			120	61.8		ug/L		52	18 - 150	39	40
Isophorone			120	60.0		ug/L		50	28 - 127	36	40
2-Methylphenol			120	67.9		ug/L		57	34 - 124	26	40
3 & 4 Methylphenol			120	65.7		ug/L		55	32 - 122	22	40
2-Nitroaniline			120	67.1		ug/L		56	24 - 139	31	40
3-Nitroaniline			120	69.0		ug/L		57	10 - 128	4	40
4-Nitroaniline			120	70.4		ug/L		59	28 - 118	17	40
Nitrobenzene			120	54.6		ug/L		45	29 - 120	39	40
2-Nitrophenol			120	62.9		ug/L		52	25 - 148	39	40
4-Nitrophenol			240	138		ug/L		57	12 - 129	18	40
N-Nitrosodimethylamine			120	43.0		ug/L		36	10 - 115	9	40
N-Nitrosodi-n-propylamine			120	64.7		ug/L		54	24 - 142	33	40
N-Nitrosodiphenylamine			119	58.5	*1	ug/L		49	29 - 138	42	40
Pentachlorophenol			240	144	*1	ug/L		60	19 - 150	41	40
Phenol			120	44.8		ug/L		37	11 - 95	11	40
Pyridine			240	21.1	*-	ug/L		9	10 - 82	6	40
Quinoline			59.9	27.8		ug/L		46	10 - 141	26	40
2,4,5-Trichlorophenol			120	61.1		ug/L		51	30 - 144	37	40
2,4,6-Trichlorophenol			120	59.5		ug/L		50	27 - 147	39	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*39*		*21 - 114*
2-Fluorophenol	*38*		*10 - 105*
Nitrobenzene-d5	*48*		*16 - 127*
Phenol-d5	*33*		*10 - 129*
Terphenyl-d14	*46*		*13 - 150*
2,4,6-Tribromophenol	*65*		*10 - 150*

Lab Sample ID: LCSD 400-688946/24-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688946

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	105		ug/L		87	10 - 140	3	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*21 - 114*
2-Fluorophenol	*43*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*32*		*10 - 129*
Terphenyl-d14	*71*		*13 - 150*

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

Lab Sample ID: LCSD 400-688946/24-A
Matrix: Water
Analysis Batch: 689044

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688946

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*80*		*10 - 150*

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

Lab Sample ID: MB 400-688847/1-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688847

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/23/24 10:22	10/23/24 16:10	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/23/24 10:22	10/23/24 16:10	1
Anthracene	ND		0.20	0.073	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/23/24 10:22	10/23/24 16:10	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1
Chrysene	ND		0.20	0.039	ug/L		10/23/24 10:22	10/23/24 16:10	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 16:10	1
Fluoranthene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 16:10	1
Fluorene	ND		0.20	0.087	ug/L		10/23/24 10:22	10/23/24 16:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/23/24 10:22	10/23/24 16:10	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/23/24 10:22	10/23/24 16:10	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/23/24 10:22	10/23/24 16:10	1
Phenanthrene	ND		0.20	0.044	ug/L		10/23/24 10:22	10/23/24 16:10	1
Pyrene	ND		0.20	0.040	ug/L		10/23/24 10:22	10/23/24 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*
Nitrobenzene-d5	*88*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*
Terphenyl-d14	*87*		*50 - 150*	*10/23/24 10:22*	*10/23/24 16:10*	*1*

Lab Sample ID: LCS 400-688847/2-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688847

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.84		ug/L		85	50 - 150
Acenaphthylene	3.34	3.00		ug/L		90	50 - 150
Anthracene	3.34	3.01		ug/L		90	50 - 150
Benzo[a]anthracene	3.34	2.88		ug/L		86	50 - 150
Benzo[a]pyrene	3.34	2.88		ug/L		86	50 - 150
Benzo[b]fluoranthene	3.34	3.01		ug/L		90	50 - 150
Benzo[g,h,i]perylene	3.34	2.90		ug/L		87	50 - 150
Benzo[k]fluoranthene	3.34	2.94		ug/L		88	50 - 150
Chrysene	3.34	3.09		ug/L		93	50 - 150
Dibenz(a,h)anthracene	3.34	2.84		ug/L		85	50 - 150
Fluoranthene	3.34	2.88		ug/L		86	50 - 150

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

Lab Sample ID: LCS 400-688847/2-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688847

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Fluorene	3.34	2.90		ug/L		87	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	3.05		ug/L		91	50 - 150
1-Methylnaphthalene	3.34	2.74		ug/L		82	50 - 150
2-Methylnaphthalene	3.34	2.44		ug/L		73	50 - 150
Phenanthrene	3.34	3.12		ug/L		93	50 - 150
Pyrene	3.34	2.90		ug/L		87	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*85*		*50 - 150*
Nitrobenzene-d5	*88*		*50 - 150*
Terphenyl-d14	*89*		*50 - 150*

Lab Sample ID: LCSD 400-688847/3-A
Matrix: Water
Analysis Batch: 688917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688847

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.34	2.36		ug/L		71	50 - 150	19	40
Acenaphthylene	3.34	2.64		ug/L		79	50 - 150	13	40
Anthracene	3.34	2.50		ug/L		75	50 - 150	18	40
Benzo[a]anthracene	3.34	2.65		ug/L		79	50 - 150	8	40
Benzo[a]pyrene	3.34	2.56		ug/L		77	50 - 150	12	40
Benzo[b]fluoranthene	3.34	2.75		ug/L		82	50 - 150	9	40
Benzo[g,h,i]perylene	3.34	2.64		ug/L		79	50 - 150	9	40
Benzo[k]fluoranthene	3.34	2.68		ug/L		80	50 - 150	9	40
Chrysene	3.34	2.62		ug/L		79	50 - 150	16	40
Dibenz(a,h)anthracene	3.34	2.64		ug/L		79	50 - 150	7	40
Fluoranthene	3.34	2.45		ug/L		73	50 - 150	16	40
Fluorene	3.34	2.47		ug/L		74	50 - 150	16	40
Indeno[1,2,3-cd]pyrene	3.34	2.79		ug/L		84	50 - 150	9	40
1-Methylnaphthalene	3.34	2.23		ug/L		67	50 - 150	21	40
2-Methylnaphthalene	3.34	1.96		ug/L		59	50 - 150	22	40
Phenanthrene	3.34	2.57		ug/L		77	50 - 150	19	40
Pyrene	3.34	2.46		ug/L		74	50 - 150	16	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*50 - 150*
Nitrobenzene-d5	*91*		*50 - 150*
Terphenyl-d14	*93*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688591/1-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688591

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		10/21/24 10:50	10/21/24 13:22	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-688591/1-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/21/24 10:50	10/21/24 13:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*10/21/24 10:50*	*10/21/24 13:22*	*1*

Lab Sample ID: LCS 400-688591/2-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688591

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0846		ug/L		84	60 - 140		
1,2-Dibromoethane			0.100	0.0784		ug/L		78	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Lab Sample ID: LCSD 400-688591/3-A
Matrix: Water
Analysis Batch: 688622

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688591

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0903		ug/L		90	60 - 140	6	30
1,2-Dibromoethane			0.100	0.0879		ug/L		88	60 - 140	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/16/2024
PO #	**GSAP Project ID**	PAGE: 1 of 1
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions
PHONE NO.: 314-802-1207
E-MAIL: melissa.remiger@aecom.com
AECOM Other ID: Roxana 4Q24 Groundwater
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell
SAMPLER NAME(S) (Print): Sahoi McLean, Tony Jones
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

SPLIT REPORT

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** Send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

REQUESTED ANALYSIS
60721927 – 3.4.2

400-264437 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-101624-8260-SS	10/16/2024	0000	Water	2					2	X				SPLIT REPORT
	TB-ROX-101624-8011-SS	10/16/2024	0000	Water	2					2		X			
	T12-ROX-101624	10/16/2024	0945	Water	6			4		10	X	X	X	X	SPLIT REPORT
	P59-ROX-101624	10/16/2024	1245	Water	6			4		10	X	X	X	X	SPLIT REPORT

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Sahoi McLean	FEDEX: 725205471872, 725205471861	10/16/2024	1600
	BP	10/17/24	943

Version: 19Sept24

CUSTODY SEALS: 1555962, 1599963, 1599965, 1599964

0.8 °C IR8

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10/30/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264437-1

Login Number: 264437
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	0.8°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
Job ID: 400-264437-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264593-1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/28/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			
Holding Times	Analyses were performed within holding time.	X			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.
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.			X	
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-689599/1002	VOCs	Acetone	**193**	NA	43-150
LCS 400-689599/1002	VOCs	2-Butanone (MEK)	**191**	NA	61-145
LCS 400-689098/2-A	SVOCs	Benzoic acid	**16**	NA	19-126
LCS 400-689098/2-A	SVOCs	Hexachlorocyclopentadiene	**192**	NA	10-124
LCS 400-689098/2-A	SVOCs	Pyridine	**4**	NA	10-82

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Trip blanks are quality control samples that do not require qualification.

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Method 8270E (SVOCs) Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270. Pyridine and benzoic acid in samples P93C-ROX-101724, P93A-ROX-101724, and P93B-ROX-101724 were qualified as estimated (UJ).					
Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.		X		
Method 8260D (VOCs) Analytes were detected in samples that were diluted with the exception of non-detect VOCs in sample P93B-ROX-101724 were diluted to bring target analytes into calibration range of the instrument. VOCs were non-detect at a dilution factor of 1000X, with raised reporting limits between 1000 and 25000 µg/L. VOCs in sample P93B-ROX-101724 were qualified as estimated non-detect (UJ) due to sample dilution and historical detections.					
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method	X			Analytical data reported as non-detect and associated with ICV/CCV %D recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.				
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 11/4/2024 8:13:36 AM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264593-1

Reviewed 11/28/2024
AN

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
400-264593-1

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 10/18/2024 9:36 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 2.3°C and 3.3°C.

GC/MS VOA
Method 8260D: The laboratory control sample (LCS) for analytical batch 400-689599 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 one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101724-8260-SS (400-264593-1), P93C-ROX-101724 (400-264593-3), P93A-ROX-101724 (400-264593-4) and P93B-ROX-101724 (400-264593-5). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93C-ROX-101724 (400-264593-3), P93A-ROX-101724 (400-264593-4) and P93B-ROX-101724 (400-264593-5). Elevated reporting limits (RLs) are provided.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689599 recovered above the upper control limit for 2-Butanone (MEK), Acetone and Hexachlorobutadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC/MS Semi VOA
Method 8270E: The initial calibration verification (ICV) analyzed in batch 400-687190 was outside method criteria for the following analyte(s): 2,4-Dimethylphenol and Hexachlorocyclopentadiene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E: The laboratory control sample (LCS) for preparation batch 400-689098 and analytical batch 400-689608 recovered outside control limits for the following analyte(s): Pyridine, Hexachlorocyclopentadiene and Benzoic acid. Pyridine, Hexachlorocyclopentadiene and Benzoic acid have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689608 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Chloro-3-methylphenol, 4,6-Dinitro-2-methylphenol, 2-Nitrophenol, Hexachloroethane and Phenol. 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 400-689608 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264593-1	TB-ROX-101724-8260-SS	Water	10/17/24 00:00	10/18/24 09:36
400-264593-2	TB-ROX-101724-8011-SS	Water	10/17/24 00:00	10/18/24 09:36
400-264593-3	P93C-ROX-101724	Water	10/17/24 09:25	10/18/24 09:36
400-264593-4	P93A-ROX-101724	Water	10/17/24 10:25	10/18/24 09:36
400-264593-5	P93B-ROX-101724	Water	10/17/24 11:50	10/18/24 09:36

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: TB-ROX-101724-8260-SS — Lab Sample ID: 400-264593-1

No Detections.

Client Sample ID: TB-ROX-101724-8011-SS — Lab Sample ID: 400-264593-2

No Detections.

Client Sample ID: P93C-ROX-101724 — Lab Sample ID: 400-264593-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2900		20	4.8	ug/L	20		8260D	Total/NA
Phenol	11		9.2	3.9	ug/L	1		8270E	Total/NA
Fluoranthene	0.059	J	0.20	0.032	ug/L	1		8270E	Total/NA
Phenanthrene	0.093	J	0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.041	J	0.20	0.040	ug/L	1		8270E	Total/NA

Client Sample ID: P93A-ROX-101724 — Lab Sample ID: 400-264593-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	190000		1000	240	ug/L	1000		8260D	Total/NA
Phenol	130		9.2	3.9	ug/L	1		8270E	Total/NA
Acenaphthene	0.11	J	0.20	0.084	ug/L	1		8270E	Total/NA
Fluorene	0.15	J	0.20	0.086	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	5.0		0.20	0.066	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	0.54		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.069	J	0.20	0.044	ug/L	1		8270E	Total/NA

Client Sample ID: P93B-ROX-101724 — Lab Sample ID: 400-264593-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	720000		2500	600	ug/L	2500		8260D	Total/NA
Phenol	55		9.3	3.9	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	0.24		0.20	0.065	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	0.22		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.080	J	0.20	0.043	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: TB-ROX-101724-8260-SS
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-1
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			10/30/24 10:53	1
Acrolein	ND		20	3.3	ug/L			10/30/24 10:53	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 10:53	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 10:53	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 10:53	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 10:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 10:53	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 10:53	1
2-Butanone (MEK)	ND	*+	25	2.6	ug/L			10/30/24 10:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 10:53	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 10:53	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 10:53	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 10:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 10:53	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 10:53	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 10:53	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 10:53	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 10:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 10:53	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 10:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 10:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 10:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 10:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 10:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 10:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 10:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 10:53	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 10:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 10:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 10:53	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 10:53	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 10:53	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 10:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 10:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 10:53	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 10:53	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 10:53	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 10:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 10:53	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 10:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 10:53	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 10:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 10:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 10:53	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: TB-ROX-101724-8260-SS
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-1
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			10/30/24 10:53	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 10:53	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 10:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 10:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 10:53	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 10:53	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 10:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 10:53	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 10:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 10:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 10:53	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 10:53	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 10:53	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 10:53	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 10:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 10:53	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 10:53	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 10:53	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 10:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 10:53	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 10:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*10/30/24 10:53*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*10/30/24 10:53*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 10:53*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: TB-ROX-101724-8011-SS
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-2
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		10/23/24 10:16	10/23/24 16:10	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/23/24 10:16	10/23/24 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*58*		*51 - 149*	*10/23/24 10:16*	*10/23/24 16:10*	*1*

Client Sample ID: P93C-ROX-101724
Date Collected: 10/17/24 09:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	500	200	ug/L			10/30/24 12:43	20
Acrolein	ND		400	66	ug/L			10/30/24 12:43	20
Acrylonitrile	ND		200	56	ug/L			10/30/24 12:43	20
Benzene	**2900**		20	4.8	ug/L			10/30/24 12:43	20
Bromobenzene	ND		20	11	ug/L			10/30/24 12:43	20
Bromochloromethane	ND		20	10	ug/L			10/30/24 12:43	20
Bromodichloromethane	ND		20	10	ug/L			10/30/24 12:43	20
Bromoform	ND		100	5.0	ug/L			10/30/24 12:43	20
Bromomethane	ND		20	20	ug/L			10/30/24 12:43	20
2-Butanone (MEK)	ND	*+	500	52	ug/L			10/30/24 12:43	20
Carbon disulfide	ND		20	10	ug/L			10/30/24 12:43	20
Carbon tetrachloride	ND		20	3.8	ug/L			10/30/24 12:43	20
Chlorobenzene	ND		20	8.4	ug/L			10/30/24 12:43	20
Chloroethane	ND		20	15	ug/L			10/30/24 12:43	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			10/30/24 12:43	20
Chloroform	ND		20	18	ug/L			10/30/24 12:43	20
1-Chlorohexane	ND		20	6.4	ug/L			10/30/24 12:43	20
Chloromethane	ND		20	8.0	ug/L			10/30/24 12:43	20
cis-1,2-Dichloroethene	ND		20	4.0	ug/L			10/30/24 12:43	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			10/30/24 12:43	20
Dibromochloromethane	ND		20	4.8	ug/L			10/30/24 12:43	20
1,2-Dichlorobenzene	ND		20	10	ug/L			10/30/24 12:43	20
1,3-Dichlorobenzene	ND		20	11	ug/L			10/30/24 12:43	20
1,4-Dichlorobenzene	ND		20	13	ug/L			10/30/24 12:43	20
Dichlorodifluoromethane	ND		20	17	ug/L			10/30/24 12:43	20
1,1-Dichloroethane	ND		20	10	ug/L			10/30/24 12:43	20
1,2-Dichloroethane	ND		20	11	ug/L			10/30/24 12:43	20
1,1-Dichloroethene	ND		20	10	ug/L			10/30/24 12:43	20
1,2-Dichloropropane	ND		20	10	ug/L			10/30/24 12:43	20
1,3-Dichloropropane	ND		20	10	ug/L			10/30/24 12:43	20
2,2-Dichloropropane	ND		20	10	ug/L			10/30/24 12:43	20
1,1-Dichloropropene	ND		20	1.8	ug/L			10/30/24 12:43	20
Ethylbenzene	ND		20	10	ug/L			10/30/24 12:43	20
Ethyl methacrylate	ND		20	12	ug/L			10/30/24 12:43	20
Hexachlorobutadiene	ND		100	18	ug/L			10/30/24 12:43	20
2-Hexanone	ND		500	85	ug/L			10/30/24 12:43	20
Isopropylbenzene	ND		20	11	ug/L			10/30/24 12:43	20
Methylene bromide	ND		100	4.4	ug/L			10/30/24 12:43	20
Methylene Chloride	ND		100	60	ug/L			10/30/24 12:43	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			10/30/24 12:43	20
Methyl tert-butyl ether	ND		20	4.4	ug/L			10/30/24 12:43	20
m-Xylene & p-Xylene	ND		100	60	ug/L			10/30/24 12:43	20
Naphthalene	ND		100	60	ug/L			10/30/24 12:43	20
n-Butylbenzene	ND		20	15	ug/L			10/30/24 12:43	20
N-Propylbenzene	ND		20	14	ug/L			10/30/24 12:43	20
o-Chlorotoluene	ND		20	11	ug/L			10/30/24 12:43	20
o-Xylene	ND		100	60	ug/L			10/30/24 12:43	20
p-Chlorotoluene	ND		20	11	ug/L			10/30/24 12:43	20
p-Isopropyltoluene	ND		20	14	ug/L			10/30/24 12:43	20

Client Sample ID: P93C-ROX-101724
Date Collected: 10/17/24 09:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-3
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		20	14	ug/L			10/30/24 12:43	20
Styrene	ND		20	20	ug/L			10/30/24 12:43	20
tert-Butylbenzene	ND		20	13	ug/L			10/30/24 12:43	20
1,1,1,2-Tetrachloroethane	ND		20	7.6	ug/L			10/30/24 12:43	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			10/30/24 12:43	20
Tetrachloroethene	ND		20	6.6	ug/L			10/30/24 12:43	20
Toluene	ND		20	18	ug/L			10/30/24 12:43	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			10/30/24 12:43	20
trans-1,3-Dichloropropene	ND		100	4.0	ug/L			10/30/24 12:43	20
1,2,3-Trichlorobenzene	ND		20	18	ug/L			10/30/24 12:43	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			10/30/24 12:43	20
1,1,1-Trichloroethane	ND		20	3.6	ug/L			10/30/24 12:43	20
1,1,2-Trichloroethane	ND		100	4.2	ug/L			10/30/24 12:43	20
Trichloroethene	ND		20	3.0	ug/L			10/30/24 12:43	20
Trichlorofluoromethane	ND		20	5.0	ug/L			10/30/24 12:43	20
1,2,3-Trichloropropane	ND		100	17	ug/L			10/30/24 12:43	20
1,2,4-Trimethylbenzene	ND		20	16	ug/L			10/30/24 12:43	20
1,3,5-Trimethylbenzene	ND		20	11	ug/L			10/30/24 12:43	20
Vinyl acetate	ND		500	19	ug/L			10/30/24 12:43	20
Vinyl chloride	ND		20	10	ug/L			10/30/24 12:43	20
Xylenes, Total	ND		200	120	ug/L			10/30/24 12:43	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*10/30/24 12:43*	*20*
Dibromofluoromethane	*110*		*75 - 126*		*10/30/24 12:43*	*20*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/30/24 12:43*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.2	8.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
Benzenethiol	ND		9.2	9.1	ug/L		10/24/24 20:26	10/30/24 13:49	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 13:49	1
Benzyl alcohol	ND		9.2	6.7	ug/L		10/24/24 20:26	10/30/24 13:49	1
Bis(2-chloroethoxy)methane	ND		9.2	4.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
Bis(2-chloroethyl)ether	ND		9.2	3.6	ug/L		10/24/24 20:26	10/30/24 13:49	1
bis (2-chloroisopropyl) ether	ND		9.2	1.7	ug/L		10/24/24 20:26	10/30/24 13:49	1
Bis(2-ethylhexyl) phthalate	ND		9.2	8.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Bromophenyl phenyl ether	ND		9.2	7.9	ug/L		10/24/24 20:26	10/30/24 13:49	1
Butyl benzyl phthalate	ND		9.2	5.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Chloroaniline	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Chloro-3-methylphenol	ND		9.2	4.9	ug/L		10/24/24 20:26	10/30/24 13:49	1
2-Chloronaphthalene	ND		9.2	3.5	ug/L		10/24/24 20:26	10/30/24 13:49	1
2-Chlorophenol	ND		9.2	3.8	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Chlorophenyl phenyl ether	ND		9.2	3.4	ug/L		10/24/24 20:26	10/30/24 13:49	1
Dibenz[a,h]acridine	ND		9.2	2.6	ug/L		10/24/24 20:26	10/30/24 13:49	1
Dibenzofuran	ND		9.2	3.7	ug/L		10/24/24 20:26	10/30/24 13:49	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4-Dichlorophenol	ND		9.2	4.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
Diethyl phthalate	ND		9.2	4.1	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4-Dimethylphenol	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 13:49	1

Client Sample ID: P93C-ROX-101724
Date Collected: 10/17/24 09:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.2	3.9	ug/L		10/24/24 20:26	10/30/24 13:49	1
Di-n-butyl phthalate	ND		9.2	4.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
4,6-Dinitro-ortho-cresol	ND		9.2	9.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4-Dinitrophenol	ND		28	4.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4-Dinitrotoluene	ND		9.2	4.7	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,6-Dinitrotoluene	ND		9.2	3.6	ug/L		10/24/24 20:26	10/30/24 13:49	1
Di-n-octyl phthalate	ND		9.2	5.5	ug/L		10/24/24 20:26	10/30/24 13:49	1
1,4-Dioxane	ND		9.2	4.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.2	3.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
Hexachlorobenzene	ND		9.2	8.9	ug/L		10/24/24 20:26	10/30/24 13:49	1
Hexachlorocyclopentadiene	ND	*+	18	4.1	ug/L		10/24/24 20:26	10/30/24 13:49	1
Hexachloroethane	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 13:49	1
Indene	ND		9.2	3.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
Isophorone	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 13:49	1
2-Methylphenol	ND		9.2	2.9	ug/L		10/24/24 20:26	10/30/24 13:49	1
3 & 4 Methylphenol	ND		18	4.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
2-Nitroaniline	ND		9.2	4.6	ug/L		10/24/24 20:26	10/30/24 13:49	1
3-Nitroaniline	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Nitroaniline	ND		9.2	3.8	ug/L		10/24/24 20:26	10/30/24 13:49	1
Nitrobenzene	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
2-Nitrophenol	ND		9.2	4.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
4-Nitrophenol	ND		9.2	3.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
N-Nitrosodimethylamine	ND		9.2	2.0	ug/L		10/24/24 20:26	10/30/24 13:49	1
N-Nitrosodi-n-propylamine	ND		9.2	2.3	ug/L		10/24/24 20:26	10/30/24 13:49	1
N-Nitrosodiphenylamine	ND		9.2	3.4	ug/L		10/24/24 20:26	10/30/24 13:49	1
Pentachlorophenol	ND		18	11	ug/L		10/24/24 20:26	10/30/24 13:49	1
Phenol	**11**		9.2	3.9	ug/L		10/24/24 20:26	10/31/24 19:01	1
Pyridine	ND	*- UJ	9.2	9.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
Quinoline	ND		9.2	2.2	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4,5-Trichlorophenol	ND		9.2	3.7	ug/L		10/24/24 20:26	10/30/24 13:49	1
2,4,6-Trichlorophenol	ND		9.2	3.2	ug/L		10/24/24 20:26	10/30/24 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*21 - 114*	*10/24/24 20:26*	*10/30/24 13:49*	*1*
2-Fluorophenol	*26*		*10 - 105*	*10/24/24 20:26*	*10/30/24 13:49*	*1*
Nitrobenzene-d5	*46*		*16 - 127*	*10/24/24 20:26*	*10/30/24 13:49*	*1*
Phenol-d5	*18*		*10 - 129*	*10/24/24 20:26*	*10/30/24 13:49*	*1*
Terphenyl-d14	*66*		*13 - 150*	*10/24/24 20:26*	*10/30/24 13:49*	*1*
2,4,6-Tribromophenol	*75*		*10 - 150*	*10/24/24 20:26*	*10/30/24 13:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 12:45	10/24/24 22:34	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 12:45	10/24/24 22:34	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 12:45	10/24/24 22:34	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/24/24 22:34	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 12:45	10/24/24 22:34	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 12:45	10/24/24 22:34	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/24/24 22:34	1

Client Sample ID: P93C-ROX-101724
Date Collected: 10/17/24 09:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/24/24 22:34	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/24/24 22:34	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/24/24 22:34	1
Fluoranthene	**0.059**	**J**	0.20	0.032	ug/L		10/24/24 12:45	10/24/24 22:34	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 12:45	10/24/24 22:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/24/24 22:34	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/24/24 12:45	10/24/24 22:34	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/24/24 12:45	10/24/24 22:34	1
Phenanthrene	**0.093**	**J**	0.20	0.044	ug/L		10/24/24 12:45	10/24/24 22:34	1
Pyrene	**0.041**	**J**	0.20	0.040	ug/L		10/24/24 12:45	10/24/24 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*50 - 150*	*10/24/24 12:45*	*10/24/24 22:34*	*1*
Nitrobenzene-d5	*92*		*50 - 150*	*10/24/24 12:45*	*10/24/24 22:34*	*1*
Terphenyl-d14	*83*		*50 - 150*	*10/24/24 12:45*	*10/24/24 22:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/23/24 10:16	10/23/24 16:31	1
1,2-Dibromoethane	ND		0.022	0.016	ug/L		10/23/24 10:16	10/23/24 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*57*		*51 - 149*	*10/23/24 10:16*	*10/23/24 16:31*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: P93A-ROX-101724
Date Collected: 10/17/24 10:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+	25000	10000	ug/L			10/30/24 13:05	1000
Acrolein	ND		20000	3300	ug/L			10/30/24 13:05	1000
Acrylonitrile	ND		10000	2800	ug/L			10/30/24 13:05	1000
Benzene	**190000**		1000	240	ug/L			10/30/24 13:05	1000
Bromobenzene	ND		1000	540	ug/L			10/30/24 13:05	1000
Bromochloromethane	ND		1000	520	ug/L			10/30/24 13:05	1000
Bromodichloromethane	ND		1000	500	ug/L			10/30/24 13:05	1000
Bromoform	ND		5000	250	ug/L			10/30/24 13:05	1000
Bromomethane	ND		1000	980	ug/L			10/30/24 13:05	1000
2-Butanone (MEK)	ND	*+	25000	2600	ug/L			10/30/24 13:05	1000
Carbon disulfide	ND		1000	500	ug/L			10/30/24 13:05	1000
Carbon tetrachloride	ND		1000	190	ug/L			10/30/24 13:05	1000
Chlorobenzene	ND		1000	420	ug/L			10/30/24 13:05	1000
Chloroethane	ND		1000	760	ug/L			10/30/24 13:05	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			10/30/24 13:05	1000
Chloroform	ND		1000	900	ug/L			10/30/24 13:05	1000
1-Chlorohexane	ND		1000	320	ug/L			10/30/24 13:05	1000
Chloromethane	ND		1000	400	ug/L			10/30/24 13:05	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			10/30/24 13:05	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			10/30/24 13:05	1000
Dibromochloromethane	ND		1000	240	ug/L			10/30/24 13:05	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			10/30/24 13:05	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			10/30/24 13:05	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			10/30/24 13:05	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			10/30/24 13:05	1000
1,1-Dichloroethane	ND		1000	500	ug/L			10/30/24 13:05	1000
1,2-Dichloroethane	ND		1000	550	ug/L			10/30/24 13:05	1000
1,1-Dichloroethene	ND		1000	500	ug/L			10/30/24 13:05	1000
1,2-Dichloropropane	ND		1000	500	ug/L			10/30/24 13:05	1000
1,3-Dichloropropane	ND		1000	500	ug/L			10/30/24 13:05	1000
2,2-Dichloropropane	ND		1000	500	ug/L			10/30/24 13:05	1000
1,1-Dichloropropene	ND		1000	90	ug/L			10/30/24 13:05	1000
Ethylbenzene	ND		1000	500	ug/L			10/30/24 13:05	1000
Ethyl methacrylate	ND		1000	600	ug/L			10/30/24 13:05	1000
Hexachlorobutadiene	ND		5000	900	ug/L			10/30/24 13:05	1000
2-Hexanone	ND		25000	4300	ug/L			10/30/24 13:05	1000
Isopropylbenzene	ND		1000	530	ug/L			10/30/24 13:05	1000
Methylene bromide	ND		5000	220	ug/L			10/30/24 13:05	1000
Methylene Chloride	ND		5000	3000	ug/L			10/30/24 13:05	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			10/30/24 13:05	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			10/30/24 13:05	1000
m-Xylene & p-Xylene	ND		5000	3000	ug/L			10/30/24 13:05	1000
Naphthalene	ND		5000	3000	ug/L			10/30/24 13:05	1000
n-Butylbenzene	ND		1000	760	ug/L			10/30/24 13:05	1000
N-Propylbenzene	ND		1000	690	ug/L			10/30/24 13:05	1000
o-Chlorotoluene	ND		1000	570	ug/L			10/30/24 13:05	1000
o-Xylene	ND		5000	3000	ug/L			10/30/24 13:05	1000
p-Chlorotoluene	ND		1000	560	ug/L			10/30/24 13:05	1000
p-Isopropyltoluene	ND		1000	710	ug/L			10/30/24 13:05	1000

Client Sample ID: P93A-ROX-101724
Date Collected: 10/17/24 10:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-4
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		1000	700	ug/L			10/30/24 13:05	1000
Styrene	ND		1000	1000	ug/L			10/30/24 13:05	1000
tert-Butylbenzene	ND		1000	630	ug/L			10/30/24 13:05	1000
1,1,1,2-Tetrachloroethane	ND		1000	380	ug/L			10/30/24 13:05	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			10/30/24 13:05	1000
Tetrachloroethene	ND		1000	330	ug/L			10/30/24 13:05	1000
Toluene	ND		1000	900	ug/L			10/30/24 13:05	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			10/30/24 13:05	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			10/30/24 13:05	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			10/30/24 13:05	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			10/30/24 13:05	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			10/30/24 13:05	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			10/30/24 13:05	1000
Trichloroethene	ND		1000	150	ug/L			10/30/24 13:05	1000
Trichlorofluoromethane	ND		1000	250	ug/L			10/30/24 13:05	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			10/30/24 13:05	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			10/30/24 13:05	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			10/30/24 13:05	1000
Vinyl acetate	ND		25000	930	ug/L			10/30/24 13:05	1000
Vinyl chloride	ND		1000	500	ug/L			10/30/24 13:05	1000
Xylenes, Total	ND		10000	6000	ug/L			10/30/24 13:05	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*10/30/24 13:05*	*1000*
Dibromofluoromethane	*110*		*75 - 126*		*10/30/24 13:05*	*1000*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 13:05*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.2	8.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
Benzenethiol	ND		9.2	9.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 14:12	1
Benzyl alcohol	ND		9.2	6.7	ug/L		10/24/24 20:26	10/30/24 14:12	1
Bis(2-chloroethoxy)methane	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
Bis(2-chloroethyl)ether	ND		9.2	3.6	ug/L		10/24/24 20:26	10/30/24 14:12	1
bis (2-chloroisopropyl) ether	ND		9.2	1.7	ug/L		10/24/24 20:26	10/30/24 14:12	1
Bis(2-ethylhexyl) phthalate	ND		9.2	8.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Bromophenyl phenyl ether	ND		9.2	8.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
Butyl benzyl phthalate	ND		9.2	5.4	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Chloroaniline	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Chloro-3-methylphenol	ND		9.2	4.9	ug/L		10/24/24 20:26	10/30/24 14:12	1
2-Chloronaphthalene	ND		9.2	3.5	ug/L		10/24/24 20:26	10/30/24 14:12	1
2-Chlorophenol	ND		9.2	3.8	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Chlorophenyl phenyl ether	ND		9.2	3.4	ug/L		10/24/24 20:26	10/30/24 14:12	1
Dibenz[a,h]acridine	ND		9.2	2.6	ug/L		10/24/24 20:26	10/30/24 14:12	1
Dibenzofuran	ND		9.2	3.7	ug/L		10/24/24 20:26	10/30/24 14:12	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4-Dichlorophenol	ND		9.2	4.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
Diethyl phthalate	ND		9.2	4.1	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4-Dimethylphenol	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 14:12	1

Client Sample ID: P93A-ROX-101724
Date Collected: 10/17/24 10:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.2	3.9	ug/L		10/24/24 20:26	10/30/24 14:12	1
Di-n-butyl phthalate	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
4,6-Dinitro-ortho-cresol	ND		9.2	9.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4-Dinitrotoluene	ND		9.2	4.7	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,6-Dinitrotoluene	ND		9.2	3.6	ug/L		10/24/24 20:26	10/30/24 14:12	1
Di-n-octyl phthalate	ND		9.2	5.5	ug/L		10/24/24 20:26	10/30/24 14:12	1
1,4-Dioxane	ND		9.2	4.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.2	3.1	ug/L		10/24/24 20:26	10/30/24 14:12	1
Hexachlorobenzene	ND		9.2	9.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
Hexachlorocyclopentadiene	ND	*+	18	4.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
Hexachloroethane	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 14:12	1
Indene	ND		9.2	3.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
Isophorone	ND		9.2	4.8	ug/L		10/24/24 20:26	10/30/24 14:12	1
2-Methylphenol	ND		9.2	3.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
3 & 4 Methylphenol	ND		18	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
2-Nitroaniline	ND		9.2	4.6	ug/L		10/24/24 20:26	10/30/24 14:12	1
3-Nitroaniline	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Nitroaniline	ND		9.2	3.8	ug/L		10/24/24 20:26	10/30/24 14:12	1
Nitrobenzene	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
2-Nitrophenol	ND		9.2	4.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
4-Nitrophenol	ND		9.2	3.1	ug/L		10/24/24 20:26	10/30/24 14:12	1
N-Nitrosodimethylamine	ND		9.2	2.0	ug/L		10/24/24 20:26	10/30/24 14:12	1
N-Nitrosodi-n-propylamine	ND		9.2	2.3	ug/L		10/24/24 20:26	10/30/24 14:12	1
N-Nitrosodiphenylamine	ND		9.2	3.4	ug/L		10/24/24 20:26	10/30/24 14:12	1
Pentachlorophenol	ND		18	11	ug/L		10/24/24 20:26	10/30/24 14:12	1
Phenol	**130**		9.2	3.9	ug/L		10/24/24 20:26	10/31/24 19:26	1
Pyridine	ND	*- UJ	9.2	9.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
Quinoline	ND		9.2	2.2	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4,5-Trichlorophenol	ND		9.2	3.7	ug/L		10/24/24 20:26	10/30/24 14:12	1
2,4,6-Trichlorophenol	ND		9.2	3.2	ug/L		10/24/24 20:26	10/30/24 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*21 - 114*	*10/24/24 20:26*	*10/30/24 14:12*	*1*
2-Fluorophenol	*27*		*10 - 105*	*10/24/24 20:26*	*10/30/24 14:12*	*1*
Nitrobenzene-d5	*54*		*16 - 127*	*10/24/24 20:26*	*10/30/24 14:12*	*1*
Phenol-d5	*20*		*10 - 129*	*10/24/24 20:26*	*10/30/24 14:12*	*1*
Terphenyl-d14	*65*		*13 - 150*	*10/24/24 20:26*	*10/30/24 14:12*	*1*
2,4,6-Tribromophenol	*76*		*10 - 150*	*10/24/24 20:26*	*10/30/24 14:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.11**	**J**	0.20	0.084	ug/L		10/24/24 12:45	10/24/24 23:04	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 12:45	10/24/24 23:04	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 12:45	10/24/24 23:04	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/24/24 23:04	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 12:45	10/24/24 23:04	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 12:45	10/24/24 23:04	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 12:45	10/24/24 23:04	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: P93A-ROX-101724
Date Collected: 10/17/24 10:25
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/24/24 23:04	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/24/24 23:04	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/24/24 23:04	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/24/24 23:04	1
Fluorene	**0.15**	**J**	0.20	0.086	ug/L		10/24/24 12:45	10/24/24 23:04	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/24/24 23:04	1
1-Methylnaphthalene	**5.0**		0.20	0.066	ug/L		10/24/24 12:45	10/24/24 23:04	1
2-Methylnaphthalene	**0.54**		0.20	0.076	ug/L		10/24/24 12:45	10/24/24 23:04	1
Phenanthrene	**0.069**	**J**	0.20	0.044	ug/L		10/24/24 12:45	10/24/24 23:04	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/24/24 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:04*	*1*
Nitrobenzene-d5	*96*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:04*	*1*
Terphenyl-d14	*90*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:04*	*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		0.034	0.019	ug/L		10/23/24 10:16	10/23/24 16:52	1
1,2-Dibromoethane	ND		0.023	0.017	ug/L		10/23/24 10:16	10/23/24 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*58*		*51 - 149*	*10/23/24 10:16*	*10/23/24 16:52*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Client Sample ID: P93B-ROX-101724
Date Collected: 10/17/24 11:50
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	*+ UJ	25000	10000	ug/L			10/30/24 13:27	1000
Acrolein	ND	UJ	20000	3300	ug/L			10/30/24 13:27	1000
Acrylonitrile	ND	UJ	10000	2800	ug/L			10/30/24 13:27	1000
Bromobenzene	ND	UJ	1000	540	ug/L			10/30/24 13:27	1000
Bromochloromethane	ND	UJ	1000	520	ug/L			10/30/24 13:27	1000
Bromodichloromethane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
Bromoform	ND	UJ	5000	250	ug/L			10/30/24 13:27	1000
Bromomethane	ND	UJ	1000	980	ug/L			10/30/24 13:27	1000
2-Butanone (MEK)	ND	*+ UJ	25000	2600	ug/L			10/30/24 13:27	1000
Carbon disulfide	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
Carbon tetrachloride	ND	UJ	1000	190	ug/L			10/30/24 13:27	1000
Chlorobenzene	ND	UJ	1000	420	ug/L			10/30/24 13:27	1000
Chloroethane	ND	UJ	1000	760	ug/L			10/30/24 13:27	1000
2-Chloroethyl vinyl ether	ND	UJ	5000	2000	ug/L			10/30/24 13:27	1000
Chloroform	ND	UJ	1000	900	ug/L			10/30/24 13:27	1000
1-Chlorohexane	ND	UJ	1000	320	ug/L			10/30/24 13:27	1000
Chloromethane	ND	UJ	1000	400	ug/L			10/30/24 13:27	1000
cis-1,2-Dichloroethene	ND	UJ	1000	200	ug/L			10/30/24 13:27	1000
cis-1,3-Dichloropropene	ND	UJ	5000	500	ug/L			10/30/24 13:27	1000
Dibromochloromethane	ND	UJ	1000	240	ug/L			10/30/24 13:27	1000
1,2-Dichlorobenzene	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
1,3-Dichlorobenzene	ND	UJ	1000	540	ug/L			10/30/24 13:27	1000
1,4-Dichlorobenzene	ND	UJ	1000	640	ug/L			10/30/24 13:27	1000
Dichlorodifluoromethane	ND	UJ	1000	850	ug/L			10/30/24 13:27	1000
1,1-Dichloroethane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
1,2-Dichloroethane	ND	UJ	1000	550	ug/L			10/30/24 13:27	1000
1,1-Dichloroethene	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
1,2-Dichloropropane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
1,3-Dichloropropane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
2,2-Dichloropropane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
1,1-Dichloropropene	ND	UJ	1000	90	ug/L			10/30/24 13:27	1000
Ethylbenzene	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
Ethyl methacrylate	ND	UJ	1000	600	ug/L			10/30/24 13:27	1000
Hexachlorobutadiene	ND	UJ	5000	900	ug/L			10/30/24 13:27	1000
2-Hexanone	ND	UJ	25000	4300	ug/L			10/30/24 13:27	1000
Isopropylbenzene	ND	UJ	1000	530	ug/L			10/30/24 13:27	1000
Methylene bromide	ND	UJ	5000	220	ug/L			10/30/24 13:27	1000
Methylene Chloride	ND	UJ	5000	3000	ug/L			10/30/24 13:27	1000
4-Methyl-2-pentanone (MIBK)	ND	UJ	25000	1800	ug/L			10/30/24 13:27	1000
Methyl tert-butyl ether	ND	UJ	1000	220	ug/L			10/30/24 13:27	1000
m-Xylene & p-Xylene	ND	UJ	5000	3000	ug/L			10/30/24 13:27	1000
Naphthalene	ND	UJ	5000	3000	ug/L			10/30/24 13:27	1000
n-Butylbenzene	ND	UJ	1000	760	ug/L			10/30/24 13:27	1000
N-Propylbenzene	ND	UJ	1000	690	ug/L			10/30/24 13:27	1000
o-Chlorotoluene	ND	UJ	1000	570	ug/L			10/30/24 13:27	1000
o-Xylene	ND	UJ	5000	3000	ug/L			10/30/24 13:27	1000
p-Chlorotoluene	ND	UJ	1000	560	ug/L			10/30/24 13:27	1000
p-Isopropyltoluene	ND	UJ	1000	710	ug/L			10/30/24 13:27	1000
sec-Butylbenzene	ND	UJ	1000	700	ug/L			10/30/24 13:27	1000

Client Sample ID: P93B-ROX-101724

Date Collected: 10/17/24 11:50
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-5

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	UJ	1000	1000	ug/L			10/30/24 13:27	1000
tert-Butylbenzene	ND	UJ	1000	630	ug/L			10/30/24 13:27	1000
1,1,1,2-Tetrachloroethane	ND	UJ	1000	380	ug/L			10/30/24 13:27	1000
1,1,2,2-Tetrachloroethane	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
Tetrachloroethene	ND	UJ	1000	330	ug/L			10/30/24 13:27	1000
Toluene	ND	UJ	1000	900	ug/L			10/30/24 13:27	1000
trans-1,2-Dichloroethene	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
trans-1,3-Dichloropropene	ND	UJ	5000	200	ug/L			10/30/24 13:27	1000
1,2,3-Trichlorobenzene	ND	UJ	1000	900	ug/L			10/30/24 13:27	1000
1,2,4-Trichlorobenzene	ND	UJ	1000	820	ug/L			10/30/24 13:27	1000
1,1,1-Trichloroethane	ND	UJ	1000	180	ug/L			10/30/24 13:27	1000
1,1,2-Trichloroethane	ND	UJ	5000	210	ug/L			10/30/24 13:27	1000
Trichloroethene	ND	UJ	1000	150	ug/L			10/30/24 13:27	1000
Trichlorofluoromethane	ND	UJ	1000	250	ug/L			10/30/24 13:27	1000
1,2,3-Trichloropropane	ND	UJ	5000	840	ug/L			10/30/24 13:27	1000
1,2,4-Trimethylbenzene	ND	UJ	1000	820	ug/L			10/30/24 13:27	1000
1,3,5-Trimethylbenzene	ND	UJ	1000	560	ug/L			10/30/24 13:27	1000
Vinyl acetate	ND	UJ	25000	930	ug/L			10/30/24 13:27	1000
Vinyl chloride	ND	UJ	1000	500	ug/L			10/30/24 13:27	1000
Xylenes, Total	ND	UJ	10000	6000	ug/L			10/30/24 13:27	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 130*		*10/30/24 13:27*	*1000*
Dibromofluoromethane	*111*		*75 - 126*		*10/30/24 13:27*	*1000*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 13:27*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**720000**		2500	600	ug/L			10/30/24 16:57	2500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/30/24 16:57*	*2500*
Dibromofluoromethane	*111*		*75 - 126*		*10/30/24 16:57*	*2500*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/30/24 16:57*	*2500*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.3	8.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
Benzenethiol	ND		9.3	9.2	ug/L		10/24/24 20:26	10/30/24 14:34	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 14:34	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 14:34	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/24/24 20:26	10/30/24 14:34	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.2	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Chloroaniline	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 14:34	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 14:34	1

Client Sample ID: P93B-ROX-101724
Date Collected: 10/17/24 11:50
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264593-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 14:34	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/24/24 20:26	10/30/24 14:34	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 14:34	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4-Dimethylphenol	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/24/24 20:26	10/30/24 14:34	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 14:34	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/24/24 20:26	10/30/24 14:34	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 14:34	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/24/24 20:26	10/30/24 14:34	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
Indene	ND		9.3	3.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
Isophorone	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
2-Nitroaniline	ND		9.3	4.6	ug/L		10/24/24 20:26	10/30/24 14:34	1
3-Nitroaniline	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 14:34	1
Nitrobenzene	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 14:34	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/24/24 20:26	10/30/24 14:34	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 14:34	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 14:34	1
Phenol	**55**		9.3	3.9	ug/L		10/24/24 20:26	10/31/24 19:51	1
Pyridine	ND	*- UJ	9.3	9.3	ug/L		10/24/24 20:26	10/30/24 14:34	1
Quinoline	ND		9.3	2.2	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 14:34	1
2,4,6-Trichlorophenol	ND		9.3	3.2	ug/L		10/24/24 20:26	10/30/24 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*21 - 114*	*10/24/24 20:26*	*10/30/24 14:34*	*1*
2-Fluorophenol	*26*		*10 - 105*	*10/24/24 20:26*	*10/30/24 14:34*	*1*
Nitrobenzene-d5	*51*		*16 - 127*	*10/24/24 20:26*	*10/30/24 14:34*	*1*
Phenol-d5	*19*		*10 - 129*	*10/24/24 20:26*	*10/30/24 14:34*	*1*
Terphenyl-d14	*62*		*13 - 150*	*10/24/24 20:26*	*10/30/24 14:34*	*1*
2,4,6-Tribromophenol	*77*		*10 - 150*	*10/24/24 20:26*	*10/30/24 14:34*	*1*

Client: AECOM
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: P93B-ROX-101724
Lab Sample ID: 400-264593-5
Date Collected: 10/17/24 11:50
Matrix: Water
Date Received: 10/18/24 09:36

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 12:45	10/24/24 23:34	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 12:45	10/24/24 23:34	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 12:45	10/24/24 23:34	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/24/24 23:34	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/24/24 23:34	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 12:45	10/24/24 23:34	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/24/24 23:34	1
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/24/24 23:34	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 12:45	10/24/24 23:34	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/24/24 23:34	1
Fluoranthene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/24/24 23:34	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 12:45	10/24/24 23:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/24/24 23:34	1
1-Methylnaphthalene	**0.24**		0.20	0.065	ug/L		10/24/24 12:45	10/24/24 23:34	1
2-Methylnaphthalene	**0.22**		0.20	0.076	ug/L		10/24/24 12:45	10/24/24 23:34	1
Phenanthrene	**0.080**	**J**	0.20	0.043	ug/L		10/24/24 12:45	10/24/24 23:34	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/24/24 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:34*	*1*
Nitrobenzene-d5	*91*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:34*	*1*
Terphenyl-d14	*87*		*50 - 150*	*10/24/24 12:45*	*10/24/24 23:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/23/24 10:16	10/23/24 17:13	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		10/23/24 10:16	10/23/24 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*51 - 149*	*10/23/24 10:16*	*10/23/24 17:13*	*1*

Definitions/Glossary

Client: AECOM
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

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)
400-264593-1	TB-ROX-101724-8260-SS	91	108	95
400-264593-3	P93C-ROX-101724	90	110	96
400-264593-4	P93A-ROX-101724	89	110	95
400-264593-5	P93B-ROX-101724	90	111	95
400-264593-5 - DL	P93B-ROX-101724	93	111	96
LCS 400-689599/1002	Lab Control Sample	99	93	97
LCS 400-689679/1002	Lab Control Sample	99	92	96
MB 400-689599/5	Method Blank	93	107	98
MB 400-689679/4	Method Blank	89	104	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)
400-264593-3	P93C-ROX-101724	49	26	46	18	66	75
400-264593-4	P93A-ROX-101724	50	27	54	20	65	76
400-264593-5	P93B-ROX-101724	50	26	51	19	62	77
LCS 400-689098/26-A	Lab Control Sample	48	28	51	20	66	73
LCS 400-689098/2-A	Lab Control Sample	55	29	59	21	65	78
LCSD 400-689098/27-A	Lab Control Sample Dup	43	25	44	17	68	68
MB 400-689098/1-A	Method Blank	49	27	56	17	73	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264593-3	P93C-ROX-101724	78	92	83
400-264593-4	P93A-ROX-101724	81	96	90
400-264593-5	P93B-ROX-101724	76	91	87
LCS 400-689030/2-A	Lab Control Sample	75	95	90
MB 400-689030/1-A	Method Blank	71	94	93

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB1 (51-149)								
400-264593-2	TB-ROX-101724-8011-SS	58								
400-264593-3	P93C-ROX-101724	57								
400-264593-4	P93A-ROX-101724	58								
400-264593-5	P93B-ROX-101724	73								
LCS 400-688845/2-A	Lab Control Sample	89								
LCSD 400-688845/3-A	Lab Control Sample Dup	89								
MB 400-688845/1-A	Method Blank	83								

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101724-8260-SS
Lab Sample ID: 400-264593-1
Date Collected: 10/17/24 00:00
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689599	10/30/24 10:53	WPD	EET PEN

Client Sample ID: TB-ROX-101724-8011-SS
Lab Sample ID: 400-264593-2
Date Collected: 10/17/24 00:00
Matrix: Water
Date Received: 10/18/24 09:36

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	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 16:10	KR	EET PEN

Client Sample ID: P93C-ROX-101724
Lab Sample ID: 400-264593-3
Date Collected: 10/17/24 09:25
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		20	5 mL	5 mL	689599	10/30/24 12:43	WPD	EET PEN
Total/NA	Prep	3510C			271.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 19:01	VC1	EET PEN
Total/NA	Prep	3511			30.3 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 22:34	DS	EET PEN
Total/NA	Prep	3510C			271.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 13:49	S1B	EET PEN
Total/NA	Prep	8011			32.4 mL	35 mL	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 16:31	KR	EET PEN

Client Sample ID: P93A-ROX-101724
Lab Sample ID: 400-264593-4
Date Collected: 10/17/24 10:25
Matrix: Water
Date Received: 10/18/24 09:36

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	689599	10/30/24 13:05	WPD	EET PEN
Total/NA	Prep	3510C			270.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 19:26	VC1	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 23:04	DS	EET PEN
Total/NA	Prep	3510C			270.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 14:12	S1B	EET PEN
Total/NA	Prep	8011			31 mL	35 mL	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 16:52	KR	EET PEN

Client Sample ID: P93B-ROX-101724
Lab Sample ID: 400-264593-5

Date Collected: 10/17/24 11:50
Matrix: Water
Date Received: 10/18/24 09:36

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	689599	10/30/24 13:27	WPD	EET PEN
Total/NA	Analysis	8260D	DL	2500	5 mL	5 mL	689679	10/30/24 16:57	CAR	EET PEN
Total/NA	Prep	3510C			270.2 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 19:51	VC1	EET PEN
Total/NA	Prep	3511			30.5 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 23:34	DS	EET PEN
Total/NA	Prep	3510C			270.2 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 14:34	S1B	EET PEN
Total/NA	Prep	8011			32.6 mL	35 mL	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 17:13	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688845/1-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	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 15:06	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689030/1-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	3511			30 mL	2 mL	689030	10/24/24 12:44	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 17:32	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689098/1-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	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:12	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689599/5

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	689599	10/30/24 08:19	WPD	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689679/4
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	689679	10/30/24 15:29	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688845/2-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	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 15:28	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689030/2-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	3511			30 mL	2 mL	689030	10/24/24 12:44	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 18:02	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689098/26-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	689098	10/28/24 16:41	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:35	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689098/2-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	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 12:19	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689599/1002
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	689599	10/30/24 07:13	WPD	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264593-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689679/1002
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	689679	10/30/24 14:33	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688845/3-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	688845	10/23/24 10:16	KR	EET PEN
Total/NA	Analysis	8011		1			688892	10/23/24 15:49	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-689098/27-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	689098	10/28/24 16:41	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:57	S1B	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

GC/MS VOA

Analysis Batch: 689599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-1	TB-ROX-101724-8260-SS	Total/NA	Water	8260D	
400-264593-3	P93C-ROX-101724	Total/NA	Water	8260D	
400-264593-4	P93A-ROX-101724	Total/NA	Water	8260D	
400-264593-5	P93B-ROX-101724	Total/NA	Water	8260D	
MB 400-689599/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689599/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 689679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-5 - DL	P93B-ROX-101724	Total/NA	Water	8260D	
MB 400-689679/4	Method Blank	Total/NA	Water	8260D	
LCS 400-689679/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 689030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-3	P93C-ROX-101724	Total/NA	Water	3511	
400-264593-4	P93A-ROX-101724	Total/NA	Water	3511	
400-264593-5	P93B-ROX-101724	Total/NA	Water	3511	
MB 400-689030/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-689030/2-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 689076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-3	P93C-ROX-101724	Total/NA	Water	8270E	689030
400-264593-4	P93A-ROX-101724	Total/NA	Water	8270E	689030
400-264593-5	P93B-ROX-101724	Total/NA	Water	8270E	689030
MB 400-689030/1-A	Method Blank	Total/NA	Water	8270E	689030
LCS 400-689030/2-A	Lab Control Sample	Total/NA	Water	8270E	689030

Prep Batch: 689098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-3	P93C-ROX-101724	Total/NA	Water	3510C	
400-264593-4	P93A-ROX-101724	Total/NA	Water	3510C	
400-264593-5	P93B-ROX-101724	Total/NA	Water	3510C	
MB 400-689098/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-689098/26-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-689098/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-689098/27-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 689608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-3	P93C-ROX-101724	Total/NA	Water	8270E	689098
400-264593-4	P93A-ROX-101724	Total/NA	Water	8270E	689098
400-264593-5	P93B-ROX-101724	Total/NA	Water	8270E	689098
MB 400-689098/1-A	Method Blank	Total/NA	Water	8270E	689098
LCS 400-689098/26-A	Lab Control Sample	Total/NA	Water	8270E	689098
LCS 400-689098/2-A	Lab Control Sample	Total/NA	Water	8270E	689098
LCSD 400-689098/27-A	Lab Control Sample Dup	Total/NA	Water	8270E	689098

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264593-1

GC/MS Semi VOA

Analysis Batch: 689784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-3	P93C-ROX-101724	Total/NA	Water	8270E	689098
400-264593-4	P93A-ROX-101724	Total/NA	Water	8270E	689098
400-264593-5	P93B-ROX-101724	Total/NA	Water	8270E	689098

GC Semi VOA

Prep Batch: 688845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-2	TB-ROX-101724-8011-SS	Total/NA	Water	8011	
400-264593-3	P93C-ROX-101724	Total/NA	Water	8011	
400-264593-4	P93A-ROX-101724	Total/NA	Water	8011	
400-264593-5	P93B-ROX-101724	Total/NA	Water	8011	
MB 400-688845/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688845/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688845/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264593-2	TB-ROX-101724-8011-SS	Total/NA	Water	8011	688845
400-264593-3	P93C-ROX-101724	Total/NA	Water	8011	688845
400-264593-4	P93A-ROX-101724	Total/NA	Water	8011	688845
400-264593-5	P93B-ROX-101724	Total/NA	Water	8011	688845
MB 400-688845/1-A	Method Blank	Total/NA	Water	8011	688845
LCS 400-688845/2-A	Lab Control Sample	Total/NA	Water	8011	688845
LCSD 400-688845/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688845

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

Lab Sample ID: MB 400-689599/5
Matrix: Water
Analysis Batch: 689599

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			10/30/24 08:19	1
Acrolein	ND		20	3.3	ug/L			10/30/24 08:19	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 08:19	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 08:19	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 08:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 08:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 08:19	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 08:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 08:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 08:19	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 08:19	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 08:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 08:19	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 08:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 08:19	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 08:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 08:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 08:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 08:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 08:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 08:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 08:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 08:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 08:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 08:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 08:19	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 08:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 08:19	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 08:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 08:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 08:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 08:19	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 08:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 08:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 08:19	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 08:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 08:19	1

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

Lab Sample ID: MB 400-689599/5
Matrix: Water
Analysis Batch: 689599

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			10/30/24 08:19	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/30/24 08:19	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 08:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 08:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 08:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 08:19	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 08:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 08:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 08:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 08:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 08:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 08:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 08:19	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 08:19	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 08:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 08:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 08:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 08:19	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 08:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 08:19	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 08:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/30/24 08:19*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*10/30/24 08:19*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*10/30/24 08:19*	*1*

Lab Sample ID: LCS 400-689599/1002
Matrix: Water
Analysis Batch: 689599

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	386	*+	ug/L		193	43 - 150
Acrolein	200	208		ug/L		104	38 - 150
Acrylonitrile	500	459		ug/L		92	64 - 142
Benzene	50.0	47.5		ug/L		95	70 - 130
Bromobenzene	50.0	51.8		ug/L		104	70 - 132
Bromochloromethane	50.0	48.5		ug/L		97	70 - 130
Bromodichloromethane	50.0	44.2		ug/L		88	67 - 133
Bromoform	50.0	48.3		ug/L		97	57 - 140
Bromomethane	20.0	27.3		ug/L		137	10 - 150
2-Butanone (MEK)	200	382	*+	ug/L		191	61 - 145
Carbon disulfide	50.0	43.8		ug/L		88	61 - 137
Carbon tetrachloride	50.0	42.8		ug/L		86	61 - 137
Chlorobenzene	50.0	49.8		ug/L		100	70 - 130
Chloroethane	20.0	16.7		ug/L		84	55 - 141
2-Chloroethyl vinyl ether	20.0	13.6		ug/L		68	10 - 150

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

Lab Sample ID: LCS 400-689599/1002
Matrix: Water
Analysis Batch: 689599

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	43.0		ug/L		86	69 - 130
1-Chlorohexane	50.0	43.6		ug/L		87	69 - 130
Chloromethane	20.0	20.3		ug/L		102	58 - 137
cis-1,2-Dichloroethene	50.0	46.5		ug/L		93	68 - 130
cis-1,3-Dichloropropene	50.0	48.4		ug/L		97	69 - 132
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
1,2-Dichlorobenzene	50.0	54.2		ug/L		108	67 - 130
1,3-Dichlorobenzene	50.0	54.7		ug/L		109	70 - 130
1,4-Dichlorobenzene	50.0	54.6		ug/L		109	70 - 130
Dichlorodifluoromethane	20.0	21.3		ug/L		106	41 - 146
1,1-Dichloroethane	50.0	46.3		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	40.0		ug/L		80	69 - 130
1,1-Dichloroethene	50.0	51.3		ug/L		103	63 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	47.4		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	41.0		ug/L		82	52 - 135
1,1-Dichloropropene	50.0	46.0		ug/L		92	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	50.3		ug/L		101	68 - 130
Hexachlorobutadiene	50.0	61.5		ug/L		123	53 - 140
2-Hexanone	200	252		ug/L		126	65 - 137
Isopropylbenzene	50.0	44.8		ug/L		90	70 - 130
Methylene bromide	50.0	47.8		ug/L		96	70 - 130
Methylene Chloride	50.0	52.6		ug/L		105	66 - 135
4-Methyl-2-pentanone (MIBK)	200	188		ug/L		94	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/L		93	70 - 130
Naphthalene	50.0	53.7		ug/L		107	47 - 149
n-Butylbenzene	50.0	53.6		ug/L		107	67 - 130
N-Propylbenzene	50.0	52.3		ug/L		105	70 - 130
o-Chlorotoluene	50.0	50.8		ug/L		102	70 - 130
o-Xylene	50.0	46.4		ug/L		93	70 - 130
p-Chlorotoluene	50.0	49.5		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	56.1		ug/L		112	65 - 130
sec-Butylbenzene	50.0	54.9		ug/L		110	66 - 130
Styrene	50.0	49.0		ug/L		98	70 - 130
tert-Butylbenzene	50.0	49.8		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.4		ug/L		95	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.4		ug/L		103	70 - 131
Tetrachloroethene	50.0	42.4		ug/L		85	65 - 130
Toluene	50.0	47.8		ug/L		96	70 - 130
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	43.3		ug/L		87	63 - 130
1,2,3-Trichlorobenzene	50.0	59.2		ug/L		118	60 - 138
1,2,4-Trichlorobenzene	50.0	59.6		ug/L		119	60 - 140
1,1,1-Trichloroethane	50.0	41.3		ug/L		83	68 - 130
1,1,2-Trichloroethane	50.0	47.9		ug/L		96	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	20.0	17.2		ug/L		86	65 - 138

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

Lab Sample ID: LCS 400-689599/1002
Matrix: Water
Analysis Batch: 689599

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	49.4		ug/L		99	70 - 130
1,2,4-Trimethylbenzene	50.0	54.4		ug/L		109	70 - 130
1,3,5-Trimethylbenzene	50.0	53.2		ug/L		106	69 - 130
Vinyl acetate	40.0	39.6		ug/L		99	26 - 150
Vinyl chloride	20.0	20.3		ug/L		101	59 - 136
Xylenes, Total	100	92.9		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*93*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: MB 400-689679/4
Matrix: Water
Analysis Batch: 689679

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			10/30/24 15:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 130*		*10/30/24 15:29*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/30/24 15:29*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/30/24 15:29*	*1*

Lab Sample ID: LCS 400-689679/1002
Matrix: Water
Analysis Batch: 689679

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	43.1		ug/L		86	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 130*
Dibromofluoromethane	*92*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: MB 400-689098/1-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzenethiol	ND		10	9.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzoic acid	ND		30	24	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzyl alcohol	ND		10	7.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1

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

Lab Sample ID: MB 400-689098/1-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chloroaniline	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Chlorophenol	ND		10	4.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dibenzofuran	ND		10	4.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Diethyl phthalate	ND		10	4.4	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
1,4-Dioxane	ND		10	4.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachloroethane	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Indene	ND		10	3.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
Isophorone	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Methylphenol	ND		10	3.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Nitroaniline	ND		10	5.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
3-Nitroaniline	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Nitroaniline	ND		10	4.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
Nitrobenzene	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Nitrophenol	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Nitrophenol	ND		10	3.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Pentachlorophenol	ND		20	12	ug/L		10/24/24 20:26	10/30/24 11:12	1
Phenol	ND		10	4.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Pyridine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 11:12	1
Quinoline	ND		10	2.4	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/24/24 20:26	10/30/24 11:12	1

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

Lab Sample ID: MB 400-689098/1-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689098

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	49		21 - 114	10/24/24 20:26	10/30/24 11:12	1
2-Fluorophenol	27		10 - 105	10/24/24 20:26	10/30/24 11:12	1
Nitrobenzene-d5	56		16 - 127	10/24/24 20:26	10/30/24 11:12	1
Phenol-d5	17		10 - 129	10/24/24 20:26	10/30/24 11:12	1
Terphenyl-d14	73		13 - 150	10/24/24 20:26	10/30/24 11:12	1
2,4,6-Tribromophenol	73		10 - 150	10/24/24 20:26	10/30/24 11:12	1

Lab Sample ID: LCS 400-689098/26-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	88.7		ug/L		74	10 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	48		21 - 114
2-Fluorophenol	28		10 - 105
Nitrobenzene-d5	51		16 - 127
Phenol-d5	20		10 - 129
Terphenyl-d14	66		13 - 150
2,4,6-Tribromophenol	73		10 - 150

Lab Sample ID: LCS 400-689098/2-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	25.5		ug/L		21	10 - 127
Benzoic acid	493	78.0	*-	ug/L		16	19 - 126
Benzyl alcohol	120	52.7		ug/L		44	17 - 109
Bis(2-chloroethoxy)methane	120	69.2		ug/L		58	24 - 125
Bis(2-chloroethyl)ether	120	61.8		ug/L		51	10 - 121
bis (2-chloroisopropyl) ether	120	76.7		ug/L		64	14 - 123
Bis(2-ethylhexyl) phthalate	120	84.1		ug/L		70	16 - 150
4-Bromophenyl phenyl ether	120	76.7		ug/L		64	17 - 150
Butyl benzyl phthalate	120	85.6		ug/L		71	21 - 150
4-Chloroaniline	120	56.1		ug/L		47	10 - 124
4-Chloro-3-methylphenol	120	79.4		ug/L		66	37 - 131
2-Chloronaphthalene	120	73.5		ug/L		61	24 - 132
2-Chlorophenol	120	70.8		ug/L		59	27 - 124
4-Chlorophenyl phenyl ether	120	77.3		ug/L		64	27 - 147
Dibenz[a,h]acridine	120	101		ug/L		85	40 - 140
Dibenzofuran	120	79.4		ug/L		66	30 - 135
3,3'-Dichlorobenzidine	240	186		ug/L		78	10 - 150
2,4-Dichlorophenol	120	75.7		ug/L		63	33 - 132
Diethyl phthalate	120	91.8		ug/L		77	37 - 145
2,4-Dimethylphenol	120	134		ug/L		112	38 - 132
Dimethyl phthalate	120	80.5		ug/L		67	32 - 137

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

Lab Sample ID: LCS 400-689098/2-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-butyl phthalate	120	95.5		ug/L		80	27 - 150
4,6-Dinitro-ortho-cresol	240	233		ug/L		97	14 - 150
2,4-Dinitrophenol	240	255		ug/L		106	15 - 150
2,4-Dinitrotoluene	120	79.6		ug/L		66	35 - 136
2,6-Dinitrotoluene	120	77.4		ug/L		65	29 - 140
Di-n-octyl phthalate	120	81.9		ug/L		68	26 - 150
1,4-Dioxane	120	22.5		ug/L		19	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	82.3		ug/L		69	23 - 138
Hexachlorobenzene	120	86.2		ug/L		72	10 - 150
Hexachlorocyclopentadiene	120	231	*+	ug/L		192	10 - 124
Hexachloroethane	120	66.0		ug/L		55	10 - 127
Indene	120	86.4		ug/L		72	18 - 150
Isophorone	120	69.0		ug/L		57	28 - 127
2-Methylphenol	120	70.6		ug/L		59	34 - 124
3 & 4 Methylphenol	120	64.1		ug/L		53	32 - 122
2-Nitroaniline	120	76.0		ug/L		63	24 - 139
3-Nitroaniline	120	58.5		ug/L		49	10 - 128
4-Nitroaniline	120	80.5		ug/L		67	28 - 118
Nitrobenzene	120	62.0		ug/L		52	29 - 120
2-Nitrophenol	120	81.2		ug/L		68	25 - 148
4-Nitrophenol	240	101		ug/L		42	12 - 129
N-Nitrosodimethylamine	120	31.0		ug/L		26	10 - 115
N-Nitrosodi-n-propylamine	120	83.3		ug/L		69	24 - 142
N-Nitrosodiphenylamine	119	76.6		ug/L		64	29 - 138
Pentachlorophenol	240	172		ug/L		72	19 - 150
Phenol	120	28.6		ug/L		24	11 - 95
Pyridine	240	ND	*-	ug/L		4	10 - 82
Quinoline	120	48.0		ug/L		40	10 - 141
2,4,5-Trichlorophenol	120	81.0		ug/L		68	30 - 144
2,4,6-Trichlorophenol	120	77.5		ug/L		65	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*21 - 114*
2-Fluorophenol	*29*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*21*		*10 - 129*
Terphenyl-d14	*65*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: LCSD 400-689098/27-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689098

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol	120	76.6		ug/L		64	10 - 140	15	40

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

Lab Sample ID: LCSD 400-689098/27-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689098

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	43		21 - 114
2-Fluorophenol	25		10 - 105
Nitrobenzene-d5	44		16 - 127
Phenol-d5	17		10 - 129
Terphenyl-d14	68		13 - 150
2,4,6-Tribromophenol	68		10 - 150

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

Lab Sample ID: MB 400-689030/1-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/24/24 12:44	10/24/24 17:32	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 12:44	10/24/24 17:32	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 12:44	10/24/24 17:32	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 12:44	10/24/24 17:32	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 12:44	10/24/24 17:32	1
Fluorene	ND		0.20	0.087	ug/L		10/24/24 12:44	10/24/24 17:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:44	10/24/24 17:32	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/24/24 12:44	10/24/24 17:32	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/24/24 12:44	10/24/24 17:32	1
Phenanthrene	ND		0.20	0.044	ug/L		10/24/24 12:44	10/24/24 17:32	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		50 - 150	10/24/24 12:44	10/24/24 17:32	1
Nitrobenzene-d5	94		50 - 150	10/24/24 12:44	10/24/24 17:32	1
Terphenyl-d14	93		50 - 150	10/24/24 12:44	10/24/24 17:32	1

Lab Sample ID: LCS 400-689030/2-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.56		ug/L		77	50 - 150
Acenaphthylene	3.34	2.74		ug/L		82	50 - 150
Anthracene	3.34	2.57		ug/L		77	50 - 150
Benzo[a]anthracene	3.34	2.74		ug/L		82	50 - 150
Benzo[a]pyrene	3.34	2.82		ug/L		85	50 - 150
Benzo[b]fluoranthene	3.34	3.03		ug/L		91	50 - 150

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

Lab Sample ID: LCS 400-689030/2-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[g,h,i]perylene	3.34	2.91		ug/L		87	50 - 150
Benzo[k]fluoranthene	3.34	2.83		ug/L		85	50 - 150
Chrysene	3.34	2.81		ug/L		84	50 - 150
Dibenz(a,h)anthracene	3.34	2.83		ug/L		85	50 - 150
Fluoranthene	3.34	2.55		ug/L		77	50 - 150
Fluorene	3.34	2.49		ug/L		75	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	3.07		ug/L		92	50 - 150
1-Methylnaphthalene	3.34	2.32		ug/L		69	50 - 150
2-Methylnaphthalene	3.34	2.03		ug/L		61	50 - 150
Phenanthrene	3.34	2.61		ug/L		78	50 - 150
Pyrene	3.34	2.59		ug/L		78	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*50 - 150*
Nitrobenzene-d5	*95*		*50 - 150*
Terphenyl-d14	*90*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688845/1-A
Matrix: Water
Analysis Batch: 688892

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688845

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		10/23/24 10:16	10/23/24 15:06	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/23/24 10:16	10/23/24 15:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*51 - 149*	*10/23/24 10:16*	*10/23/24 15:06*	*1*

Lab Sample ID: LCS 400-688845/2-A
Matrix: Water
Analysis Batch: 688892

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688845

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0889		ug/L		88	60 - 140
1,2-Dibromoethane	0.100	0.0827		ug/L		82	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*51 - 149*

Lab Sample ID: LCSD 400-688845/3-A
Matrix: Water
Analysis Batch: 688892

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688845

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0885		ug/L		88	60 - 140	0	30
1,2-Dibromoethane	0.100	0.0881		ug/L		88	60 - 140	6	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-688845/3-A
Matrix: Water
Analysis Batch: 688892

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688845

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	89		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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/17/2024
PO #	**GSAP Project ID**	PAGE: ___1___ of ___1___
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

SAMPLER NAME(S) (Print): Sahoi McLean, Tony Jones

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☐ LEVEL 1 ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Email reports to: melissa.remiger@aecom.com; mary.massa@aecom.com; brett.howell@aecom.com

SPLIT REPORT

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** Send EQuiS EDDs to EDDSubmissions@aecomshell.com; Vlad.Virjan@aecom.com**

REQUESTED ANALYSIS
60721927 – 3.4.2

400-264593 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	Container PID Readings or Laboratory Notes:
	TB-ROX-101724-8260-SS	10/17/2024	0000	Water	2					2	X				SPLIT REPORT
	TB-ROX-101724-8011-SS	10/17/2024	0000	Water	2					2		X			
	P93C-ROX-101724	10/17/2024	0925	Water	6			4		10	X	X	X	X	SPLIT REPORT
	P93A-ROX-101724	10/17/2024	1025	Water	6			4		10	X	X	X	X	SPLIT REPORT
	P93B-ROX-101724	10/17/2024	1150	Water	6			4		10	X	X	X	X	SPLIT REPORT

10/17/24

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Sahoi McLean	FEDEX: 725205471839,725205471828	10/17/2024	1600
	BP	10/18/24	936

Version: 19Sept24

CUSTODY SEALS: 1599967,1599966,1599969, 1599968

2.3°C
3.3°C
IR11

11/4/2024

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264593-1

Login Number: 264593
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.3°C, 3.3°C IR-11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have 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
Job ID: 400-264593-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264595-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andreia Vladimirescu, 11/28/24

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.	X			
Matrix Spike	MS recoveries met acceptance criteria.			X	
Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS 400-689098/2-A	SVOCs	Benzoic acid	**16**	NA	19-126
LCS 400-689098/2-A	SVOCs	Pyridine	**4**	NA	10-82
LCS 400-689098/2-A	SVOCs	Hexachlorocyclopentadiene	**192**	NA	10-124
LCS/LCSD 400-688716/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	79/87	**32**	60-140/30

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Method 8270E (SVOCs)
Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270.

Pyridine and benzoic acid in samples P57-ROX-101724, P74-ROX-101724, P74-ROX-101724-DUP, and P58-ROX-101724 were qualified as estimated (UJ).

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.		X		Analytes were detected in samples that were diluted.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on December 2, 2024, to include missing ICVs for method 8270E (SVOCs).
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
	specified frequency per method, and ion relative abundances were within acceptance limits.				
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analytes at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method	X			
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 11/1/2024 2:33:51 PM

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264595-1

Reviewed 11/28/2024
VA

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
11/1/2024 2:33:51 PM

Authorized for release by
Mark Swafford, Project Manager II
Mark.Swafford@et.eurofinsus.com
Designee for
Leah Klingensmith, Senior Project Manager
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Job Narrative
400-264595-1

Receipt
The samples were received on 10/18/2024 9:36 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 2.3º C and 3.3º C.

GC/MS VOA
Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689506 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689506 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 400-689506 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689506 recovered above the upper control limit for Acrolein. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-101724-8260 (400-264595-1), P57-ROX-101724-EB (400-264595-3), P57-ROX-101724 (400-264595-4), P74-ROX-101724 (400-264595-5), P74-ROX-101724-DUP (400-264595-6) and P58-ROX-101724 (400-264595-7). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

Method 8260D: The following samples were diluted to bring the concentration of target analytes within the calibration range: P74-ROX-101724 (400-264595-5), P74-ROX-101724-DUP (400-264595-6) and P58-ROX-101724 (400-264595-7). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-689098 and analytical batch 400-689608 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 laboratory control sample (LCS) for preparation batch 400-689098 and analytical batch 400-689608 recovered outside control limits for the following analyte(s): Pyridine, Hexachlorocyclopentadiene and Benzoic acid. Pyridine, Hexachlorocyclopentadiene and Benzoic acid have been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270E: The continuing calibration verification (CCV) associated with batch 400-689608 recovered above the upper control limit for 2,4-Dinitrophenol, 4-Chloro-3-methylphenol, 4,6-Dinitro-2-methylphenol, 2-Nitrophenol, Hexachloroethane and Phenol. 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 400-689608 recovered above the upper control limit for Benzenethiol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The following sample was diluted to bring the concentration of target analytes within the calibration range: P58-ROX-101724 (400-264595-7). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8011: The RPD of the laboratory control sample duplicate (LCSD) for preparation batch 400-688716 and analytical batch 400-688762 recovered outside control limits for the following analytes: 1,2-Dibromoethane.

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264595-1	TB-ROX-101724-8260	Water	10/17/24 00:00	10/18/24 09:36
400-264595-2	TB-ROX-101724-8011	Water	10/17/24 00:00	10/18/24 09:36
400-264595-3	P57-ROX-101724-EB	Water	10/17/24 08:00	10/18/24 09:36
400-264595-4	P57-ROX-101724	Water	10/17/24 09:45	10/18/24 09:36
400-264595-5	P74-ROX-101724	Water	10/17/24 11:45	10/18/24 09:36
400-264595-6	P74-ROX-101724-DUP	Water	10/17/24 11:45	10/18/24 09:36
400-264595-7	P58-ROX-101724	Water	10/17/24 13:10	10/18/24 09:36

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: TB-ROX-101724-8260 — Lab Sample ID: 400-264595-1

No Detections.

Client Sample ID: TB-ROX-101724-8011 — Lab Sample ID: 400-264595-2

No Detections.

Client Sample ID: P57-ROX-101724-EB — Lab Sample ID: 400-264595-3

No Detections.

Client Sample ID: P57-ROX-101724 — Lab Sample ID: 400-264595-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	66		1.0	0.24	ug/L	1		8260D	Total/NA
Ethylbenzene	1.7		1.0	0.50	ug/L	1		8260D	Total/NA
Isopropylbenzene	15		1.0	0.53	ug/L	1		8260D	Total/NA
Naphthalene	16		5.0	3.0	ug/L	1		8260D	Total/NA
n-Butylbenzene	1.8		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	4.0		1.0	0.70	ug/L	1		8260D	Total/NA
tert-Butylbenzene	5.3		1.0	0.63	ug/L	1		8260D	Total/NA
Toluene	3.2		1.0	0.90	ug/L	1		8260D	Total/NA
Acenaphthene	0.56		0.20	0.083	ug/L	1		8270E	Total/NA
Acenaphthylene	0.072	J	0.20	0.046	ug/L	1		8270E	Total/NA
Fluorene	0.72		0.20	0.085	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	19		0.20	0.064	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	13		0.20	0.075	ug/L	1		8270E	Total/NA
Phenanthrene	0.29		0.20	0.043	ug/L	1		8270E	Total/NA

Client Sample ID: P74-ROX-101724 — Lab Sample ID: 400-264595-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1800		10	2.4	ug/L	10		8260D	Total/NA
Ethylbenzene	110		10	5.0	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	190		50	30	ug/L	10		8260D	Total/NA
Toluene	35		10	9.0	ug/L	10		8260D	Total/NA
1,2,4-Trimethylbenzene	34		10	8.2	ug/L	10		8260D	Total/NA
1,3,5-Trimethylbenzene	11		10	5.6	ug/L	10		8260D	Total/NA
Xylenes, Total	200		100	60	ug/L	10		8260D	Total/NA
Phenol	16		9.3	3.9	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	1.0		0.20	0.065	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	1.1		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.070	J	0.20	0.043	ug/L	1		8270E	Total/NA

Client Sample ID: P74-ROX-101724-DUP — Lab Sample ID: 400-264595-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1800		10	2.4	ug/L	10		8260D	Total/NA
Ethylbenzene	100		10	5.0	ug/L	10		8260D	Total/NA
m-Xylene & p-Xylene	170		50	30	ug/L	10		8260D	Total/NA
Toluene	33		10	9.0	ug/L	10		8260D	Total/NA
1,2,4-Trimethylbenzene	28		10	8.2	ug/L	10		8260D	Total/NA
1,3,5-Trimethylbenzene	8.3	J	10	5.6	ug/L	10		8260D	Total/NA
Xylenes, Total	180		100	60	ug/L	10		8260D	Total/NA
Phenol	11		9.5	4.0	ug/L	1		8270E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P74-ROX-101724-DUP (Continued)

Lab Sample ID: 400-264595-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluorene	0.088	J	0.20	0.086	ug/L	1		8270E	Total/NA
1-Methylnaphthalene	0.99		0.20	0.065	ug/L	1		8270E	Total/NA
2-Methylnaphthalene	1.1		0.20	0.076	ug/L	1		8270E	Total/NA
Phenanthrene	0.070	J	0.20	0.043	ug/L	1		8270E	Total/NA

Client Sample ID: P58-ROX-101724

Lab Sample ID: 400-264595-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	230000		1000	240	ug/L	1000		8260D	Total/NA
Phenol	250		9.3	3.9	ug/L	1		8270E	Total/NA
Acenaphthylene	0.26		0.20	0.047	ug/L	1		8270E	Total/NA
Anthracene	0.10	J	0.20	0.073	ug/L	1		8270E	Total/NA
Benzo[a]anthracene	0.12	J	0.20	0.040	ug/L	1		8270E	Total/NA
Benzo[a]pyrene	0.14	J	0.20	0.045	ug/L	1		8270E	Total/NA
Benzo[b]fluoranthene	0.080	J	0.20	0.042	ug/L	1		8270E	Total/NA
Benzo[g,h,i]perylene	0.057	J	0.20	0.052	ug/L	1		8270E	Total/NA
Chrysene	0.22		0.20	0.039	ug/L	1		8270E	Total/NA
Fluoranthene	0.079	J	0.20	0.032	ug/L	1		8270E	Total/NA
Fluorene	1.8		0.20	0.087	ug/L	1		8270E	Total/NA
Phenanthrene	1.2		0.20	0.044	ug/L	1		8270E	Total/NA
Pyrene	0.31		0.20	0.040	ug/L	1		8270E	Total/NA
1-Methylnaphthalene - DL	62		1.0	0.33	ug/L	5		8270E	Total/NA
2-Methylnaphthalene - DL	36		1.0	0.38	ug/L	5		8270E	Total/NA

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: TB-ROX-101724-8260
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-1
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			10/29/24 18:54	1
Acrolein	ND		20	3.3	ug/L			10/29/24 18:54	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 18:54	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 18:54	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 18:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 18:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 18:54	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 18:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 18:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 18:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 18:54	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 18:54	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 18:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 18:54	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 18:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 18:54	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 18:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 18:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 18:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 18:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 18:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 18:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 18:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 18:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 18:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 18:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 18:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 18:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 18:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 18:54	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 18:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 18:54	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 18:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 18:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 18:54	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 18:54	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 18:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 18:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 18:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 18:54	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 18:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 18:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 18:54	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: TB-ROX-101724-8260
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-1
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			10/29/24 18:54	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 18:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 18:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 18:54	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 18:54	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 18:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 18:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 18:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 18:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 18:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 18:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 18:54	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 18:54	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 18:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 18:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 18:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 18:54	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 18:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 18:54	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*10/29/24 18:54*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/29/24 18:54*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/29/24 18:54*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: TB-ROX-101724-8011
Date Collected: 10/17/24 00:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-2
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		10/22/24 10:34	10/22/24 17:59	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*63*		*51 - 149*	*10/22/24 10:34*	*10/22/24 17:59*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P57-ROX-101724-EB
Date Collected: 10/17/24 08:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-3
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			10/29/24 19:21	1
Acrolein	ND		20	3.3	ug/L			10/29/24 19:21	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 19:21	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 19:21	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 19:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 19:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 19:21	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 19:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 19:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 19:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 19:21	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 19:21	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 19:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 19:21	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 19:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 19:21	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 19:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 19:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 19:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 19:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 19:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 19:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 19:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 19:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 19:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 19:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 19:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 19:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 19:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 19:21	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 19:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 19:21	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 19:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 19:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 19:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 19:21	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 19:21	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 19:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 19:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 19:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 19:21	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 19:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 19:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 19:21	1

Client Sample ID: P57-ROX-101724-EB
Date Collected: 10/17/24 08:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-3
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			10/29/24 19:21	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 19:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 19:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 19:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 19:21	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 19:21	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 19:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 19:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 19:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 19:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 19:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 19:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 19:21	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 19:21	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 19:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 19:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 19:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 19:21	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 19:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 19:21	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 130*		*10/29/24 19:21*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*10/29/24 19:21*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/29/24 19:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	8.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
Benzenethiol	ND		9.4	9.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
Benzoic acid	ND	*-	28	22	ug/L		10/24/24 20:26	10/30/24 16:05	1
Benzyl alcohol	ND		9.4	6.8	ug/L		10/24/24 20:26	10/30/24 16:05	1
Bis(2-chloroethoxy)methane	ND		9.4	4.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
Bis(2-chloroethyl)ether	ND		9.4	3.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
bis (2-chloroisopropyl) ether	ND		9.4	1.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
Bis(2-ethylhexyl) phthalate	ND		9.4	8.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Bromophenyl phenyl ether	ND		9.4	8.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
Butyl benzyl phthalate	ND		9.4	5.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Chloroaniline	ND		9.4	4.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Chloro-3-methylphenol	ND		9.4	5.0	ug/L		10/24/24 20:26	10/30/24 16:05	1
2-Chloronaphthalene	ND		9.4	3.6	ug/L		10/24/24 20:26	10/30/24 16:05	1
2-Chlorophenol	ND		9.4	3.8	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Chlorophenyl phenyl ether	ND		9.4	3.5	ug/L		10/24/24 20:26	10/30/24 16:05	1
Dibenz[a,h]acridine	ND		9.4	2.6	ug/L		10/24/24 20:26	10/30/24 16:05	1
Dibenzofuran	ND		9.4	3.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4-Dichlorophenol	ND		9.4	4.0	ug/L		10/24/24 20:26	10/30/24 16:05	1
Diethyl phthalate	ND		9.4	4.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4-Dimethylphenol	ND		9.4	4.9	ug/L		10/24/24 20:26	10/30/24 16:05	1

Client Sample ID: P57-ROX-101724-EB
Date Collected: 10/17/24 08:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.4	3.9	ug/L		10/24/24 20:26	10/30/24 16:05	1
Di-n-butyl phthalate	ND		9.4	4.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
4,6-Dinitro-ortho-cresol	ND		9.4	9.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4-Dinitrotoluene	ND		9.4	4.8	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,6-Dinitrotoluene	ND		9.4	3.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
Di-n-octyl phthalate	ND		9.4	5.6	ug/L		10/24/24 20:26	10/30/24 16:05	1
1,4-Dioxane	ND		9.4	4.0	ug/L		10/24/24 20:26	10/30/24 16:05	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	3.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
Hexachlorobenzene	ND		9.4	9.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/24/24 20:26	10/30/24 16:05	1
Hexachloroethane	ND		9.4	4.9	ug/L		10/24/24 20:26	10/30/24 16:05	1
Indene	ND		9.4	3.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
Isophorone	ND		9.4	4.9	ug/L		10/24/24 20:26	10/30/24 16:05	1
2-Methylphenol	ND		9.4	3.0	ug/L		10/24/24 20:26	10/30/24 16:05	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
2-Nitroaniline	ND		9.4	4.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
3-Nitroaniline	ND		9.4	4.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Nitroaniline	ND		9.4	3.8	ug/L		10/24/24 20:26	10/30/24 16:05	1
Nitrobenzene	ND		9.4	4.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
2-Nitrophenol	ND		9.4	4.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
4-Nitrophenol	ND		9.4	3.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
N-Nitrosodimethylamine	ND		9.4	2.1	ug/L		10/24/24 20:26	10/30/24 16:05	1
N-Nitrosodi-n-propylamine	ND		9.4	2.3	ug/L		10/24/24 20:26	10/30/24 16:05	1
N-Nitrosodiphenylamine	ND		9.4	3.5	ug/L		10/24/24 20:26	10/30/24 16:05	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 16:05	1
Phenol	ND		9.4	3.9	ug/L		10/24/24 20:26	10/30/24 16:05	1
Pyridine	ND	*-	9.4	9.4	ug/L		10/24/24 20:26	10/30/24 16:05	1
Quinoline	ND		9.4	2.2	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4,5-Trichlorophenol	ND		9.4	3.7	ug/L		10/24/24 20:26	10/30/24 16:05	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		10/24/24 20:26	10/30/24 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*21 - 114*	*10/24/24 20:26*	*10/30/24 16:05*	*1*
2-Fluorophenol	*31*		*10 - 105*	*10/24/24 20:26*	*10/30/24 16:05*	*1*
Nitrobenzene-d5	*50*		*16 - 127*	*10/24/24 20:26*	*10/30/24 16:05*	*1*
Phenol-d5	*22*		*10 - 129*	*10/24/24 20:26*	*10/30/24 16:05*	*1*
Terphenyl-d14	*66*		*13 - 150*	*10/24/24 20:26*	*10/30/24 16:05*	*1*
2,4,6-Tribromophenol	*74*		*10 - 150*	*10/24/24 20:26*	*10/30/24 16:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 12:45	10/25/24 00:04	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 12:45	10/25/24 00:04	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 12:45	10/25/24 00:04	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:04	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 00:04	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 12:45	10/25/24 00:04	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/25/24 00:04	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P57-ROX-101724-EB
Date Collected: 10/17/24 08:00
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:04	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 12:45	10/25/24 00:04	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 00:04	1
Fluoranthene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 00:04	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 12:45	10/25/24 00:04	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 00:04	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/24/24 12:45	10/25/24 00:04	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/24/24 12:45	10/25/24 00:04	1
Phenanthrene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 00:04	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:04*	*1*
Nitrobenzene-d5	*94*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:04*	*1*
Terphenyl-d14	*91*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/22/24 10:34	10/22/24 18:20	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*70*		*51 - 149*	*10/22/24 10:34*	*10/22/24 18:20*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P57-ROX-101724
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-4
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			10/29/24 19:47	1
Acrolein	ND		20	3.3	ug/L			10/29/24 19:47	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 19:47	1
Benzene	**66**		1.0	0.24	ug/L			10/29/24 19:47	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 19:47	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 19:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 19:47	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 19:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 19:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 19:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 19:47	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 19:47	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 19:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 19:47	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 19:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 19:47	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 19:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 19:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 19:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 19:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 19:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 19:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 19:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 19:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 19:47	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 19:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 19:47	1
Ethylbenzene	**1.7**		1.0	0.50	ug/L			10/29/24 19:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 19:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 19:47	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 19:47	1
Isopropylbenzene	**15**		1.0	0.53	ug/L			10/29/24 19:47	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 19:47	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 19:47	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 19:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 19:47	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 19:47	1
Naphthalene	**16**		5.0	3.0	ug/L			10/29/24 19:47	1
n-Butylbenzene	**1.8**		1.0	0.76	ug/L			10/29/24 19:47	1
N-Propylbenzene	**16**		1.0	0.69	ug/L			10/29/24 19:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 19:47	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 19:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 19:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/29/24 19:47	1

Client Sample ID: P57-ROX-101724
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**4.0**		1.0	0.70	ug/L			10/29/24 19:47	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 19:47	1
tert-Butylbenzene	**5.3**		1.0	0.63	ug/L			10/29/24 19:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 19:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 19:47	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 19:47	1
Toluene	**3.2**		1.0	0.90	ug/L			10/29/24 19:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 19:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 19:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 19:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 19:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 19:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 19:47	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 19:47	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 19:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 19:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 19:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 19:47	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 19:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 19:47	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 19:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 19:47*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*10/29/24 19:47*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*10/29/24 19:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.3	8.1	ug/L		10/24/24 20:26	10/30/24 16:28	1
Benzenethiol	ND		9.3	9.2	ug/L		10/24/24 20:26	10/30/24 16:28	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 16:28	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/24/24 20:26	10/30/24 16:28	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 16:28	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/24/24 20:26	10/30/24 16:28	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/24/24 20:26	10/30/24 16:28	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 16:28	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 16:28	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Chlorophenyl phenyl ether	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 16:28	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/24/24 20:26	10/30/24 16:28	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 16:28	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 16:28	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4-Dimethylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 16:28	1

Client Sample ID: P57-ROX-101724
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/24/24 20:26	10/30/24 16:28	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 16:28	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/24/24 20:26	10/30/24 16:28	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 16:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 16:28	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/24/24 20:26	10/30/24 16:28	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/24/24 20:26	10/30/24 16:28	1
Hexachloroethane	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 16:28	1
Indene	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 16:28	1
Isophorone	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 16:28	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/24/24 20:26	10/30/24 16:28	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/24/24 20:26	10/30/24 16:28	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 16:28	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 16:28	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 16:28	1
N-Nitrosodimethylamine	ND		9.3	2.1	ug/L		10/24/24 20:26	10/30/24 16:28	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
N-Nitrosodiphenylamine	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 16:28	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 16:28	1
Phenol	ND		9.3	3.9	ug/L		10/24/24 20:26	10/30/24 16:28	1
Pyridine	ND	*- UJ	9.3	9.3	ug/L		10/24/24 20:26	10/30/24 16:28	1
Quinoline	ND		9.3	2.2	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 16:28	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/24/24 20:26	10/30/24 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*21 - 114*	*10/24/24 20:26*	*10/30/24 16:28*	*1*
2-Fluorophenol	*31*		*10 - 105*	*10/24/24 20:26*	*10/30/24 16:28*	*1*
Nitrobenzene-d5	*50*		*16 - 127*	*10/24/24 20:26*	*10/30/24 16:28*	*1*
Phenol-d5	*21*		*10 - 129*	*10/24/24 20:26*	*10/30/24 16:28*	*1*
Terphenyl-d14	*64*		*13 - 150*	*10/24/24 20:26*	*10/30/24 16:28*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*10/24/24 20:26*	*10/30/24 16:28*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.56**		0.20	0.083	ug/L		10/24/24 12:45	10/25/24 00:34	1
Acenaphthylene	**0.072**	J	0.20	0.046	ug/L		10/24/24 12:45	10/25/24 00:34	1
Anthracene	ND		0.20	0.071	ug/L		10/24/24 12:45	10/25/24 00:34	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:34	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 00:34	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 12:45	10/25/24 00:34	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/25/24 00:34	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P57-ROX-101724
Date Collected: 10/17/24 09:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:34	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 12:45	10/25/24 00:34	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 00:34	1
Fluoranthene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 00:34	1
Fluorene	**0.72**		0.20	0.085	ug/L		10/24/24 12:45	10/25/24 00:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 00:34	1
1-Methylnaphthalene	**19**		0.20	0.064	ug/L		10/24/24 12:45	10/25/24 00:34	1
2-Methylnaphthalene	**13**		0.20	0.075	ug/L		10/24/24 12:45	10/25/24 00:34	1
Phenanthrene	**0.29**		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 00:34	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*75*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:34*	*1*
Nitrobenzene-d5	*87*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:34*	*1*
Terphenyl-d14	*85*		*50 - 150*	*10/24/24 12:45*	*10/25/24 00:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		10/22/24 10:34	10/22/24 18:41	1
1,2-Dibromoethane	ND	*1	0.022	0.017	ug/L		10/22/24 10:34	10/22/24 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*10/22/24 10:34*	*10/22/24 18:41*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P74-ROX-101724
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			10/29/24 21:33	10
Acrolein	ND		200	33	ug/L			10/29/24 21:33	10
Acrylonitrile	ND		100	28	ug/L			10/29/24 21:33	10
Benzene	**1800**		10	2.4	ug/L			10/29/24 21:33	10
Bromobenzene	ND		10	5.4	ug/L			10/29/24 21:33	10
Bromochloromethane	ND		10	5.2	ug/L			10/29/24 21:33	10
Bromodichloromethane	ND		10	5.0	ug/L			10/29/24 21:33	10
Bromoform	ND		50	2.5	ug/L			10/29/24 21:33	10
Bromomethane	ND		10	9.8	ug/L			10/29/24 21:33	10
2-Butanone (MEK)	ND		250	26	ug/L			10/29/24 21:33	10
Carbon disulfide	ND		10	5.0	ug/L			10/29/24 21:33	10
Carbon tetrachloride	ND		10	1.9	ug/L			10/29/24 21:33	10
Chlorobenzene	ND		10	4.2	ug/L			10/29/24 21:33	10
Chloroethane	ND		10	7.6	ug/L			10/29/24 21:33	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			10/29/24 21:33	10
Chloroform	ND		10	9.0	ug/L			10/29/24 21:33	10
1-Chlorohexane	ND		10	3.2	ug/L			10/29/24 21:33	10
Chloromethane	ND		10	4.0	ug/L			10/29/24 21:33	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			10/29/24 21:33	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			10/29/24 21:33	10
Dibromochloromethane	ND		10	2.4	ug/L			10/29/24 21:33	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			10/29/24 21:33	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			10/29/24 21:33	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			10/29/24 21:33	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			10/29/24 21:33	10
1,1-Dichloroethane	ND		10	5.0	ug/L			10/29/24 21:33	10
1,2-Dichloroethane	ND		10	5.5	ug/L			10/29/24 21:33	10
1,1-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:33	10
1,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:33	10
1,3-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:33	10
2,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:33	10
1,1-Dichloropropene	ND		10	0.90	ug/L			10/29/24 21:33	10
Ethylbenzene	**110**		10	5.0	ug/L			10/29/24 21:33	10
Ethyl methacrylate	ND		10	6.0	ug/L			10/29/24 21:33	10
Hexachlorobutadiene	ND		50	9.0	ug/L			10/29/24 21:33	10
2-Hexanone	ND		250	43	ug/L			10/29/24 21:33	10
Isopropylbenzene	ND		10	5.3	ug/L			10/29/24 21:33	10
Methylene bromide	ND		50	2.2	ug/L			10/29/24 21:33	10
Methylene Chloride	ND		50	30	ug/L			10/29/24 21:33	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			10/29/24 21:33	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			10/29/24 21:33	10
m-Xylene & p-Xylene	**190**		50	30	ug/L			10/29/24 21:33	10
Naphthalene	ND		50	30	ug/L			10/29/24 21:33	10
n-Butylbenzene	ND		10	7.6	ug/L			10/29/24 21:33	10
N-Propylbenzene	ND		10	6.9	ug/L			10/29/24 21:33	10
o-Chlorotoluene	ND		10	5.7	ug/L			10/29/24 21:33	10
o-Xylene	ND		50	30	ug/L			10/29/24 21:33	10
p-Chlorotoluene	ND		10	5.6	ug/L			10/29/24 21:33	10
p-Isopropyltoluene	ND		10	7.1	ug/L			10/29/24 21:33	10

Client Sample ID: P74-ROX-101724
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-5
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		10	7.0	ug/L			10/29/24 21:33	10
Styrene	ND		10	10	ug/L			10/29/24 21:33	10
tert-Butylbenzene	ND		10	6.3	ug/L			10/29/24 21:33	10
1,1,1,2-Tetrachloroethane	ND		10	3.8	ug/L			10/29/24 21:33	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			10/29/24 21:33	10
Tetrachloroethene	ND		10	3.3	ug/L			10/29/24 21:33	10
Toluene	**35**		10	9.0	ug/L			10/29/24 21:33	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:33	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			10/29/24 21:33	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			10/29/24 21:33	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			10/29/24 21:33	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			10/29/24 21:33	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			10/29/24 21:33	10
Trichloroethene	ND		10	1.5	ug/L			10/29/24 21:33	10
Trichlorofluoromethane	ND		10	2.5	ug/L			10/29/24 21:33	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			10/29/24 21:33	10
1,2,4-Trimethylbenzene	**34**		10	8.2	ug/L			10/29/24 21:33	10
1,3,5-Trimethylbenzene	**11**		10	5.6	ug/L			10/29/24 21:33	10
Vinyl acetate	ND		250	9.3	ug/L			10/29/24 21:33	10
Vinyl chloride	ND		10	5.0	ug/L			10/29/24 21:33	10
Xylenes, Total	**200**		100	60	ug/L			10/29/24 21:33	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 21:33*	*10*
Dibromofluoromethane	*99*		*75 - 126*		*10/29/24 21:33*	*10*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/29/24 21:33*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.3	8.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
Benzenethiol	ND		9.3	9.2	ug/L		10/24/24 20:26	10/30/24 14:57	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 14:57	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/24/24 20:26	10/30/24 14:57	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 14:57	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/24/24 20:26	10/30/24 14:57	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/24/24 20:26	10/30/24 14:57	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 14:57	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 14:57	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Chlorophenyl phenyl ether	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 14:57	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/24/24 20:26	10/30/24 14:57	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 14:57	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 14:57	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4-Dimethylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 14:57	1

Client Sample ID: P74-ROX-101724
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/24/24 20:26	10/30/24 14:57	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 14:57	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/24/24 20:26	10/30/24 14:57	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 14:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
Hexachlorobenzene	ND		9.3	9.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/24/24 20:26	10/30/24 14:57	1
Hexachloroethane	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 14:57	1
Indene	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 14:57	1
Isophorone	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 14:57	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/24/24 20:26	10/30/24 14:57	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/24/24 20:26	10/30/24 14:57	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 14:57	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 14:57	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
N-Nitrosodimethylamine	ND		9.3	2.1	ug/L		10/24/24 20:26	10/30/24 14:57	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
N-Nitrosodiphenylamine	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 14:57	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 14:57	1
Phenol	**16**		9.3	3.9	ug/L		10/24/24 20:26	10/31/24 20:15	1
Pyridine	ND	*- UJ	9.3	9.3	ug/L		10/24/24 20:26	10/30/24 14:57	1
Quinoline	ND		9.3	2.2	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 14:57	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/24/24 20:26	10/30/24 14:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*21 - 114*	*10/24/24 20:26*	*10/30/24 14:57*	*1*
2-Fluorophenol	*29*		*10 - 105*	*10/24/24 20:26*	*10/30/24 14:57*	*1*
Nitrobenzene-d5	*51*		*16 - 127*	*10/24/24 20:26*	*10/30/24 14:57*	*1*
Phenol-d5	*22*		*10 - 129*	*10/24/24 20:26*	*10/30/24 14:57*	*1*
Terphenyl-d14	*63*		*13 - 150*	*10/24/24 20:26*	*10/30/24 14:57*	*1*
2,4,6-Tribromophenol	*79*		*10 - 150*	*10/24/24 20:26*	*10/30/24 14:57*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 12:45	10/25/24 01:04	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 12:45	10/25/24 01:04	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 12:45	10/25/24 01:04	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:04	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 01:04	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 12:45	10/25/24 01:04	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/25/24 01:04	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P74-ROX-101724
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:04	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 12:45	10/25/24 01:04	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 01:04	1
Fluoranthene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 01:04	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 12:45	10/25/24 01:04	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/24/24 12:45	10/25/24 01:04	1
1-Methylnaphthalene	**1.0**		0.20	0.065	ug/L		10/24/24 12:45	10/25/24 01:04	1
2-Methylnaphthalene	**1.1**		0.20	0.076	ug/L		10/24/24 12:45	10/25/24 01:04	1
Phenanthrene	**0.070**	**J**	0.20	0.043	ug/L		10/24/24 12:45	10/25/24 01:04	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:04*	*1*
Nitrobenzene-d5	*97*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:04*	*1*
Terphenyl-d14	*77*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		10/22/24 10:34	10/22/24 19:02	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 19:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*60*		*51 - 149*	*10/22/24 10:34*	*10/22/24 19:02*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P74-ROX-101724-DUP
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			10/29/24 21:59	10
Acrolein	ND		200	33	ug/L			10/29/24 21:59	10
Acrylonitrile	ND		100	28	ug/L			10/29/24 21:59	10
Benzene	**1800**		10	2.4	ug/L			10/29/24 21:59	10
Bromobenzene	ND		10	5.4	ug/L			10/29/24 21:59	10
Bromochloromethane	ND		10	5.2	ug/L			10/29/24 21:59	10
Bromodichloromethane	ND		10	5.0	ug/L			10/29/24 21:59	10
Bromoform	ND		50	2.5	ug/L			10/29/24 21:59	10
Bromomethane	ND		10	9.8	ug/L			10/29/24 21:59	10
2-Butanone (MEK)	ND		250	26	ug/L			10/29/24 21:59	10
Carbon disulfide	ND		10	5.0	ug/L			10/29/24 21:59	10
Carbon tetrachloride	ND		10	1.9	ug/L			10/29/24 21:59	10
Chlorobenzene	ND		10	4.2	ug/L			10/29/24 21:59	10
Chloroethane	ND		10	7.6	ug/L			10/29/24 21:59	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			10/29/24 21:59	10
Chloroform	ND		10	9.0	ug/L			10/29/24 21:59	10
1-Chlorohexane	ND		10	3.2	ug/L			10/29/24 21:59	10
Chloromethane	ND		10	4.0	ug/L			10/29/24 21:59	10
cis-1,2-Dichloroethene	ND		10	2.0	ug/L			10/29/24 21:59	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			10/29/24 21:59	10
Dibromochloromethane	ND		10	2.4	ug/L			10/29/24 21:59	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			10/29/24 21:59	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			10/29/24 21:59	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			10/29/24 21:59	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			10/29/24 21:59	10
1,1-Dichloroethane	ND		10	5.0	ug/L			10/29/24 21:59	10
1,2-Dichloroethane	ND		10	5.5	ug/L			10/29/24 21:59	10
1,1-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:59	10
1,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:59	10
1,3-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:59	10
2,2-Dichloropropane	ND		10	5.0	ug/L			10/29/24 21:59	10
1,1-Dichloropropene	ND		10	0.90	ug/L			10/29/24 21:59	10
Ethylbenzene	**100**		10	5.0	ug/L			10/29/24 21:59	10
Ethyl methacrylate	ND		10	6.0	ug/L			10/29/24 21:59	10
Hexachlorobutadiene	ND		50	9.0	ug/L			10/29/24 21:59	10
2-Hexanone	ND		250	43	ug/L			10/29/24 21:59	10
Isopropylbenzene	ND		10	5.3	ug/L			10/29/24 21:59	10
Methylene bromide	ND		50	2.2	ug/L			10/29/24 21:59	10
Methylene Chloride	ND		50	30	ug/L			10/29/24 21:59	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			10/29/24 21:59	10
Methyl tert-butyl ether	ND		10	2.2	ug/L			10/29/24 21:59	10
m-Xylene & p-Xylene	**170**		50	30	ug/L			10/29/24 21:59	10
Naphthalene	ND		50	30	ug/L			10/29/24 21:59	10
n-Butylbenzene	ND		10	7.6	ug/L			10/29/24 21:59	10
N-Propylbenzene	ND		10	6.9	ug/L			10/29/24 21:59	10
o-Chlorotoluene	ND		10	5.7	ug/L			10/29/24 21:59	10
o-Xylene	ND		50	30	ug/L			10/29/24 21:59	10
p-Chlorotoluene	ND		10	5.6	ug/L			10/29/24 21:59	10
p-Isopropyltoluene	ND		10	7.1	ug/L			10/29/24 21:59	10

Client Sample ID: P74-ROX-101724-DUP
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			10/29/24 21:59	10
Styrene	ND		10	10	ug/L			10/29/24 21:59	10
tert-Butylbenzene	ND		10	6.3	ug/L			10/29/24 21:59	10
1,1,1,2-Tetrachloroethane	ND		10	3.8	ug/L			10/29/24 21:59	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			10/29/24 21:59	10
Tetrachloroethene	ND		10	3.3	ug/L			10/29/24 21:59	10
Toluene	**33**		10	9.0	ug/L			10/29/24 21:59	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			10/29/24 21:59	10
trans-1,3-Dichloropropene	ND		50	2.0	ug/L			10/29/24 21:59	10
1,2,3-Trichlorobenzene	ND		10	9.0	ug/L			10/29/24 21:59	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			10/29/24 21:59	10
1,1,1-Trichloroethane	ND		10	1.8	ug/L			10/29/24 21:59	10
1,1,2-Trichloroethane	ND		50	2.1	ug/L			10/29/24 21:59	10
Trichloroethene	ND		10	1.5	ug/L			10/29/24 21:59	10
Trichlorofluoromethane	ND		10	2.5	ug/L			10/29/24 21:59	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			10/29/24 21:59	10
1,2,4-Trimethylbenzene	**28**		10	8.2	ug/L			10/29/24 21:59	10
1,3,5-Trimethylbenzene	**8.3**	**J**	10	5.6	ug/L			10/29/24 21:59	10
Vinyl acetate	ND		250	9.3	ug/L			10/29/24 21:59	10
Vinyl chloride	ND		10	5.0	ug/L			10/29/24 21:59	10
Xylenes, Total	**180**		100	60	ug/L			10/29/24 21:59	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/29/24 21:59*	*10*
Dibromofluoromethane	*97*		*75 - 126*		*10/29/24 21:59*	*10*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/29/24 21:59*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	8.2	ug/L		10/24/24 20:26	10/30/24 15:19	1
Benzenethiol	ND		9.5	9.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
Benzoic acid	ND	*- UJ	28	23	ug/L		10/24/24 20:26	10/30/24 15:19	1
Benzyl alcohol	ND		9.5	6.9	ug/L		10/24/24 20:26	10/30/24 15:19	1
Bis(2-chloroethoxy)methane	ND		9.5	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
Bis(2-chloroethyl)ether	ND		9.5	3.7	ug/L		10/24/24 20:26	10/30/24 15:19	1
bis (2-chloroisopropyl) ether	ND		9.5	1.7	ug/L		10/24/24 20:26	10/30/24 15:19	1
Bis(2-ethylhexyl) phthalate	ND		9.5	8.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Bromophenyl phenyl ether	ND		9.5	8.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
Butyl benzyl phthalate	ND		9.5	5.5	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Chloroaniline	ND		9.5	4.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Chloro-3-methylphenol	ND		9.5	5.0	ug/L		10/24/24 20:26	10/30/24 15:19	1
2-Chloronaphthalene	ND		9.5	3.6	ug/L		10/24/24 20:26	10/30/24 15:19	1
2-Chlorophenol	ND		9.5	3.9	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Chlorophenyl phenyl ether	ND		9.5	3.5	ug/L		10/24/24 20:26	10/30/24 15:19	1
Dibenz[a,h]acridine	ND		9.5	2.6	ug/L		10/24/24 20:26	10/30/24 15:19	1
Dibenzofuran	ND		9.5	3.8	ug/L		10/24/24 20:26	10/30/24 15:19	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4-Dichlorophenol	ND		9.5	4.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
Diethyl phthalate	ND		9.5	4.2	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4-Dimethylphenol	ND		9.5	4.9	ug/L		10/24/24 20:26	10/30/24 15:19	1

Client Sample ID: P74-ROX-101724-DUP
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.5	4.0	ug/L		10/24/24 20:26	10/30/24 15:19	1
Di-n-butyl phthalate	ND		9.5	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
4,6-Dinitro-ortho-cresol	ND		9.5	9.5	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4-Dinitrotoluene	ND		9.5	4.8	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,6-Dinitrotoluene	ND		9.5	3.7	ug/L		10/24/24 20:26	10/30/24 15:19	1
Di-n-octyl phthalate	ND		9.5	5.7	ug/L		10/24/24 20:26	10/30/24 15:19	1
1,4-Dioxane	ND		9.5	4.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	3.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
Hexachlorobenzene	ND		9.5	9.2	ug/L		10/24/24 20:26	10/30/24 15:19	1
Hexachlorocyclopentadiene	ND	*+	19	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
Hexachloroethane	ND		9.5	4.9	ug/L		10/24/24 20:26	10/30/24 15:19	1
Indene	ND		9.5	3.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
Isophorone	ND		9.5	4.9	ug/L		10/24/24 20:26	10/30/24 15:19	1
2-Methylphenol	ND		9.5	3.0	ug/L		10/24/24 20:26	10/30/24 15:19	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
2-Nitroaniline	ND		9.5	4.7	ug/L		10/24/24 20:26	10/30/24 15:19	1
3-Nitroaniline	ND		9.5	4.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Nitroaniline	ND		9.5	3.9	ug/L		10/24/24 20:26	10/30/24 15:19	1
Nitrobenzene	ND		9.5	4.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
2-Nitrophenol	ND		9.5	4.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
4-Nitrophenol	ND		9.5	3.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
N-Nitrosodimethylamine	ND		9.5	2.1	ug/L		10/24/24 20:26	10/30/24 15:19	1
N-Nitrosodi-n-propylamine	ND		9.5	2.4	ug/L		10/24/24 20:26	10/30/24 15:19	1
N-Nitrosodiphenylamine	ND		9.5	3.5	ug/L		10/24/24 20:26	10/30/24 15:19	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 15:19	1
Phenol	**11**		9.5	4.0	ug/L		10/24/24 20:26	10/31/24 20:39	1
Pyridine	ND	*- UJ	9.5	9.5	ug/L		10/24/24 20:26	10/30/24 15:19	1
Quinoline	ND		9.5	2.3	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4,5-Trichlorophenol	ND		9.5	3.8	ug/L		10/24/24 20:26	10/30/24 15:19	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		10/24/24 20:26	10/30/24 15:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*21 - 114*	*10/24/24 20:26*	*10/30/24 15:19*	*1*
2-Fluorophenol	*26*		*10 - 105*	*10/24/24 20:26*	*10/30/24 15:19*	*1*
Nitrobenzene-d5	*48*		*16 - 127*	*10/24/24 20:26*	*10/30/24 15:19*	*1*
Phenol-d5	*19*		*10 - 129*	*10/24/24 20:26*	*10/30/24 15:19*	*1*
Terphenyl-d14	*61*		*13 - 150*	*10/24/24 20:26*	*10/30/24 15:19*	*1*
2,4,6-Tribromophenol	*75*		*10 - 150*	*10/24/24 20:26*	*10/30/24 15:19*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 12:45	10/25/24 01:34	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 12:45	10/25/24 01:34	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 12:45	10/25/24 01:34	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:34	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 01:34	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 12:45	10/25/24 01:34	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 12:45	10/25/24 01:34	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P74-ROX-101724-DUP
Date Collected: 10/17/24 11:45
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:34	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 12:45	10/25/24 01:34	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 12:45	10/25/24 01:34	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/25/24 01:34	1
Fluorene	**0.088**	**J**	0.20	0.086	ug/L		10/24/24 12:45	10/25/24 01:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/25/24 01:34	1
1-Methylnaphthalene	**0.99**		0.20	0.065	ug/L		10/24/24 12:45	10/25/24 01:34	1
2-Methylnaphthalene	**1.1**		0.20	0.076	ug/L		10/24/24 12:45	10/25/24 01:34	1
Phenanthrene	**0.070**	**J**	0.20	0.043	ug/L		10/24/24 12:45	10/25/24 01:34	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:34*	*1*
Nitrobenzene-d5	*98*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:34*	*1*
Terphenyl-d14	*73*		*50 - 150*	*10/24/24 12:45*	*10/25/24 01:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.032	0.018	ug/L		10/22/24 10:34	10/22/24 19:45	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*59*		*51 - 149*	*10/22/24 10:34*	*10/22/24 19:45*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P58-ROX-101724
Date Collected: 10/17/24 13:10
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-7
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			10/29/24 22:25	1000
Acrolein	ND		20000	3300	ug/L			10/29/24 22:25	1000
Acrylonitrile	ND		10000	2800	ug/L			10/29/24 22:25	1000
Benzene	**230000**		1000	240	ug/L			10/29/24 22:25	1000
Bromobenzene	ND		1000	540	ug/L			10/29/24 22:25	1000
Bromochloromethane	ND		1000	520	ug/L			10/29/24 22:25	1000
Bromodichloromethane	ND		1000	500	ug/L			10/29/24 22:25	1000
Bromoform	ND		5000	250	ug/L			10/29/24 22:25	1000
Bromomethane	ND		1000	980	ug/L			10/29/24 22:25	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			10/29/24 22:25	1000
Carbon disulfide	ND		1000	500	ug/L			10/29/24 22:25	1000
Carbon tetrachloride	ND		1000	190	ug/L			10/29/24 22:25	1000
Chlorobenzene	ND		1000	420	ug/L			10/29/24 22:25	1000
Chloroethane	ND		1000	760	ug/L			10/29/24 22:25	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			10/29/24 22:25	1000
Chloroform	ND		1000	900	ug/L			10/29/24 22:25	1000
1-Chlorohexane	ND		1000	320	ug/L			10/29/24 22:25	1000
Chloromethane	ND		1000	400	ug/L			10/29/24 22:25	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			10/29/24 22:25	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			10/29/24 22:25	1000
Dibromochloromethane	ND		1000	240	ug/L			10/29/24 22:25	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			10/29/24 22:25	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			10/29/24 22:25	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			10/29/24 22:25	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			10/29/24 22:25	1000
1,1-Dichloroethane	ND		1000	500	ug/L			10/29/24 22:25	1000
1,2-Dichloroethane	ND		1000	550	ug/L			10/29/24 22:25	1000
1,1-Dichloroethene	ND		1000	500	ug/L			10/29/24 22:25	1000
1,2-Dichloropropane	ND		1000	500	ug/L			10/29/24 22:25	1000
1,3-Dichloropropane	ND		1000	500	ug/L			10/29/24 22:25	1000
2,2-Dichloropropane	ND		1000	500	ug/L			10/29/24 22:25	1000
1,1-Dichloropropene	ND		1000	90	ug/L			10/29/24 22:25	1000
Ethylbenzene	ND		1000	500	ug/L			10/29/24 22:25	1000
Ethyl methacrylate	ND		1000	600	ug/L			10/29/24 22:25	1000
Hexachlorobutadiene	ND		5000	900	ug/L			10/29/24 22:25	1000
2-Hexanone	ND		25000	4300	ug/L			10/29/24 22:25	1000
Isopropylbenzene	ND		1000	530	ug/L			10/29/24 22:25	1000
Methylene bromide	ND		5000	220	ug/L			10/29/24 22:25	1000
Methylene Chloride	ND		5000	3000	ug/L			10/29/24 22:25	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			10/29/24 22:25	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			10/29/24 22:25	1000
m-Xylene & p-Xylene	ND		5000	3000	ug/L			10/29/24 22:25	1000
Naphthalene	ND		5000	3000	ug/L			10/29/24 22:25	1000
n-Butylbenzene	ND		1000	760	ug/L			10/29/24 22:25	1000
N-Propylbenzene	ND		1000	690	ug/L			10/29/24 22:25	1000
o-Chlorotoluene	ND		1000	570	ug/L			10/29/24 22:25	1000
o-Xylene	ND		5000	3000	ug/L			10/29/24 22:25	1000
p-Chlorotoluene	ND		1000	560	ug/L			10/29/24 22:25	1000
p-Isopropyltoluene	ND		1000	710	ug/L			10/29/24 22:25	1000

Client Sample ID: P58-ROX-101724
Date Collected: 10/17/24 13:10
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-7
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		1000	700	ug/L			10/29/24 22:25	1000
Styrene	ND		1000	1000	ug/L			10/29/24 22:25	1000
tert-Butylbenzene	ND		1000	630	ug/L			10/29/24 22:25	1000
1,1,1,2-Tetrachloroethane	ND		1000	380	ug/L			10/29/24 22:25	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			10/29/24 22:25	1000
Tetrachloroethene	ND		1000	330	ug/L			10/29/24 22:25	1000
Toluene	ND		1000	900	ug/L			10/29/24 22:25	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			10/29/24 22:25	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			10/29/24 22:25	1000
1,2,3-Trichlorobenzene	ND		1000	900	ug/L			10/29/24 22:25	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			10/29/24 22:25	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			10/29/24 22:25	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			10/29/24 22:25	1000
Trichloroethene	ND		1000	150	ug/L			10/29/24 22:25	1000
Trichlorofluoromethane	ND		1000	250	ug/L			10/29/24 22:25	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			10/29/24 22:25	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			10/29/24 22:25	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			10/29/24 22:25	1000
Vinyl acetate	ND		25000	930	ug/L			10/29/24 22:25	1000
Vinyl chloride	ND		1000	500	ug/L			10/29/24 22:25	1000
Xylenes, Total	ND		10000	6000	ug/L			10/29/24 22:25	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/29/24 22:25*	*1000*
Dibromofluoromethane	*98*		*75 - 126*		*10/29/24 22:25*	*1000*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/29/24 22:25*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.3	8.1	ug/L		10/24/24 20:26	10/30/24 15:42	1
Benzenethiol	ND		9.3	9.2	ug/L		10/24/24 20:26	10/30/24 15:42	1
Benzoic acid	ND	*- UJ	28	22	ug/L		10/24/24 20:26	10/30/24 15:42	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 15:42	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/24/24 20:26	10/30/24 15:42	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/24/24 20:26	10/30/24 15:42	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/24/24 20:26	10/30/24 15:42	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/24/24 20:26	10/30/24 15:42	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 15:42	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4-Dimethylphenol	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 15:42	1

Client Sample ID: P58-ROX-101724
Date Collected: 10/17/24 13:10
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/24/24 20:26	10/30/24 15:42	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/24/24 20:26	10/30/24 15:42	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/24/24 20:26	10/30/24 15:42	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 15:42	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/24/24 20:26	10/30/24 15:42	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
Indene	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
Isophorone	ND		9.3	4.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/24/24 20:26	10/30/24 15:42	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/24/24 20:26	10/30/24 15:42	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/24/24 20:26	10/30/24 15:42	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/24/24 20:26	10/30/24 15:42	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/24/24 20:26	10/30/24 15:42	1
Pentachlorophenol	ND		19	11	ug/L		10/24/24 20:26	10/30/24 15:42	1
Phenol	**250**		9.3	3.9	ug/L		10/24/24 20:26	10/31/24 21:03	1
Pyridine	ND	*- UJ	9.3	9.3	ug/L		10/24/24 20:26	10/30/24 15:42	1
Quinoline	ND		9.3	2.2	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/24/24 20:26	10/30/24 15:42	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/24/24 20:26	10/30/24 15:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*21 - 114*	*10/24/24 20:26*	*10/30/24 15:42*	*1*
2-Fluorophenol	*29*		*10 - 105*	*10/24/24 20:26*	*10/30/24 15:42*	*1*
Nitrobenzene-d5	*63*		*16 - 127*	*10/24/24 20:26*	*10/30/24 15:42*	*1*
Phenol-d5	*19*		*10 - 129*	*10/24/24 20:26*	*10/30/24 15:42*	*1*
Terphenyl-d14	*61*		*13 - 150*	*10/24/24 20:26*	*10/30/24 15:42*	*1*
2,4,6-Tribromophenol	*82*		*10 - 150*	*10/24/24 20:26*	*10/30/24 15:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/24/24 12:45	10/25/24 02:04	1
Acenaphthylene	**0.26**		0.20	0.047	ug/L		10/24/24 12:45	10/25/24 02:04	1
Anthracene	**0.10**	**J**	0.20	0.073	ug/L		10/24/24 12:45	10/25/24 02:04	1
Benzo[a]anthracene	**0.12**	**J**	0.20	0.040	ug/L		10/24/24 12:45	10/25/24 02:04	1
Benzo[a]pyrene	**0.14**	**J**	0.20	0.045	ug/L		10/24/24 12:45	10/25/24 02:04	1
Benzo[b]fluoranthene	**0.080**	**J**	0.20	0.042	ug/L		10/24/24 12:45	10/25/24 02:04	1
Benzo[g,h,i]perylene	**0.057**	**J**	0.20	0.052	ug/L		10/24/24 12:45	10/25/24 02:04	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Client Sample ID: P58-ROX-101724
Date Collected: 10/17/24 13:10
Date Received: 10/18/24 09:36

Lab Sample ID: 400-264595-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 12:45	10/25/24 02:04	1
Chrysene	**0.22**		0.20	0.039	ug/L		10/24/24 12:45	10/25/24 02:04	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 02:04	1
Fluoranthene	**0.079**	**J**	0.20	0.032	ug/L		10/24/24 12:45	10/25/24 02:04	1
Fluorene	**1.8**		0.20	0.087	ug/L		10/24/24 12:45	10/25/24 02:04	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:45	10/25/24 02:04	1
Phenanthrene	**1.2**		0.20	0.044	ug/L		10/24/24 12:45	10/25/24 02:04	1
Pyrene	**0.31**		0.20	0.040	ug/L		10/24/24 12:45	10/25/24 02:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*50 - 150*	*10/24/24 12:45*	*10/25/24 02:04*	*1*
Nitrobenzene-d5	*120*		*50 - 150*	*10/24/24 12:45*	*10/25/24 02:04*	*1*
Terphenyl-d14	*82*		*50 - 150*	*10/24/24 12:45*	*10/25/24 02:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	**62**		1.0	0.33	ug/L		10/24/24 12:45	10/25/24 12:52	5
2-Methylnaphthalene	**36**		1.0	0.38	ug/L		10/24/24 12:45	10/25/24 12:52	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		0.032	0.018	ug/L		10/22/24 10:34	10/22/24 20:06	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*63*		*51 - 149*	*10/22/24 10:34*	*10/22/24 20:06*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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
*1	LCS/LCSD 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

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)
400-264595-1	TB-ROX-101724-8260	91	104	95
400-264595-3	P57-ROX-101724-EB	91	102	95
400-264595-4	P57-ROX-101724	94	98	97
400-264595-5	P74-ROX-101724	94	99	96
400-264595-6	P74-ROX-101724-DUP	94	97	95
400-264595-7	P58-ROX-101724	93	98	94
LCS 400-689506/1002	Lab Control Sample	91	100	95
MB 400-689506/5	Method Blank	93	101	92

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)
400-264595-3	P57-ROX-101724-EB	52	31	50	22	66	74
400-264595-4	P57-ROX-101724	52	31	50	21	64	82
400-264595-5	P74-ROX-101724	53	29	51	22	63	79
400-264595-6	P74-ROX-101724-DUP	50	26	48	19	61	75
400-264595-7	P58-ROX-101724	51	29	63	19	61	82
LCS 400-689098/26-A	Lab Control Sample	48	28	51	20	66	73
LCS 400-689098/2-A	Lab Control Sample	55	29	59	21	65	78
LCSD 400-689098/27-A	Lab Control Sample Dup	43	25	44	17	68	68
MB 400-689098/1-A	Method Blank	49	27	56	17	73	73

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264595-3	P57-ROX-101724-EB	76	94	91
400-264595-4	P57-ROX-101724	75	87	85
400-264595-5	P74-ROX-101724	83	97	77
400-264595-6	P74-ROX-101724-DUP	78	98	73
400-264595-7	P58-ROX-101724	86	120	82
LCS 400-689030/2-A	Lab Control Sample	75	95	90
MB 400-689030/1-A	Method Blank	71	94	93

Surrogate Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264595-2	TB-ROX-101724-8011	63
400-264595-3	P57-ROX-101724-EB	70
400-264595-4	P57-ROX-101724	68
400-264595-5	P74-ROX-101724	60
400-264595-6	P74-ROX-101724-DUP	59
400-264595-7	P58-ROX-101724	63
LCS 400-688716/2-A	Lab Control Sample	89
LCSD 400-688716/3-A	Lab Control Sample Dup	94
MB 400-688716/1-A	Method Blank	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264595-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101724-8260
Lab Sample ID: 400-264595-1
Date Collected: 10/17/24 00:00
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689506	10/29/24 18:54	CAR	EET PEN

Client Sample ID: TB-ROX-101724-8011
Lab Sample ID: 400-264595-2
Date Collected: 10/17/24 00:00
Matrix: Water
Date Received: 10/18/24 09:36

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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 17:59	KR	EET PEN

Client Sample ID: P57-ROX-101724-EB
Lab Sample ID: 400-264595-3
Date Collected: 10/17/24 08:00
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689506	10/29/24 19:21	CAR	EET PEN
Total/NA	Prep	3511			30.5 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/25/24 00:04	DS	EET PEN
Total/NA	Prep	3510C			267 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 16:05	S1B	EET PEN
Total/NA	Prep	8011			33.3 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 18:20	KR	EET PEN

Client Sample ID: P57-ROX-101724
Lab Sample ID: 400-264595-4
Date Collected: 10/17/24 09:45
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689506	10/29/24 19:47	CAR	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/25/24 00:34	DS	EET PEN
Total/NA	Prep	3510C			268 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 16:28	S1B	EET PEN
Total/NA	Prep	8011			31.8 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 18:41	KR	EET PEN

Client Sample ID: P74-ROX-101724
Lab Sample ID: 400-264595-5
Date Collected: 10/17/24 11:45
Matrix: Water
Date Received: 10/18/24 09:36

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	689506	10/29/24 21:33	CAR	EET PEN
Total/NA	Prep	3510C			267.8 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 20:15	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264595-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: P74-ROX-101724
Lab Sample ID: 400-264595-5
Date Collected: 10/17/24 11:45
Matrix: Water
Date Received: 10/18/24 09:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3511			30.5 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/25/24 01:04	DS	EET PEN
Total/NA	Prep	3510C			267.8 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 14:57	S1B	EET PEN
Total/NA	Prep	8011			33.4 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 19:02	KR	EET PEN

Client Sample ID: P74-ROX-101724-DUP
Lab Sample ID: 400-264595-6
Date Collected: 10/17/24 11:45
Matrix: Water
Date Received: 10/18/24 09:36

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	689506	10/29/24 21:59	CAR	EET PEN
Total/NA	Prep	3510C			264.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 20:39	VC1	EET PEN
Total/NA	Prep	3511			30.4 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/25/24 01:34	DS	EET PEN
Total/NA	Prep	3510C			264.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 15:19	S1B	EET PEN
Total/NA	Prep	8011			33.1 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 19:45	KR	EET PEN

Client Sample ID: P58-ROX-101724
Lab Sample ID: 400-264595-7
Date Collected: 10/17/24 13:10
Matrix: Water
Date Received: 10/18/24 09:36

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	689506	10/29/24 22:25	CAR	EET PEN
Total/NA	Prep	3510C			268.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689784	10/31/24 21:03	VC1	EET PEN
Total/NA	Prep	3511			30.1 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/25/24 02:04	DS	EET PEN
Total/NA	Prep	3511	DL		30.1 mL	2 mL	689030	10/24/24 12:45	RAW	EET PEN
Total/NA	Analysis	8270E	DL	5			689129	10/25/24 12:52	JAW	EET PEN
Total/NA	Prep	3510C			268.4 mL	1 mL	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 15:42	S1B	EET PEN
Total/NA	Prep	8011			33 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 20:06	KR	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264595-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688716/1-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 15:52	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689030/1-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	3511			30 mL	2 mL	689030	10/24/24 12:44	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 17:32	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689098/1-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	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:12	S1B	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689506/5
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	689506	10/29/24 12:12	CAR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688716/2-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 16:13	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689030/2-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	3511			30 mL	2 mL	689030	10/24/24 12:44	RAW	EET PEN
Total/NA	Analysis	8270E		1			689076	10/24/24 18:02	DS	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264595-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689098/26-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	689098	10/28/24 16:41	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:35	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689098/2-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	689098	10/24/24 20:26	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 12:19	S1B	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689506/1002
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	689506	10/29/24 11:02	CAR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688716/3-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 16:34	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-689098/27-A
Date Collected: N/A
Matrix: Water
Date Received: N/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	689098	10/28/24 16:41	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689608	10/30/24 11:57	S1B	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264595-1

GC/MS VOA

Analysis Batch: 689506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-1	TB-ROX-101724-8260	Total/NA	Water	8260D	
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	8260D	
400-264595-4	P57-ROX-101724	Total/NA	Water	8260D	
400-264595-5	P74-ROX-101724	Total/NA	Water	8260D	
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8260D	
400-264595-7	P58-ROX-101724	Total/NA	Water	8260D	
MB 400-689506/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689506/1002	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 689030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	3511	
400-264595-4	P57-ROX-101724	Total/NA	Water	3511	
400-264595-5	P74-ROX-101724	Total/NA	Water	3511	
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	3511	
400-264595-7	P58-ROX-101724	Total/NA	Water	3511	
400-264595-7 - DL	P58-ROX-101724	Total/NA	Water	3511	
MB 400-689030/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-689030/2-A	Lab Control Sample	Total/NA	Water	3511	

Analysis Batch: 689076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	8270E	689030
400-264595-4	P57-ROX-101724	Total/NA	Water	8270E	689030
400-264595-5	P74-ROX-101724	Total/NA	Water	8270E	689030
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8270E	689030
400-264595-7	P58-ROX-101724	Total/NA	Water	8270E	689030
MB 400-689030/1-A	Method Blank	Total/NA	Water	8270E	689030
LCS 400-689030/2-A	Lab Control Sample	Total/NA	Water	8270E	689030

Prep Batch: 689098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	3510C	
400-264595-4	P57-ROX-101724	Total/NA	Water	3510C	
400-264595-5	P74-ROX-101724	Total/NA	Water	3510C	
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	3510C	
400-264595-7	P58-ROX-101724	Total/NA	Water	3510C	
MB 400-689098/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-689098/26-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-689098/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-689098/27-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 689129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-7 - DL	P58-ROX-101724	Total/NA	Water	8270E	689030

Analysis Batch: 689608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	8270E	689098

GC/MS Semi VOA (Continued)

Analysis Batch: 689608 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-4	P57-ROX-101724	Total/NA	Water	8270E	689098
400-264595-5	P74-ROX-101724	Total/NA	Water	8270E	689098
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8270E	689098
400-264595-7	P58-ROX-101724	Total/NA	Water	8270E	689098
MB 400-689098/1-A	Method Blank	Total/NA	Water	8270E	689098
LCS 400-689098/26-A	Lab Control Sample	Total/NA	Water	8270E	689098
LCS 400-689098/2-A	Lab Control Sample	Total/NA	Water	8270E	689098
LCSD 400-689098/27-A	Lab Control Sample Dup	Total/NA	Water	8270E	689098

Analysis Batch: 689784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-5	P74-ROX-101724	Total/NA	Water	8270E	689098
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8270E	689098
400-264595-7	P58-ROX-101724	Total/NA	Water	8270E	689098

GC Semi VOA

Prep Batch: 688716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-2	TB-ROX-101724-8011	Total/NA	Water	8011	
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	8011	
400-264595-4	P57-ROX-101724	Total/NA	Water	8011	
400-264595-5	P74-ROX-101724	Total/NA	Water	8011	
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8011	
400-264595-7	P58-ROX-101724	Total/NA	Water	8011	
MB 400-688716/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688716/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688716/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264595-2	TB-ROX-101724-8011	Total/NA	Water	8011	688716
400-264595-3	P57-ROX-101724-EB	Total/NA	Water	8011	688716
400-264595-4	P57-ROX-101724	Total/NA	Water	8011	688716
400-264595-5	P74-ROX-101724	Total/NA	Water	8011	688716
400-264595-6	P74-ROX-101724-DUP	Total/NA	Water	8011	688716
400-264595-7	P58-ROX-101724	Total/NA	Water	8011	688716
MB 400-688716/1-A	Method Blank	Total/NA	Water	8011	688716
LCS 400-688716/2-A	Lab Control Sample	Total/NA	Water	8011	688716
LCSD 400-688716/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688716

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

Lab Sample ID: MB 400-689506/5
Matrix: Water
Analysis Batch: 689506

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			10/29/24 12:12	1
Acrolein	ND		20	3.3	ug/L			10/29/24 12:12	1
Acrylonitrile	ND		10	2.8	ug/L			10/29/24 12:12	1
Benzene	ND		1.0	0.24	ug/L			10/29/24 12:12	1
Bromobenzene	ND		1.0	0.54	ug/L			10/29/24 12:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/29/24 12:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Bromoform	ND		5.0	0.25	ug/L			10/29/24 12:12	1
Bromomethane	ND		1.0	0.98	ug/L			10/29/24 12:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/29/24 12:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/29/24 12:12	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/29/24 12:12	1
Chloroethane	ND		1.0	0.76	ug/L			10/29/24 12:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/29/24 12:12	1
Chloroform	ND		1.0	0.90	ug/L			10/29/24 12:12	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/29/24 12:12	1
Chloromethane	ND		1.0	0.40	ug/L			10/29/24 12:12	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/29/24 12:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/29/24 12:12	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/29/24 12:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/29/24 12:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/29/24 12:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/29/24 12:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/29/24 12:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/29/24 12:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/29/24 12:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/29/24 12:12	1
2-Hexanone	ND		25	4.3	ug/L			10/29/24 12:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/29/24 12:12	1
Methylene bromide	ND		5.0	0.22	ug/L			10/29/24 12:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/29/24 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/29/24 12:12	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/29/24 12:12	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
Naphthalene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/29/24 12:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/29/24 12:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/29/24 12:12	1
o-Xylene	ND		5.0	3.0	ug/L			10/29/24 12:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/29/24 12:12	1

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

Lab Sample ID: MB 400-689506/5
Matrix: Water
Analysis Batch: 689506

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			10/29/24 12:12	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/29/24 12:12	1
Styrene	ND		1.0	1.0	ug/L			10/29/24 12:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/29/24 12:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/29/24 12:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/29/24 12:12	1
Toluene	ND		1.0	0.90	ug/L			10/29/24 12:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/29/24 12:12	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/29/24 12:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/29/24 12:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/29/24 12:12	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/29/24 12:12	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/29/24 12:12	1
Trichloroethene	ND		1.0	0.15	ug/L			10/29/24 12:12	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/29/24 12:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/29/24 12:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/29/24 12:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/29/24 12:12	1
Vinyl acetate	ND		25	0.93	ug/L			10/29/24 12:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/29/24 12:12	1
Xylenes, Total	ND		10	6.0	ug/L			10/29/24 12:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 130*		*10/29/24 12:12*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/29/24 12:12*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*10/29/24 12:12*	*1*

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	184		ug/L		92	43 - 150
Acrolein	500	612		ug/L		122	38 - 150
Acrylonitrile	500	474		ug/L		95	64 - 142
Benzene	50.0	48.3		ug/L		97	70 - 130
Bromobenzene	50.0	47.3		ug/L		95	70 - 132
Bromochloromethane	50.0	50.2		ug/L		100	70 - 130
Bromodichloromethane	50.0	45.1		ug/L		90	67 - 133
Bromoform	50.0	42.1		ug/L		84	57 - 140
Bromomethane	50.0	35.3		ug/L		71	10 - 150
2-Butanone (MEK)	200	205		ug/L		102	61 - 145
Carbon disulfide	50.0	45.7		ug/L		91	61 - 137
Carbon tetrachloride	50.0	44.7		ug/L		89	61 - 137
Chlorobenzene	50.0	47.8		ug/L		96	70 - 130
Chloroethane	50.0	46.1		ug/L		92	55 - 141
2-Chloroethyl vinyl ether	50.0	30.3		ug/L		61	10 - 150

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

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	46.4		ug/L		93	69 - 130
1-Chlorohexane	50.0	47.9		ug/L		96	69 - 130
Chloromethane	50.0	54.4		ug/L		109	58 - 137
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	68 - 130
cis-1,3-Dichloropropene	50.0	45.5		ug/L		91	69 - 132
Dibromochloromethane	50.0	45.5		ug/L		91	67 - 135
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	67 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	43.7		ug/L		87	41 - 146
1,1-Dichloroethane	50.0	46.7		ug/L		93	70 - 130
1,2-Dichloroethane	50.0	43.4		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	47.6		ug/L		95	63 - 134
1,2-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	45.5		ug/L		91	70 - 130
2,2-Dichloropropane	50.0	41.6		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	46.5		ug/L		93	70 - 130
Ethylbenzene	50.0	46.9		ug/L		94	70 - 130
Ethyl methacrylate	50.0	41.5		ug/L		83	68 - 130
Hexachlorobutadiene	50.0	53.0		ug/L		106	53 - 140
2-Hexanone	200	193		ug/L		96	65 - 137
Isopropylbenzene	50.0	47.6		ug/L		95	70 - 130
Methylene bromide	50.0	45.5		ug/L		91	70 - 130
Methylene Chloride	50.0	51.6		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	173		ug/L		87	69 - 138
Methyl tert-butyl ether	50.0	41.6		ug/L		83	66 - 130
m-Xylene & p-Xylene	50.0	46.5		ug/L		93	70 - 130
Naphthalene	50.0	42.1		ug/L		84	47 - 149
n-Butylbenzene	50.0	48.7		ug/L		97	67 - 130
N-Propylbenzene	50.0	50.2		ug/L		100	70 - 130
o-Chlorotoluene	50.0	46.7		ug/L		93	70 - 130
o-Xylene	50.0	46.3		ug/L		93	70 - 130
p-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	48.9		ug/L		98	65 - 130
sec-Butylbenzene	50.0	48.8		ug/L		98	66 - 130
Styrene	50.0	47.6		ug/L		95	70 - 130
tert-Butylbenzene	50.0	44.1		ug/L		88	64 - 139
1,1,1,2-Tetrachloroethane	50.0	46.2		ug/L		92	67 - 131
1,1,2,2-Tetrachloroethane	50.0	41.8		ug/L		84	70 - 131
Tetrachloroethene	50.0	48.5		ug/L		97	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	43.1		ug/L		86	63 - 130
1,2,3-Trichlorobenzene	50.0	47.5		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	49.9		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	44.4		ug/L		89	68 - 130
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	50.0	47.9		ug/L		96	65 - 138

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

Lab Sample ID: LCS 400-689506/1002
Matrix: Water
Analysis Batch: 689506

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	50.0	40.9		ug/L		82	70 - 130
1,2,4-Trimethylbenzene	50.0	47.8		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	46.3		ug/L		93	69 - 130
Vinyl acetate	100	94.8		ug/L		95	26 - 150
Vinyl chloride	50.0	51.0		ug/L		102	59 - 136
Xylenes, Total	100	92.8		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: MB 400-689098/1-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzenethiol	ND		10	9.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzoic acid	ND		30	24	ug/L		10/24/24 20:26	10/30/24 11:12	1
Benzyl alcohol	ND		10	7.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chloroaniline	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Chlorophenol	ND		10	4.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dibenzofuran	ND		10	4.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Diethyl phthalate	ND		10	4.4	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/24/24 20:26	10/30/24 11:12	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
1,4-Dioxane	ND		10	4.3	ug/L		10/24/24 20:26	10/30/24 11:12	1

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

Lab Sample ID: MB 400-689098/1-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/24/24 20:26	10/30/24 11:12	1
Hexachloroethane	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Indene	ND		10	3.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
Isophorone	ND		10	5.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Methylphenol	ND		10	3.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Nitroaniline	ND		10	5.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
3-Nitroaniline	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Nitroaniline	ND		10	4.1	ug/L		10/24/24 20:26	10/30/24 11:12	1
Nitrobenzene	ND		10	4.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
2-Nitrophenol	ND		10	4.6	ug/L		10/24/24 20:26	10/30/24 11:12	1
4-Nitrophenol	ND		10	3.3	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/24/24 20:26	10/30/24 11:12	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/24/24 20:26	10/30/24 11:12	1
Pentachlorophenol	ND		20	12	ug/L		10/24/24 20:26	10/30/24 11:12	1
Phenol	ND		10	4.2	ug/L		10/24/24 20:26	10/30/24 11:12	1
Pyridine	ND		10	10	ug/L		10/24/24 20:26	10/30/24 11:12	1
Quinoline	ND		10	2.4	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/24/24 20:26	10/30/24 11:12	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/24/24 20:26	10/30/24 11:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*49*		*21 - 114*	*10/24/24 20:26*	*10/30/24 11:12*	*1*
2-Fluorophenol	*27*		*10 - 105*	*10/24/24 20:26*	*10/30/24 11:12*	*1*
Nitrobenzene-d5	*56*		*16 - 127*	*10/24/24 20:26*	*10/30/24 11:12*	*1*
Phenol-d5	*17*		*10 - 129*	*10/24/24 20:26*	*10/30/24 11:12*	*1*
Terphenyl-d14	*73*		*13 - 150*	*10/24/24 20:26*	*10/30/24 11:12*	*1*
2,4,6-Tribromophenol	*73*		*10 - 150*	*10/24/24 20:26*	*10/30/24 11:12*	*1*

Lab Sample ID: LCS 400-689098/26-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzenethiol			120	88.7		ug/L		74	10 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*48*		*21 - 114*
2-Fluorophenol	*28*		*10 - 105*
Nitrobenzene-d5	*51*		*16 - 127*
Phenol-d5	*20*		*10 - 129*
Terphenyl-d14	*66*		*13 - 150*
2,4,6-Tribromophenol	*73*		*10 - 150*

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

Lab Sample ID: LCS 400-689098/2-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	25.5		ug/L		21	10 - 127
Benzoic acid	493	78.0	*-	ug/L		16	19 - 126
Benzyl alcohol	120	52.7		ug/L		44	17 - 109
Bis(2-chloroethoxy)methane	120	69.2		ug/L		58	24 - 125
Bis(2-chloroethyl)ether	120	61.8		ug/L		51	10 - 121
bis (2-chloroisopropyl) ether	120	76.7		ug/L		64	14 - 123
Bis(2-ethylhexyl) phthalate	120	84.1		ug/L		70	16 - 150
4-Bromophenyl phenyl ether	120	76.7		ug/L		64	17 - 150
Butyl benzyl phthalate	120	85.6		ug/L		71	21 - 150
4-Chloroaniline	120	56.1		ug/L		47	10 - 124
4-Chloro-3-methylphenol	120	79.4		ug/L		66	37 - 131
2-Chloronaphthalene	120	73.5		ug/L		61	24 - 132
2-Chlorophenol	120	70.8		ug/L		59	27 - 124
4-Chlorophenyl phenyl ether	120	77.3		ug/L		64	27 - 147
Dibenz[a,h]acridine	120	101		ug/L		85	40 - 140
Dibenzofuran	120	79.4		ug/L		66	30 - 135
3,3'-Dichlorobenzidine	240	186		ug/L		78	10 - 150
2,4-Dichlorophenol	120	75.7		ug/L		63	33 - 132
Diethyl phthalate	120	91.8		ug/L		77	37 - 145
2,4-Dimethylphenol	120	134		ug/L		112	38 - 132
Dimethyl phthalate	120	80.5		ug/L		67	32 - 137
Di-n-butyl phthalate	120	95.5		ug/L		80	27 - 150
4,6-Dinitro-ortho-cresol	240	233		ug/L		97	14 - 150
2,4-Dinitrophenol	240	255		ug/L		106	15 - 150
2,4-Dinitrotoluene	120	79.6		ug/L		66	35 - 136
2,6-Dinitrotoluene	120	77.4		ug/L		65	29 - 140
Di-n-octyl phthalate	120	81.9		ug/L		68	26 - 150
1,4-Dioxane	120	22.5		ug/L		19	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	82.3		ug/L		69	23 - 138
Hexachlorobenzene	120	86.2		ug/L		72	10 - 150
Hexachlorocyclopentadiene	120	231	*+	ug/L		192	10 - 124
Hexachloroethane	120	66.0		ug/L		55	10 - 127
Indene	120	86.4		ug/L		72	18 - 150
Isophorone	120	69.0		ug/L		57	28 - 127
2-Methylphenol	120	70.6		ug/L		59	34 - 124
3 & 4 Methylphenol	120	64.1		ug/L		53	32 - 122
2-Nitroaniline	120	76.0		ug/L		63	24 - 139
3-Nitroaniline	120	58.5		ug/L		49	10 - 128
4-Nitroaniline	120	80.5		ug/L		67	28 - 118
Nitrobenzene	120	62.0		ug/L		52	29 - 120
2-Nitrophenol	120	81.2		ug/L		68	25 - 148
4-Nitrophenol	240	101		ug/L		42	12 - 129
N-Nitrosodimethylamine	120	31.0		ug/L		26	10 - 115
N-Nitrosodi-n-propylamine	120	83.3		ug/L		69	24 - 142
N-Nitrosodiphenylamine	119	76.6		ug/L		64	29 - 138
Pentachlorophenol	240	172		ug/L		72	19 - 150
Phenol	120	28.6		ug/L		24	11 - 95
Pyridine	240	ND	*-	ug/L		4	10 - 82

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

Lab Sample ID: LCS 400-689098/2-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689098

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Quinoline			120	48.0		ug/L		40	10 - 141		
2,4,5-Trichlorophenol			120	81.0		ug/L		68	30 - 144		
2,4,6-Trichlorophenol			120	77.5		ug/L		65	27 - 147		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*21 - 114*
2-Fluorophenol	*29*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*21*		*10 - 129*
Terphenyl-d14	*65*		*13 - 150*
2,4,6-Tribromophenol	*78*		*10 - 150*

Lab Sample ID: LCSD 400-689098/27-A
Matrix: Water
Analysis Batch: 689608

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689098

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	76.6		ug/L		64	10 - 140	NaN	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*43*		*21 - 114*
2-Fluorophenol	*25*		*10 - 105*
Nitrobenzene-d5	*44*		*16 - 127*
Phenol-d5	*17*		*10 - 129*
Terphenyl-d14	*68*		*13 - 150*
2,4,6-Tribromophenol	*68*		*10 - 150*

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

Lab Sample ID: MB 400-689030/1-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/24/24 12:44	10/24/24 17:32	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 12:44	10/24/24 17:32	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 12:44	10/24/24 17:32	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 12:44	10/24/24 17:32	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 12:44	10/24/24 17:32	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 12:44	10/24/24 17:32	1
Fluorene	ND		0.20	0.087	ug/L		10/24/24 12:44	10/24/24 17:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 12:44	10/24/24 17:32	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/24/24 12:44	10/24/24 17:32	1

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

Lab Sample ID: MB 400-689030/1-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/24/24 12:44	10/24/24 17:32	1
Phenanthrene	ND		0.20	0.044	ug/L		10/24/24 12:44	10/24/24 17:32	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 12:44	10/24/24 17:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*50 - 150*	*10/24/24 12:44*	*10/24/24 17:32*	*1*
Nitrobenzene-d5	*94*		*50 - 150*	*10/24/24 12:44*	*10/24/24 17:32*	*1*
Terphenyl-d14	*93*		*50 - 150*	*10/24/24 12:44*	*10/24/24 17:32*	*1*

Lab Sample ID: LCS 400-689030/2-A
Matrix: Water
Analysis Batch: 689076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.56		ug/L		77	50 - 150
Acenaphthylene	3.34	2.74		ug/L		82	50 - 150
Anthracene	3.34	2.57		ug/L		77	50 - 150
Benzo[a]anthracene	3.34	2.74		ug/L		82	50 - 150
Benzo[a]pyrene	3.34	2.82		ug/L		85	50 - 150
Benzo[b]fluoranthene	3.34	3.03		ug/L		91	50 - 150
Benzo[g,h,i]perylene	3.34	2.91		ug/L		87	50 - 150
Benzo[k]fluoranthene	3.34	2.83		ug/L		85	50 - 150
Chrysene	3.34	2.81		ug/L		84	50 - 150
Dibenz(a,h)anthracene	3.34	2.83		ug/L		85	50 - 150
Fluoranthene	3.34	2.55		ug/L		77	50 - 150
Fluorene	3.34	2.49		ug/L		75	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	3.07		ug/L		92	50 - 150
1-Methylnaphthalene	3.34	2.32		ug/L		69	50 - 150
2-Methylnaphthalene	3.34	2.03		ug/L		61	50 - 150
Phenanthrene	3.34	2.61		ug/L		78	50 - 150
Pyrene	3.34	2.59		ug/L		78	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*50 - 150*
Nitrobenzene-d5	*95*		*50 - 150*
Terphenyl-d14	*90*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688716/1-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688716

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		10/22/24 10:34	10/22/24 15:52	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/22/24 10:34	10/22/24 15:52	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-688716/1-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688716

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		51 - 149	10/22/24 10:34	10/22/24 15:52	1

Lab Sample ID: LCS 400-688716/2-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0865		ug/L		86	60 - 140		
1,2-Dibromoethane			0.100	0.0788	p	ug/L		79	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	89		51 - 149

Lab Sample ID: LCSD 400-688716/3-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688716

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0926		ug/L		92	60 - 140	7	30
1,2-Dibromoethane			0.100	0.0873	*1	ug/L		87	60 - 140	32	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		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 (_____)

Lab Vendor # 1364589 (TestAmerica)

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: 10/17/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA — State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger - please see special instructions

PHONE NO.: 314-802-1207

E-MAIL: melissa.remiger@aecom.com

AECOM Other ID: Roxana 4Q24 Groundwater

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

400-264595 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-101724-8260	10/17/2024	0000	Water	2					2	X			
	TB-ROX-101724-8011	10/17/2024	0000	Water	2					2		X		
	P57-ROX-101724-EB	10/17/2024	0800	Water	6			4		10	X	X	X	X
	P57-ROX-101724	10/17/2024	0945	Water	6			4		10	X	X	X	X
	P74-ROX-101724	10/17/2024	1145	Water	6			4		10	X	X	X	X
	P74-ROX-101724-DUP	10/17/2024	1145	Water	6			4		10	X	X	X	X
	P58-ROX-101724	10/17/2024	1310	Water	6			4		10	X	X	X	X

Relinquished by: (Signature) *COURTNEY MCDAVID*	Received by: (Signature) FEDEX: 7252 0547 1839, 7252 0547 1828	Date: 10/17/2024	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) BF	Date: 10/18/24	Time: 936

Version: 19Sept24

CUSTODY SEALS: 1599966, 1599967, 1599968, 1599969

3.3°C
2.3°C IR11

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Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264595-1

Login Number: 264595
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3°C, 2.3°C IR-11
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have 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
Job ID: 400-264595-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

Laboratory Report Reviewed: 400-264600-1-Rev.1

Site Name: Roxana

Prepared By and Date: Andrei Niculau 11/28/2024

Event Reviewed: 4th Quarter 2024 Data Review

Reviewed By and Date: Delaine Austin 12/05/2024

Stage 2A Validation

Item Reviewed	Acceptable Criteria	Quality Condition			Comments
		Pass	Fail[1]	N/A	
Chain of Custody and Sample Receipt	Samples received in good condition, consistent with the COC, and within the required temperature range.	X			The cooler receipt form did not indicate any problems. 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.
Holding Times	Analyses were performed within holding time.	X			
Surrogate	Surrogate recoveries met acceptance criteria.	X			
Field/Laboratory Duplicate	Laboratory duplicates met laboratory control limits, and field duplicates met the applicable criteria.	X			
Matrix Spike	MS recoveries met acceptance criteria.		X		

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW4-ROX-101824 MS/MSD	VOCs	Acetone	**35/36**	1	43-150/30
MW4-ROX-101824 MS/MSD	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW4-ROX-101824 MS/MSD	VOCs	2-Hexanone	**58/56**	4	65-140/30

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.

Acetone, 2-chloroethyl vinyl ether, and 2-hexanone in sample MW4-ROX-101824 were qualified as estimated (UJ).

Laboratory Control Spike	LCS was performed at the required frequency and LCS recoveries met acceptance criteria.		X		

Stage 2A Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD/RPD Criteria
LCS/LCSD 400-689203/2-A/3-A	SVOCs	Aniline	49/**32**	**42**	10-127/40
LCS/LCSD 400-689203/2-A/3-A	SVOCs	2,4-Dimethylphenol	**146/146**	0	38-132/40
LCS/LCSD 400-689203/2-A/3-A	SVOCs	Hexachlorocyclopentadiene	**174/171**	2	10-124/40
LCS/LCSD 400-689203/2-A/3-A	SVOCs	Pyridine	27/**15**	**54**	10-82/40
LCS/LCSD 400-688716/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	79/87	**32**	60-140/30

Analytical data that required qualification based on LCS/LCSD data are referenced 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. Analytical data associated with LCS/LCSD RPD alone outside evaluation criteria did not require qualification. Equipment blanks are quality control samples that do not require qualification.

Method 8270E (SVOCs)
Professional judgment was used to qualify, however not reject, data associated with pyridine below evaluation criteria; pyridine has been identified as a poor-performing analyte under Method 8270.

Aniline and pyridine in samples MW4-ROX-101824, MW25-ROX-101824, and MW25-ROX-101824 were qualified as estimated (UJ).

Trip/Field/Equipment Blank	Target analytes were not detected in the trip/field/equipment blank.	X			
Laboratory Blank	Target analytes were not detected in the laboratory blank.	X			
Detection Limits[2]	No results were reported as non-detect at elevated detection limits.	X			Samples analyzed did not require dilution.
Reporting/Other	No other quality issues were noted that would impact the usability of this data set.	X			The laboratory report was revised on November 11, 2024, to remove false positive results.
Usability	No results qualified as unusable.	X			
Historical	Sample results were within 3 standard deviations from historical mean.			X	Not evaluated.

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
Initial Calibration	The initial calibration met the criteria outlined in the associated method. This includes, but is not limited to: • Meeting the minimum standards for average, linear, and non-linear regression • Acceptable relative standard deviation • Acceptable correlation coefficient/correlation criteria			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Tuning/Instrument Performance Checks	A satisfactory tuning event was conducted at the beginning of every 12 hours of sample analysis, or the specified frequency per method, and ion relative abundances were within acceptance limits.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Initial Calibration Verification/Continuing Calibration Verification	ICVs/CCVs were analyzed for each analyte at the specified frequency and appropriate concentrations. **Organics** The associated percent difference (%D) was within method criteria. **Inorganics** The ICV and CCV were recovered within the method low-level acceptance range of 70-130% and the medium/high acceptance range of 90-110% as applicable to the method		X		
Method 8260D (VOCs) The continuing calibration verification (CCV) for chloromethane, vinyl chloride, chloroethane, trichlorofluoromethane, vinyl acetate, and 2-chloroethyl vinyl ether were outside evaluation criteria, biased low. The associated results for samples MW4-ROX-101824, MW25-ROX-101824, and MW25-ROX-101824-DUP were qualified as estimated (UJ).					

Stage 2B, 3, 4 Validation					
Item Reviewed	**Acceptable Criteria**	**Quality Condition**			**Comments**
		Pass	**Fail[1]**	**N/A**	
2-Chloroethyl vinyl ether in sample MW4-ROX-101824 was previously qualified due to MS/MSD recovery outside evaluation criteria; no further qualification is required.					
Initial and Continuing Calibration Blanks	ICBs/CCBs were analyzed at the specified frequency and no target analytes were present.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Interference Check Standard (Metals Only)	The interference check standard (ICS) AB solutions were analyzed at the proper frequency. The target analytes were recovered within the acceptance range of 85-115% in the ICS AB solution. Interferent elements were not present in the samples at concentrations greater than those in the ICSs.			X	
Internal Standards	The recoveries for the internal standards in field samples were within the applicable acceptance limits.	X			
Second Column/Detector Confirmation Results	The reported results agreed with an RPD ≤40% between the primary and confirmation columns.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Recalculation/Re-quantification	10% of selected samples, batch QC, instrument QC, and the initial calibration were recalculated and appropriate instrument response data was reviewed.			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.
Target Compound Identification	The instrument printouts were reviewed. Results obtained for quality control check samples (calibration standards and laboratory control samples) indicate that instrument signals reported were due to the target analytes. Reported signal intensities and mass spectral data agreed with reported concentrations for all samples and agree with the criteria in the analytical method			X	Evaluation not required for Stage 2A + IS/ICV/CCV hybrid validation.

[1] A failed condition must be elevated to the PM and project chemist for resolution.
[2] Non-detect results reported at elevated detection limits should be evaluated by the end user of the data with respect to project objectives.

Data is reviewed electronically and confirmed against the PDF. Criteria is evaluated against the most current version of National Functional Guidelines, method requirements, and the project Quality Assurance Project Plan, as applicable.

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

ANALYTICAL REPORT

PREPARED FOR

Attn: Melissa Remiger
AECOM
411 Broadway Ave
South Roxana, Illinois 62087

Generated 11/11/2024 12:57:50 PM Revision 1

JOB DESCRIPTION

ROXANA QUARTERLY GW

JOB NUMBER

400-264600-1

Reviewed 11/28/2024
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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Revision 1

Authorized for release by
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Job Narrative
400-264600-1

Revision
Report revised to unreport a false positive. Supersedes report dated 11-1-2024.

Receipt
The samples were received on 10/19/2024 8:03 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 0.0º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 400-689626 recovered outside acceptance criteria, low biased, for 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane and 2,2-Dichloropropane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analytes, the data are reported.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689626 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689647 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 continuing calibration verification (CCV) associated with batch 400-689647 recovered outside acceptance criteria, low biased, for 2-Chloroethyl vinyl ether, Chloroethane, Chloromethane, Trichlorofluoromethane, Vinyl acetate and Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260D: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: MW4-ROX-101824 (400-264600-4), MW25-ROX-101824 (400-264600-5) and MW25-ROX-101824-DUP (400-264600-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile which are acid-labile compound that degrades in an acidic medium.

Method 8260D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-689647 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 400-689647 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270E: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-689203 and analytical batch 400-689342 recovered outside control limits for the following analytes: 2,4-Dimethylphenol and Hexachlorocyclopentadiene. 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 400-689342 recovered above the upper control limit for 2,4-Dimethylphenol and Hexachlorocyclopentadiene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-689203 and analytical batch 400-689342 recovered outside control limits for the following analytes: Pyridine and Aniline.

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 RPD of the laboratory control sample duplicate (LCSD) for preparation batch 400-688716 and analytical batch 400-688762 recovered outside control limits for the following analytes: 1,2-Dibromoethane.

Job ID: 400-264600-1 (Continued) Eurofins Pensacola

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

Sample Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-264600-1	TB-ROX-101824-8260	Water	10/18/24 00:00	10/19/24 08:03
400-264600-2	TB-ROX-101824-8011	Water	10/18/24 00:00	10/19/24 08:03
400-264600-3	MW4-ROX-101824-EB	Water	10/18/24 07:45	10/19/24 08:03
400-264600-4	MW4-ROX-101824	Water	10/18/24 09:00	10/19/24 08:03
400-264600-5	MW25-ROX-101824	Water	10/18/24 10:00	10/19/24 08:03
400-264600-6	MW25-ROX-101824-DUP	Water	10/18/24 10:00	10/19/24 08:03

Detection Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: TB-ROX-101824-8260 — Lab Sample ID: 400-264600-1

No Detections.

Client Sample ID: TB-ROX-101824-8011 — Lab Sample ID: 400-264600-2

No Detections.

Client Sample ID: MW4-ROX-101824-EB — Lab Sample ID: 400-264600-3

No Detections.

Client Sample ID: MW4-ROX-101824 — Lab Sample ID: 400-264600-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.64	J	1.0	0.24	ug/L	1		8260D	Total/NA
4-Nitrophenol	3.6	J	9.3	3.1	ug/L	1		8270E	Total/NA

Client Sample ID: MW25-ROX-101824 — Lab Sample ID: 400-264600-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	43		1.0	0.24	ug/L	1		8260D	Total/NA
tert-Butylbenzene	1.1		1.0	0.63	ug/L	1		8260D	Total/NA

Client Sample ID: MW25-ROX-101824-DUP — Lab Sample ID: 400-264600-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	39		1.0	0.24	ug/L	1		8260D	Total/NA
tert-Butylbenzene	0.75	J	1.0	0.63	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: TB-ROX-101824-8260
Date Collected: 10/18/24 00:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-1
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			10/30/24 15:03	1
Acrolein	ND		20	3.3	ug/L			10/30/24 15:03	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 15:03	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 15:03	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 15:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 15:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 15:03	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 15:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 15:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 15:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 15:03	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 15:03	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 15:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 15:03	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 15:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 15:03	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 15:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 15:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 15:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 15:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 15:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 15:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 15:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 15:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 15:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 15:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 15:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 15:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 15:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 15:03	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 15:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 15:03	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 15:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 15:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 15:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 15:03	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 15:03	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 15:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 15:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 15:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 15:03	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 15:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 15:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 15:03	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: TB-ROX-101824-8260
Date Collected: 10/18/24 00:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-1
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			10/30/24 15:03	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 15:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 15:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 15:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 15:03	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 15:03	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 15:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 15:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 15:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 15:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 15:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 15:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 15:03	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 15:03	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 15:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 15:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 15:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 15:03	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 15:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 15:03	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 15:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/30/24 15:03*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*10/30/24 15:03*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*10/30/24 15:03*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: TB-ROX-101824-8011
Date Collected: 10/18/24 00:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-2
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		10/22/24 10:34	10/22/24 20:27	1
1,2-Dibromoethane	ND	*1	0.022	0.017	ug/L		10/22/24 10:34	10/22/24 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*64*		*51 - 149*	*10/22/24 10:34*	*10/22/24 20:27*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: MW4-ROX-101824-EB
Date Collected: 10/18/24 07:45
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-3
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			10/30/24 15:29	1
Acrolein	ND		20	3.3	ug/L			10/30/24 15:29	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 15:29	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 15:29	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 15:29	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 15:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 15:29	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 15:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 15:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 15:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 15:29	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 15:29	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 15:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 15:29	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 15:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 15:29	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 15:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 15:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 15:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 15:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 15:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 15:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 15:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 15:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 15:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 15:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 15:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 15:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 15:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 15:29	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 15:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 15:29	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 15:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 15:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 15:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 15:29	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 15:29	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 15:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 15:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 15:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 15:29	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 15:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 15:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 15:29	1

Client Sample ID: MW4-ROX-101824-EB
Date Collected: 10/18/24 07:45
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-3
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			10/30/24 15:29	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 15:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 15:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 15:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 15:29	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 15:29	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 15:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 15:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 15:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 15:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 15:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 15:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 15:29	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 15:29	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 15:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 15:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 15:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 15:29	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 15:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 15:29	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/30/24 15:29*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*10/30/24 15:29*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/30/24 15:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1	9.3	8.1	ug/L		10/25/24 15:16	10/28/24 15:36	1
Benzenethiol	ND		9.3	9.2	ug/L		10/25/24 15:16	10/28/24 15:36	1
Benzoic acid	ND		28	22	ug/L		10/25/24 15:16	10/28/24 15:36	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/25/24 15:16	10/28/24 15:36	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 15:36	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/25/24 15:16	10/28/24 15:36	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/25/24 15:16	10/28/24 15:36	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 15:36	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 15:36	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Chlorophenyl phenyl ether	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 15:36	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/25/24 15:16	10/28/24 15:36	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 15:36	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 15:36	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4-Dimethylphenol	ND	*+	9.3	4.9	ug/L		10/25/24 15:16	10/28/24 15:36	1

Client Sample ID: MW4-ROX-101824-EB
Date Collected: 10/18/24 07:45
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 15:36	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4-Dinitrotoluene	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 15:36	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/25/24 15:16	10/28/24 15:36	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 15:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 15:36	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/25/24 15:16	10/28/24 15:36	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/25/24 15:16	10/28/24 15:36	1
Hexachloroethane	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 15:36	1
Indene	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 15:36	1
Isophorone	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 15:36	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/25/24 15:16	10/28/24 15:36	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/25/24 15:16	10/28/24 15:36	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 15:36	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:36	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 15:36	1
N-Nitrosodimethylamine	ND		9.3	2.1	ug/L		10/25/24 15:16	10/28/24 15:36	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
N-Nitrosodiphenylamine	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 15:36	1
Pentachlorophenol	ND		19	11	ug/L		10/25/24 15:16	10/28/24 15:36	1
Phenol	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 15:36	1
Pyridine	ND	*1	9.3	9.3	ug/L		10/25/24 15:16	10/28/24 15:36	1
Quinoline	ND		9.3	2.2	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 15:36	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*21 - 114*	*10/25/24 15:16*	*10/28/24 15:36*	*1*
2-Fluorophenol	*41*		*10 - 105*	*10/25/24 15:16*	*10/28/24 15:36*	*1*
Nitrobenzene-d5	*66*		*16 - 127*	*10/25/24 15:16*	*10/28/24 15:36*	*1*
Phenol-d5	*27*		*10 - 129*	*10/25/24 15:16*	*10/28/24 15:36*	*1*
Terphenyl-d14	*86*		*13 - 150*	*10/25/24 15:16*	*10/28/24 15:36*	*1*
2,4,6-Tribromophenol	*81*		*10 - 150*	*10/25/24 15:16*	*10/28/24 15:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 17:19	10/25/24 19:55	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 17:19	10/25/24 19:55	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 17:19	10/25/24 19:55	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 17:19	10/25/24 19:55	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 17:19	10/25/24 19:55	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 17:19	10/25/24 19:55	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 17:19	10/25/24 19:55	1

Client Sample ID: MW4-ROX-101824-EB
Lab Sample ID: 400-264600-3
Date Collected: 10/18/24 07:45
Matrix: Water
Date Received: 10/19/24 08:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 17:19	10/25/24 19:55	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 19:55	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 17:19	10/25/24 19:55	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 17:19	10/25/24 19:55	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 17:19	10/25/24 19:55	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 17:19	10/25/24 19:55	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/24/24 17:19	10/25/24 19:55	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/24/24 17:19	10/25/24 19:55	1
Phenanthrene	ND		0.20	0.044	ug/L		10/24/24 17:19	10/25/24 19:55	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 17:19	10/25/24 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*50 - 150*	*10/24/24 17:19*	*10/25/24 19:55*	*1*
Nitrobenzene-d5	*108*		*50 - 150*	*10/24/24 17:19*	*10/25/24 19:55*	*1*
Terphenyl-d14	*102*		*50 - 150*	*10/24/24 17:19*	*10/25/24 19:55*	*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		10/22/24 10:34	10/22/24 20:48	1
1,2-Dibromoethane	ND	*1	0.021	0.016	ug/L		10/22/24 10:34	10/22/24 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*65*		*51 - 149*	*10/22/24 10:34*	*10/22/24 20:48*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: MW4-ROX-101824
Date Collected: 10/18/24 09:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	F1 UJ	25	10	ug/L			10/30/24 18:54	1
Acrolein	ND		20	3.3	ug/L			10/30/24 18:54	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 18:54	1
Benzene	**0.64**	**J**	1.0	0.24	ug/L			10/30/24 18:54	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 18:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 18:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 18:54	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 18:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 18:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 18:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 18:54	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 18:54	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/30/24 18:54	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			10/30/24 18:54	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 18:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 18:54	1
Chloromethane	ND	UJ	1.0	0.40	ug/L			10/30/24 18:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 18:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 18:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 18:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 18:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 18:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 18:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 18:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 18:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 18:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 18:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 18:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 18:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 18:54	1
2-Hexanone	ND	F1 UJ	25	4.3	ug/L			10/30/24 18:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 18:54	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 18:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 18:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 18:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 18:54	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 18:54	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 18:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 18:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 18:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 18:54	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 18:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 18:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 18:54	1

Client Sample ID: MW4-ROX-101824
Date Collected: 10/18/24 09:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-4
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			10/30/24 18:54	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 18:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 18:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 18:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 18:54	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 18:54	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 18:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 18:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 18:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 18:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 18:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 18:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 18:54	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 18:54	1
Trichlorofluoromethane	ND	UJ	1.0	0.25	ug/L			10/30/24 18:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 18:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 18:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 18:54	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/30/24 18:54	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			10/30/24 18:54	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/30/24 18:54*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*10/30/24 18:54*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*10/30/24 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1 UJ	9.3	8.1	ug/L		10/25/24 15:16	10/28/24 15:59	1
Benzenethiol	ND		9.3	9.2	ug/L		10/25/24 15:16	10/28/24 15:59	1
Benzoic acid	ND		28	22	ug/L		10/25/24 15:16	10/28/24 15:59	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/25/24 15:16	10/28/24 15:59	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 15:59	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/25/24 15:16	10/28/24 15:59	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 15:59	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 15:59	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/25/24 15:16	10/28/24 15:59	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 15:59	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/25/24 15:16	10/28/24 15:59	1

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: MW4-ROX-101824
Date Collected: 10/18/24 09:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 15:59	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 15:59	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/25/24 15:16	10/28/24 15:59	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 15:59	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/25/24 15:16	10/28/24 15:59	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 15:59	1
Indene	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
Isophorone	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 15:59	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
2-Nitroaniline	ND		9.3	4.6	ug/L		10/25/24 15:16	10/28/24 15:59	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 15:59	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
4-Nitrophenol	**3.6**	**J**	9.3	3.1	ug/L		10/25/24 15:16	10/28/24 15:59	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/25/24 15:16	10/28/24 15:59	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 15:59	1
Pentachlorophenol	ND		19	11	ug/L		10/25/24 15:16	10/28/24 15:59	1
Phenol	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 15:59	1
Pyridine	ND	*1 UJ	9.3	9.3	ug/L		10/25/24 15:16	10/28/24 15:59	1
Quinoline	ND		9.3	2.2	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 15:59	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*21 - 114*	*10/25/24 15:16*	*10/28/24 15:59*	*1*
2-Fluorophenol	*38*		*10 - 105*	*10/25/24 15:16*	*10/28/24 15:59*	*1*
Nitrobenzene-d5	*62*		*16 - 127*	*10/25/24 15:16*	*10/28/24 15:59*	*1*
Phenol-d5	*22*		*10 - 129*	*10/25/24 15:16*	*10/28/24 15:59*	*1*
Terphenyl-d14	*83*		*13 - 150*	*10/25/24 15:16*	*10/28/24 15:59*	*1*
2,4,6-Tribromophenol	*87*		*10 - 150*	*10/25/24 15:16*	*10/28/24 15:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.083	ug/L		10/24/24 17:19	10/25/24 20:25	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 17:19	10/25/24 20:25	1
Anthracene	ND		0.20	0.071	ug/L		10/24/24 17:19	10/25/24 20:25	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:25	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 17:19	10/25/24 20:25	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 17:19	10/25/24 20:25	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 17:19	10/25/24 20:25	1

Client Sample ID: MW4-ROX-101824
Lab Sample ID: 400-264600-4
Date Collected: 10/18/24 09:00
Matrix: Water
Date Received: 10/19/24 08:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:25	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 17:19	10/25/24 20:25	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 17:19	10/25/24 20:25	1
Fluoranthene	ND		0.20	0.031	ug/L		10/24/24 17:19	10/25/24 20:25	1
Fluorene	ND		0.20	0.085	ug/L		10/24/24 17:19	10/25/24 20:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.031	ug/L		10/24/24 17:19	10/25/24 20:25	1
1-Methylnaphthalene	ND		0.20	0.064	ug/L		10/24/24 17:19	10/25/24 20:25	1
2-Methylnaphthalene	ND		0.20	0.075	ug/L		10/24/24 17:19	10/25/24 20:25	1
Phenanthrene	ND		0.20	0.043	ug/L		10/24/24 17:19	10/25/24 20:25	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*50 - 150*	*10/24/24 17:19*	*10/25/24 20:25*	*1*
Nitrobenzene-d5	*110*		*50 - 150*	*10/24/24 17:19*	*10/25/24 20:25*	*1*
Terphenyl-d14	*95*		*50 - 150*	*10/24/24 17:19*	*10/25/24 20:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.033	0.019	ug/L		10/22/24 10:34	10/22/24 21:09	1
1,2-Dibromoethane	ND	*1	0.022	0.017	ug/L		10/22/24 10:34	10/22/24 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*58*		*51 - 149*	*10/22/24 10:34*	*10/22/24 21:09*	*1*

Client Sample ID: MW25-ROX-101824

Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-5

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			10/30/24 21:06	1
Acrolein	ND		20	3.3	ug/L			10/30/24 21:06	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 21:06	1
Benzene	**43**		1.0	0.24	ug/L			10/30/24 21:06	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 21:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 21:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 21:06	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 21:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 21:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 21:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 21:06	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 21:06	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/30/24 21:06	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			10/30/24 21:06	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 21:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 21:06	1
Chloromethane	ND	UJ	1.0	0.40	ug/L			10/30/24 21:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 21:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 21:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 21:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 21:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 21:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 21:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 21:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 21:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 21:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 21:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 21:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 21:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 21:06	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 21:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 21:06	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 21:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 21:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 21:06	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 21:06	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 21:06	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 21:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 21:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 21:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 21:06	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 21:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 21:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 21:06	1

Client Sample ID: MW25-ROX-101824
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-5
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			10/30/24 21:06	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 21:06	1
tert-Butylbenzene	**1.1**		1.0	0.63	ug/L			10/30/24 21:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 21:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 21:06	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 21:06	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 21:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 21:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 21:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 21:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 21:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 21:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 21:06	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 21:06	1
Trichlorofluoromethane	ND	UJ	1.0	0.25	ug/L			10/30/24 21:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 21:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 21:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 21:06	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/30/24 21:06	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			10/30/24 21:06	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 130*		*10/30/24 21:06*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/30/24 21:06*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 21:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1 UJ	9.3	8.1	ug/L		10/25/24 15:16	10/28/24 16:24	1
Benzenethiol	ND		9.3	9.2	ug/L		10/25/24 15:16	10/28/24 16:24	1
Benzoic acid	ND		28	22	ug/L		10/25/24 15:16	10/28/24 16:24	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/25/24 15:16	10/28/24 16:24	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 16:24	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/25/24 15:16	10/28/24 16:24	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/25/24 15:16	10/29/24 10:24	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/25/24 15:16	10/29/24 10:24	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:24	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 16:24	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 16:24	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 16:24	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 16:24	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/25/24 15:16	10/29/24 10:24	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 16:24	1
3,3'-Dichlorobenzidine	ND		10	10	ug/L		10/25/24 15:16	10/29/24 10:24	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:24	1

Client Sample ID: MW25-ROX-101824
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 16:24	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 16:24	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/25/24 15:16	10/29/24 10:24	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 16:24	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/25/24 15:16	10/28/24 16:24	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:24	1
Indene	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
Isophorone	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:24	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
2-Nitroaniline	ND		9.3	4.7	ug/L		10/25/24 15:16	10/28/24 16:24	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:24	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 16:24	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:24	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 16:24	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/25/24 15:16	10/28/24 16:24	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 16:24	1
Pentachlorophenol	ND		19	11	ug/L		10/25/24 15:16	10/28/24 16:24	1
Phenol	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 16:24	1
Pyridine	ND	*1 UJ	9.3	9.3	ug/L		10/25/24 15:16	10/28/24 16:24	1
Quinoline	ND		9.3	2.2	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 16:24	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*21 - 114*	*10/25/24 15:16*	*10/29/24 10:24*	*1*
2-Fluorophenol	*47*		*10 - 105*	*10/25/24 15:16*	*10/29/24 10:24*	*1*
Nitrobenzene-d5	*99*		*16 - 127*	*10/25/24 15:16*	*10/29/24 10:24*	*1*
Phenol-d5	*38*		*10 - 129*	*10/25/24 15:16*	*10/29/24 10:24*	*1*
Terphenyl-d14	*104*		*13 - 150*	*10/25/24 15:16*	*10/29/24 10:24*	*1*
2,4,6-Tribromophenol	*112*		*10 - 150*	*10/25/24 15:16*	*10/29/24 10:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/24/24 18:08	10/25/24 21:25	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 18:08	10/25/24 21:25	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 18:08	10/25/24 21:25	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 18:08	10/25/24 21:25	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 18:08	10/25/24 21:25	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 18:08	10/25/24 21:25	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 18:08	10/25/24 21:25	1

Client Sample ID: MW25-ROX-101824
Lab Sample ID: 400-264600-5
Date Collected: 10/18/24 10:00
Matrix: Water
Date Received: 10/19/24 08:03

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 18:08	10/25/24 21:25	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 18:08	10/25/24 21:25	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 18:08	10/25/24 21:25	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 18:08	10/25/24 21:25	1
Fluorene	ND		0.20	0.087	ug/L		10/24/24 18:08	10/25/24 21:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 18:08	10/25/24 21:25	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/24/24 18:08	10/25/24 21:25	1
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/24/24 18:08	10/25/24 21:25	1
Phenanthrene	ND		0.20	0.044	ug/L		10/24/24 18:08	10/25/24 21:25	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 18:08	10/25/24 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*50 - 150*	*10/24/24 18:08*	*10/25/24 21:25*	*1*
Nitrobenzene-d5	*99*		*50 - 150*	*10/24/24 18:08*	*10/25/24 21:25*	*1*
Terphenyl-d14	*92*		*50 - 150*	*10/24/24 18:08*	*10/25/24 21:25*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.037	0.021	ug/L		10/22/24 10:34	10/22/24 21:30	1
1,2-Dibromoethane	ND	*1	0.025	0.019	ug/L		10/22/24 10:34	10/22/24 21:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*61*		*51 - 149*	*10/22/24 10:34*	*10/22/24 21:30*	*1*

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Client Sample ID: MW25-ROX-101824-DUP
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-6
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			10/30/24 21:32	1
Acrolein	ND		20	3.3	ug/L			10/30/24 21:32	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 21:32	1
Benzene	**39**		1.0	0.24	ug/L			10/30/24 21:32	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 21:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 21:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 21:32	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 21:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 21:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 21:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 21:32	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 21:32	1
Chloroethane	ND	UJ	1.0	0.76	ug/L			10/30/24 21:32	1
2-Chloroethyl vinyl ether	ND	UJ	5.0	2.0	ug/L			10/30/24 21:32	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 21:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 21:32	1
Chloromethane	ND	UJ	1.0	0.40	ug/L			10/30/24 21:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 21:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 21:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 21:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 21:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 21:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 21:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 21:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 21:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 21:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 21:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 21:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 21:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 21:32	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 21:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 21:32	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 21:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 21:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 21:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 21:32	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 21:32	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 21:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 21:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 21:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 21:32	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 21:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 21:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 21:32	1

Client Sample ID: MW25-ROX-101824-DUP
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-6
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			10/30/24 21:32	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 21:32	1
tert-Butylbenzene	**0.75**	**J**	1.0	0.63	ug/L			10/30/24 21:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 21:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 21:32	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 21:32	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 21:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 21:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 21:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 21:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 21:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 21:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 21:32	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 21:32	1
Trichlorofluoromethane	ND	UJ	1.0	0.25	ug/L			10/30/24 21:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 21:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 21:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 21:32	1
Vinyl acetate	ND	UJ	25	0.93	ug/L			10/30/24 21:32	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			10/30/24 21:32	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/30/24 21:32*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/30/24 21:32*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 21:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	*1 UJ	9.3	8.1	ug/L		10/25/24 15:16	10/28/24 16:50	1
Benzenethiol	ND		9.3	9.2	ug/L		10/25/24 15:16	10/28/24 16:50	1
Benzoic acid	ND		28	22	ug/L		10/25/24 15:16	10/28/24 16:50	1
Benzyl alcohol	ND		9.3	6.8	ug/L		10/25/24 15:16	10/28/24 16:50	1
Bis(2-chloroethoxy)methane	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
Bis(2-chloroethyl)ether	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 16:50	1
bis (2-chloroisopropyl) ether	ND		9.3	1.7	ug/L		10/25/24 15:16	10/28/24 16:50	1
Bis(2-ethylhexyl) phthalate	ND		9.3	8.3	ug/L		10/25/24 15:16	10/29/24 10:49	1
4-Bromophenyl phenyl ether	ND		9.3	8.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
Butyl benzyl phthalate	ND		9.3	5.4	ug/L		10/25/24 15:16	10/29/24 10:49	1
4-Chloroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:50	1
4-Chloro-3-methylphenol	ND		9.3	4.9	ug/L		10/25/24 15:16	10/28/24 16:50	1
2-Chloronaphthalene	ND		9.3	3.5	ug/L		10/25/24 15:16	10/28/24 16:50	1
2-Chlorophenol	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 16:50	1
4-Chlorophenyl phenyl ether	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 16:50	1
Dibenz[a,h]acridine	ND		9.3	2.6	ug/L		10/25/24 15:16	10/28/24 16:50	1
Dibenzofuran	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 16:50	1
3,3'-Dichlorobenzidine	ND	UJ	10	10	ug/L		10/25/24 15:16	10/29/24 10:49	1
2,4-Dichlorophenol	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
Diethyl phthalate	ND		9.3	4.1	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,4-Dimethylphenol	ND	*+	9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:50	1

Client Sample ID: MW25-ROX-101824-DUP
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 16:50	1
Di-n-butyl phthalate	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
4,6-Dinitro-ortho-cresol	ND		9.3	9.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,4-Dinitrophenol	ND		28	4.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,4-Dinitrotoluene	ND		9.3	4.7	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,6-Dinitrotoluene	ND		9.3	3.6	ug/L		10/25/24 15:16	10/28/24 16:50	1
Di-n-octyl phthalate	ND		9.3	5.6	ug/L		10/25/24 15:16	10/29/24 10:49	1
1,4-Dioxane	ND		9.3	4.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 16:50	1
Hexachlorobenzene	ND		9.3	9.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
Hexachlorocyclopentadiene	ND	*+	19	4.2	ug/L		10/25/24 15:16	10/28/24 16:50	1
Hexachloroethane	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:50	1
Indene	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
Isophorone	ND		9.3	4.8	ug/L		10/25/24 15:16	10/28/24 16:50	1
2-Methylphenol	ND		9.3	3.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
3 & 4 Methylphenol	ND		19	4.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
2-Nitroaniline	ND		9.3	4.6	ug/L		10/25/24 15:16	10/28/24 16:50	1
3-Nitroaniline	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:50	1
4-Nitroaniline	ND		9.3	3.8	ug/L		10/25/24 15:16	10/28/24 16:50	1
Nitrobenzene	ND		9.3	4.4	ug/L		10/25/24 15:16	10/28/24 16:50	1
2-Nitrophenol	ND		9.3	4.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
4-Nitrophenol	ND		9.3	3.1	ug/L		10/25/24 15:16	10/28/24 16:50	1
N-Nitrosodimethylamine	ND		9.3	2.0	ug/L		10/25/24 15:16	10/28/24 16:50	1
N-Nitrosodi-n-propylamine	ND		9.3	2.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
N-Nitrosodiphenylamine	ND		9.3	3.4	ug/L		10/25/24 15:16	10/28/24 16:50	1
Pentachlorophenol	ND		19	11	ug/L		10/25/24 15:16	10/28/24 16:50	1
Phenol	ND		9.3	3.9	ug/L		10/25/24 15:16	10/28/24 16:50	1
Pyridine	ND	*1 UJ	9.3	9.3	ug/L		10/25/24 15:16	10/28/24 16:50	1
Quinoline	ND		9.3	2.2	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,4,5-Trichlorophenol	ND		9.3	3.7	ug/L		10/25/24 15:16	10/28/24 16:50	1
2,4,6-Trichlorophenol	ND		9.3	3.3	ug/L		10/25/24 15:16	10/28/24 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*21 - 114*	*10/25/24 15:16*	*10/29/24 10:49*	*1*
2-Fluorophenol	*48*		*10 - 105*	*10/25/24 15:16*	*10/29/24 10:49*	*1*
Nitrobenzene-d5	*95*		*16 - 127*	*10/25/24 15:16*	*10/29/24 10:49*	*1*
Phenol-d5	*40*		*10 - 129*	*10/25/24 15:16*	*10/29/24 10:49*	*1*
Terphenyl-d14	*116*		*13 - 150*	*10/25/24 15:16*	*10/29/24 10:49*	*1*
2,4,6-Tribromophenol	*116*		*10 - 150*	*10/25/24 15:16*	*10/29/24 10:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.084	ug/L		10/24/24 17:19	10/25/24 20:55	1
Acenaphthylene	ND		0.20	0.046	ug/L		10/24/24 17:19	10/25/24 20:55	1
Anthracene	ND		0.20	0.072	ug/L		10/24/24 17:19	10/25/24 20:55	1
Benzo[a]anthracene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:55	1
Benzo[a]pyrene	ND		0.20	0.044	ug/L		10/24/24 17:19	10/25/24 20:55	1
Benzo[b]fluoranthene	ND		0.20	0.041	ug/L		10/24/24 17:19	10/25/24 20:55	1
Benzo[g,h,i]perylene	ND		0.20	0.051	ug/L		10/24/24 17:19	10/25/24 20:55	1

Client Sample ID: MW25-ROX-101824-DUP
Date Collected: 10/18/24 10:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:55	1
Chrysene	ND		0.20	0.038	ug/L		10/24/24 17:19	10/25/24 20:55	1
Dibenz(a,h)anthracene	ND		0.20	0.043	ug/L		10/24/24 17:19	10/25/24 20:55	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 17:19	10/25/24 20:55	1
Fluorene	ND		0.20	0.086	ug/L		10/24/24 17:19	10/25/24 20:55	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 17:19	10/25/24 20:55	1
1-Methylnaphthalene	ND		0.20	0.065	ug/L		10/24/24 17:19	10/25/24 20:55	1
2-Methylnaphthalene	ND		0.20	0.076	ug/L		10/24/24 17:19	10/25/24 20:55	1
Phenanthrene	ND		0.20	0.043	ug/L		10/24/24 17:19	10/25/24 20:55	1
Pyrene	ND		0.20	0.039	ug/L		10/24/24 17:19	10/25/24 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*50 - 150*	*10/24/24 17:19*	*10/25/24 20:55*	*1*
Nitrobenzene-d5	*101*		*50 - 150*	*10/24/24 17:19*	*10/25/24 20:55*	*1*
Terphenyl-d14	*91*		*50 - 150*	*10/24/24 17:19*	*10/25/24 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		0.033	0.019	ug/L		10/22/24 10:34	10/22/24 21:51	1
1,2-Dibromoethane	ND	*1	0.022	0.017	ug/L		10/22/24 10:34	10/22/24 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*52*		*51 - 149*	*10/22/24 10:34*	*10/22/24 21:51*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, 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
*1	LCS/LCSD 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
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

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)
400-264600-1	TB-ROX-101824-8260	94	104	93
400-264600-3	MW4-ROX-101824-EB	92	102	94
400-264600-4	MW4-ROX-101824	94	102	96
400-264600-4 MS	MW4-ROX-101824	91	100	94
400-264600-4 MSD	MW4-ROX-101824	92	101	96
400-264600-5	MW25-ROX-101824	95	101	95
400-264600-6	MW25-ROX-101824-DUP	94	101	95
LCS 400-689626/1002	Lab Control Sample	89	99	95
LCS 400-689647/1002	Lab Control Sample	91	98	95
MB 400-689626/5	Method Blank	92	101	95
MB 400-689647/5	Method Blank	94	103	94

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)
400-264600-3	MW4-ROX-101824-EB	67	41	66	27	86	81
400-264600-4	MW4-ROX-101824	68	38	62	22	83	87
400-264600-5	MW25-ROX-101824	89	47	99	38	104	112
400-264600-6	MW25-ROX-101824-DUP	90	48	95	40	116	116
LCS 400-689203/2-A	Lab Control Sample	77	46	79	34	92	100
LCS 400-689203/4-A	Lab Control Sample	64	39	63	25	97	84
LCSD 400-689203/3-A	Lab Control Sample Dup	74	46	78	34	86	95
LCSD 400-689203/5-A	Lab Control Sample Dup	61	33	59	20	89	79
MB 400-689203/1-A	Method Blank	55	28	53	16	87	77

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
400-264600-3	MW4-ROX-101824-EB	106	108	102
400-264600-4	MW4-ROX-101824	107	110	95
400-264600-5	MW25-ROX-101824	99	99	92
400-264600-6	MW25-ROX-101824-DUP	97	101	91

Surrogate Summary

Client: AECOM
Job ID: 400-264600-1
Project/Site: ROXANA QUARTERLY GW

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)
LCS 400-689035/2-A	Lab Control Sample	76	108	81
LCSD 400-689035/3-A	Lab Control Sample Dup	74	105	76
MB 400-689035/1-A	Method Blank	80	115	84

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5
TPHL = Terphenyl-d14

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-264600-2	TB-ROX-101824-8011	64
400-264600-3	MW4-ROX-101824-EB	65
400-264600-4	MW4-ROX-101824	58
400-264600-5	MW25-ROX-101824	61
400-264600-6	MW25-ROX-101824-DUP	52
LCS 400-688716/2-A	Lab Control Sample	89
LCSD 400-688716/3-A	Lab Control Sample Dup	94
MB 400-688716/1-A	Method Blank	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC-MS/MS)	SW846	EET PEN
8270E	Semivolatile Organic Compounds (GC/MS)	SW846	EET PEN
8011	EDB and DBCP in Water by Microextraction	EPA	EET PEN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET PEN
3511	Microextraction of Organic Compounds	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
Job ID: 400-264600-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: TB-ROX-101824-8260
Lab Sample ID: 400-264600-1
Date Collected: 10/18/24 00:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689626	10/30/24 15:03	IMC	EET PEN

Client Sample ID: TB-ROX-101824-8011
Lab Sample ID: 400-264600-2
Date Collected: 10/18/24 00:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			31.3 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 20:27	KR	EET PEN

Client Sample ID: MW4-ROX-101824-EB
Lab Sample ID: 400-264600-3
Date Collected: 10/18/24 07:45
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689626	10/30/24 15:29	IMC	EET PEN
Total/NA	Prep	3510C			268 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 15:36	VC1	EET PEN
Total/NA	Prep	3511			30.2 mL	2 mL	689035	10/24/24 17:19	RAW	EET PEN
Total/NA	Analysis	8270E		1			689129	10/25/24 19:55	JAW	EET PEN
Total/NA	Prep	8011			32.9 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 20:48	KR	EET PEN

Client Sample ID: MW4-ROX-101824
Lab Sample ID: 400-264600-4
Date Collected: 10/18/24 09:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689647	10/30/24 18:54	IMC	EET PEN
Total/NA	Prep	3510C			269.2 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 15:59	VC1	EET PEN
Total/NA	Prep	3511			30.7 mL	2 mL	689035	10/24/24 17:19	RAW	EET PEN
Total/NA	Analysis	8270E		1			689129	10/25/24 20:25	JAW	EET PEN
Total/NA	Prep	8011			31.4 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 21:09	KR	EET PEN

Client Sample ID: MW25-ROX-101824
Lab Sample ID: 400-264600-5
Date Collected: 10/18/24 10:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689647	10/30/24 21:06	IMC	EET PEN
Total/NA	Prep	3510C			268.8 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689489	10/29/24 10:24	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264600-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW25-ROX-101824
Lab Sample ID: 400-264600-5
Date Collected: 10/18/24 10:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			268.8 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 16:24	VC1	EET PEN
Total/NA	Prep	3511			30.1 mL	2 mL	689035	10/24/24 18:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			689129	10/25/24 21:25	JAW	EET PEN
Total/NA	Prep	8011			28.2 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 21:30	KR	EET PEN

Client Sample ID: MW25-ROX-101824-DUP
Lab Sample ID: 400-264600-6
Date Collected: 10/18/24 10:00
Matrix: Water
Date Received: 10/19/24 08:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689647	10/30/24 21:32	IMC	EET PEN
Total/NA	Prep	3510C			269 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689489	10/29/24 10:49	VC1	EET PEN
Total/NA	Prep	3510C			269 mL	1 mL	689203	10/25/24 15:16	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 16:50	VC1	EET PEN
Total/NA	Prep	3511			30.4 mL	2 mL	689035	10/24/24 17:19	RAW	EET PEN
Total/NA	Analysis	8270E		1			689129	10/25/24 20:55	JAW	EET PEN
Total/NA	Prep	8011			31.4 mL	35 mL	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 21:51	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-688716/1-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 15:52	KR	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689035/1-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	3511			30 mL	2 mL	689035	10/24/24 13:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			689094	10/25/24 02:52	DS	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689203/1-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	689203	10/25/24 15:13	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 13:32	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264600-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689626/5
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	689626	10/30/24 11:31	IMC	EET PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-689647/5
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	689647	10/30/24 18:01	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-688716/2-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 16:13	KR	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689035/2-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	3511			30 mL	2 mL	689035	10/24/24 13:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			689094	10/25/24 03:22	DS	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689203/2-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	689203	10/25/24 15:13	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 13:57	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689203/4-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	689203	10/25/24 15:13	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 14:46	VC1	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689626/1002
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	689626	10/30/24 10:07	IMC	EET PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-689647/1002
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	689647	10/30/24 16:56	IMC	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-688716/3-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	688716	10/22/24 10:34	KR	EET PEN
Total/NA	Analysis	8011		1			688762	10/22/24 16:34	KR	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-689035/3-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	3511			30 mL	2 mL	689035	10/24/24 13:08	RAW	EET PEN
Total/NA	Analysis	8270E		1			689094	10/25/24 03:52	DS	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-689203/3-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	689203	10/25/24 15:13	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 14:21	VC1	EET PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-689203/5-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	689203	10/25/24 15:13	DPB	EET PEN
Total/NA	Analysis	8270E		1	0.4 mL	0.4 mL	689342	10/28/24 15:11	VC1	EET PEN

Lab Chronicle

Client: AECOM
Job ID: 400-264600-1
Project/Site: ROXANA QUARTERLY GW

Client Sample ID: MW4-ROX-101824
Date Collected: 10/18/24 09:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-4 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689647	10/30/24 19:21	IMC	EET PEN

Client Sample ID: MW4-ROX-101824
Date Collected: 10/18/24 09:00
Date Received: 10/19/24 08:03

Lab Sample ID: 400-264600-4 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	5 mL	5 mL	689647	10/30/24 19:47	IMC	EET PEN

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

QC Association Summary

Client: AECOM
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-264600-1

GC/MS VOA

Analysis Batch: 689626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-1	TB-ROX-101824-8260	Total/NA	Water	8260D	
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	8260D	
MB 400-689626/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689626/1002	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 689647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-4	MW4-ROX-101824	Total/NA	Water	8260D	
400-264600-5	MW25-ROX-101824	Total/NA	Water	8260D	
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8260D	
MB 400-689647/5	Method Blank	Total/NA	Water	8260D	
LCS 400-689647/1002	Lab Control Sample	Total/NA	Water	8260D	
400-264600-4 MS	MW4-ROX-101824	Total/NA	Water	8260D	
400-264600-4 MSD	MW4-ROX-101824	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 689035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	3511	
400-264600-4	MW4-ROX-101824	Total/NA	Water	3511	
400-264600-5	MW25-ROX-101824	Total/NA	Water	3511	
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	3511	
MB 400-689035/1-A	Method Blank	Total/NA	Water	3511	
LCS 400-689035/2-A	Lab Control Sample	Total/NA	Water	3511	
LCSD 400-689035/3-A	Lab Control Sample Dup	Total/NA	Water	3511	

Analysis Batch: 689094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-689035/1-A	Method Blank	Total/NA	Water	8270E	689035
LCS 400-689035/2-A	Lab Control Sample	Total/NA	Water	8270E	689035
LCSD 400-689035/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	689035

Analysis Batch: 689129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	8270E	689035
400-264600-4	MW4-ROX-101824	Total/NA	Water	8270E	689035
400-264600-5	MW25-ROX-101824	Total/NA	Water	8270E	689035
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8270E	689035

Prep Batch: 689203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	3510C	
400-264600-4	MW4-ROX-101824	Total/NA	Water	3510C	
400-264600-5	MW25-ROX-101824	Total/NA	Water	3510C	
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	3510C	
MB 400-689203/1-A	Method Blank	Total/NA	Water	3510C	
LCS 400-689203/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 400-689203/4-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 400-689203/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	
LCSD 400-689203/5-A	Lab Control Sample Dup	Total/NA	Water	3510C	

GC/MS Semi VOA

Analysis Batch: 689342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	8270E	689203
400-264600-4	MW4-ROX-101824	Total/NA	Water	8270E	689203
400-264600-5	MW25-ROX-101824	Total/NA	Water	8270E	689203
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8270E	689203
MB 400-689203/1-A	Method Blank	Total/NA	Water	8270E	689203
LCS 400-689203/2-A	Lab Control Sample	Total/NA	Water	8270E	689203
LCS 400-689203/4-A	Lab Control Sample	Total/NA	Water	8270E	689203
LCSD 400-689203/3-A	Lab Control Sample Dup	Total/NA	Water	8270E	689203
LCSD 400-689203/5-A	Lab Control Sample Dup	Total/NA	Water	8270E	689203

Analysis Batch: 689489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-5	MW25-ROX-101824	Total/NA	Water	8270E	689203
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8270E	689203

GC Semi VOA

Prep Batch: 688716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-2	TB-ROX-101824-8011	Total/NA	Water	8011	
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	8011	
400-264600-4	MW4-ROX-101824	Total/NA	Water	8011	
400-264600-5	MW25-ROX-101824	Total/NA	Water	8011	
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8011	
MB 400-688716/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-688716/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-688716/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 688762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-264600-2	TB-ROX-101824-8011	Total/NA	Water	8011	688716
400-264600-3	MW4-ROX-101824-EB	Total/NA	Water	8011	688716
400-264600-4	MW4-ROX-101824	Total/NA	Water	8011	688716
400-264600-5	MW25-ROX-101824	Total/NA	Water	8011	688716
400-264600-6	MW25-ROX-101824-DUP	Total/NA	Water	8011	688716
MB 400-688716/1-A	Method Blank	Total/NA	Water	8011	688716
LCS 400-688716/2-A	Lab Control Sample	Total/NA	Water	8011	688716
LCSD 400-688716/3-A	Lab Control Sample Dup	Total/NA	Water	8011	688716

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

Lab Sample ID: MB 400-689626/5
Matrix: Water
Analysis Batch: 689626

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			10/30/24 11:31	1
Acrolein	ND		20	3.3	ug/L			10/30/24 11:31	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 11:31	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 11:31	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 11:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 11:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 11:31	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 11:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 11:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 11:31	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 11:31	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 11:31	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 11:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 11:31	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 11:31	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 11:31	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 11:31	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 11:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 11:31	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 11:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 11:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 11:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 11:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 11:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 11:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 11:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
1,1-Dichloropropene	ND		1.0	0.090	ug/L			10/30/24 11:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 11:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 11:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 11:31	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 11:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 11:31	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 11:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 11:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 11:31	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 11:31	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 11:31	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 11:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 11:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 11:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 11:31	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 11:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 11:31	1

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

Lab Sample ID: MB 400-689626/5
Matrix: Water
Analysis Batch: 689626

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			10/30/24 11:31	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/30/24 11:31	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 11:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 11:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 11:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 11:31	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 11:31	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 11:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 11:31	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 11:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 11:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 11:31	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 11:31	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 11:31	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 11:31	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 11:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 11:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 11:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 11:31	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 11:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 11:31	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 11:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 130*		*10/30/24 11:31*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*10/30/24 11:31*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*10/30/24 11:31*	*1*

Lab Sample ID: LCS 400-689626/1002
Matrix: Water
Analysis Batch: 689626

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	187		ug/L		93	43 - 150
Acrolein	500	562		ug/L		112	38 - 150
Acrylonitrile	500	468		ug/L		94	64 - 142
Benzene	50.0	46.2		ug/L		92	70 - 130
Bromobenzene	50.0	44.4		ug/L		89	70 - 132
Bromochloromethane	50.0	49.2		ug/L		98	70 - 130
Bromodichloromethane	50.0	43.5		ug/L		87	67 - 133
Bromoform	50.0	40.9		ug/L		82	57 - 140
Bromomethane	50.0	39.0		ug/L		78	10 - 150
2-Butanone (MEK)	200	204		ug/L		102	61 - 145
Carbon disulfide	50.0	43.1		ug/L		86	61 - 137
Carbon tetrachloride	50.0	42.7		ug/L		85	61 - 137
Chlorobenzene	50.0	45.9		ug/L		92	70 - 130
Chloroethane	50.0	40.1		ug/L		80	55 - 141
2-Chloroethyl vinyl ether	50.0	27.1		ug/L		54	10 - 150

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

Lab Sample ID: LCS 400-689626/1002
Matrix: Water
Analysis Batch: 689626

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	50.0	44.2		ug/L		88	69 - 130
1-Chlorohexane	50.0	46.0		ug/L		92	69 - 130
Chloromethane	50.0	47.1		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	44.0		ug/L		88	68 - 130
cis-1,3-Dichloropropene	50.0	43.8		ug/L		88	69 - 132
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
1,2-Dichlorobenzene	50.0	46.7		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	46.8		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
Dichlorodifluoromethane	50.0	38.4		ug/L		77	41 - 146
1,1-Dichloroethane	50.0	44.8		ug/L		90	70 - 130
1,2-Dichloroethane	50.0	41.1		ug/L		82	69 - 130
1,1-Dichloroethene	50.0	44.9		ug/L		90	63 - 134
1,2-Dichloropropane	50.0	46.4		ug/L		93	70 - 130
1,3-Dichloropropane	50.0	43.7		ug/L		87	70 - 130
2,2-Dichloropropane	50.0	39.6		ug/L		79	52 - 135
1,1-Dichloropropene	50.0	44.1		ug/L		88	70 - 130
Ethylbenzene	50.0	44.8		ug/L		90	70 - 130
Ethyl methacrylate	50.0	40.2		ug/L		80	68 - 130
Hexachlorobutadiene	50.0	50.3		ug/L		101	53 - 140
2-Hexanone	200	195		ug/L		97	65 - 137
Isopropylbenzene	50.0	45.3		ug/L		91	70 - 130
Methylene bromide	50.0	44.3		ug/L		89	70 - 130
Methylene Chloride	50.0	48.9		ug/L		98	66 - 135
4-Methyl-2-pentanone (MIBK)	200	175		ug/L		88	69 - 138
Methyl tert-butyl ether	50.0	40.1		ug/L		80	66 - 130
m-Xylene & p-Xylene	50.0	44.1		ug/L		88	70 - 130
Naphthalene	50.0	40.5		ug/L		81	47 - 149
n-Butylbenzene	50.0	45.6		ug/L		91	67 - 130
N-Propylbenzene	50.0	47.7		ug/L		95	70 - 130
o-Chlorotoluene	50.0	42.9		ug/L		86	70 - 130
o-Xylene	50.0	44.1		ug/L		88	70 - 130
p-Chlorotoluene	50.0	42.9		ug/L		86	70 - 130
p-Isopropyltoluene	50.0	45.8		ug/L		92	65 - 130
sec-Butylbenzene	50.0	45.4		ug/L		91	66 - 130
Styrene	50.0	46.3		ug/L		93	70 - 130
tert-Butylbenzene	50.0	41.3		ug/L		83	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.7		ug/L		89	67 - 131
1,1,2,2-Tetrachloroethane	50.0	39.6		ug/L		79	70 - 131
Tetrachloroethene	50.0	47.0		ug/L		94	65 - 130
Toluene	50.0	44.2		ug/L		88	70 - 130
trans-1,2-Dichloroethene	50.0	46.2		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	41.3		ug/L		83	63 - 130
1,2,3-Trichlorobenzene	50.0	44.7		ug/L		89	60 - 138
1,2,4-Trichlorobenzene	50.0	47.2		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	42.3		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	44.4		ug/L		89	70 - 130
Trichloroethene	50.0	46.6		ug/L		93	70 - 130
Trichlorofluoromethane	50.0	43.7		ug/L		87	65 - 138

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

Lab Sample ID: LCS 400-689626/1002
Matrix: Water
Analysis Batch: 689626

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	39.3		ug/L		79	70 - 130
1,2,4-Trimethylbenzene	50.0	44.4		ug/L		89	70 - 130
1,3,5-Trimethylbenzene	50.0	43.4		ug/L		87	69 - 130
Vinyl acetate	100	87.6		ug/L		88	26 - 150
Vinyl chloride	50.0	44.7		ug/L		89	59 - 136
Xylenes, Total	100	88.2		ug/L		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*72 - 130*
Dibromofluoromethane	*99*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: MB 400-689647/5
Matrix: Water
Analysis Batch: 689647

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			10/30/24 18:01	1
Acrolein	ND		20	3.3	ug/L			10/30/24 18:01	1
Acrylonitrile	ND		10	2.8	ug/L			10/30/24 18:01	1
Benzene	ND		1.0	0.24	ug/L			10/30/24 18:01	1
Bromobenzene	ND		1.0	0.54	ug/L			10/30/24 18:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			10/30/24 18:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			10/30/24 18:01	1
Bromoform	ND		5.0	0.25	ug/L			10/30/24 18:01	1
Bromomethane	ND		1.0	0.98	ug/L			10/30/24 18:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			10/30/24 18:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			10/30/24 18:01	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			10/30/24 18:01	1
Chlorobenzene	ND		1.0	0.42	ug/L			10/30/24 18:01	1
Chloroethane	ND		1.0	0.76	ug/L			10/30/24 18:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			10/30/24 18:01	1
Chloroform	ND		1.0	0.90	ug/L			10/30/24 18:01	1
1-Chlorohexane	ND		1.0	0.32	ug/L			10/30/24 18:01	1
Chloromethane	ND		1.0	0.40	ug/L			10/30/24 18:01	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			10/30/24 18:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			10/30/24 18:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			10/30/24 18:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			10/30/24 18:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			10/30/24 18:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			10/30/24 18:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			10/30/24 18:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			10/30/24 18:01	1
1,2-Dichloroethane	ND		1.0	0.55	ug/L			10/30/24 18:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 18:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			10/30/24 18:01	1

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

Lab Sample ID: MB 400-689647/5
Matrix: Water
Analysis Batch: 689647

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			10/30/24 18:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			10/30/24 18:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			10/30/24 18:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			10/30/24 18:01	1
2-Hexanone	ND		25	4.3	ug/L			10/30/24 18:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			10/30/24 18:01	1
Methylene bromide	ND		5.0	0.22	ug/L			10/30/24 18:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			10/30/24 18:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			10/30/24 18:01	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			10/30/24 18:01	1
m-Xylene & p-Xylene	ND		5.0	3.0	ug/L			10/30/24 18:01	1
Naphthalene	ND		5.0	3.0	ug/L			10/30/24 18:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			10/30/24 18:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/30/24 18:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			10/30/24 18:01	1
o-Xylene	ND		5.0	3.0	ug/L			10/30/24 18:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			10/30/24 18:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			10/30/24 18:01	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			10/30/24 18:01	1
Styrene	ND		1.0	1.0	ug/L			10/30/24 18:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			10/30/24 18:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.38	ug/L			10/30/24 18:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			10/30/24 18:01	1
Tetrachloroethene	ND		1.0	0.33	ug/L			10/30/24 18:01	1
Toluene	ND		1.0	0.90	ug/L			10/30/24 18:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			10/30/24 18:01	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			10/30/24 18:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.90	ug/L			10/30/24 18:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			10/30/24 18:01	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			10/30/24 18:01	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			10/30/24 18:01	1
Trichloroethene	ND		1.0	0.15	ug/L			10/30/24 18:01	1
Trichlorofluoromethane	ND		1.0	0.25	ug/L			10/30/24 18:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			10/30/24 18:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			10/30/24 18:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			10/30/24 18:01	1
Vinyl acetate	ND		25	0.93	ug/L			10/30/24 18:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			10/30/24 18:01	1
Xylenes, Total	ND		10	6.0	ug/L			10/30/24 18:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 130*		*10/30/24 18:01*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*10/30/24 18:01*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*10/30/24 18:01*	*1*

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

Lab Sample ID: LCS 400-689647/1002
Matrix: Water
Analysis Batch: 689647

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	200	163		ug/L		82	43 - 150
Acrolein	500	454		ug/L		91	38 - 150
Acrylonitrile	500	475		ug/L		95	64 - 142
Benzene	50.0	50.0		ug/L		100	70 - 130
Bromobenzene	50.0	49.1		ug/L		98	70 - 132
Bromochloromethane	50.0	51.5		ug/L		103	70 - 130
Bromodichloromethane	50.0	47.5		ug/L		95	67 - 133
Bromoform	50.0	43.1		ug/L		86	57 - 140
Bromomethane	50.0	32.4		ug/L		65	10 - 150
2-Butanone (MEK)	200	198		ug/L		99	61 - 145
Carbon disulfide	50.0	47.8		ug/L		96	61 - 137
Carbon tetrachloride	50.0	46.3		ug/L		93	61 - 137
Chlorobenzene	50.0	50.4		ug/L		101	70 - 130
Chloroethane	50.0	29.2		ug/L		58	55 - 141
2-Chloroethyl vinyl ether	50.0	22.4		ug/L		45	10 - 150
Chloroform	50.0	47.3		ug/L		95	69 - 130
1-Chlorohexane	50.0	51.0		ug/L		102	69 - 130
Chloromethane	50.0	39.4		ug/L		79	58 - 137
cis-1,2-Dichloroethene	50.0	47.4		ug/L		95	68 - 130
cis-1,3-Dichloropropene	50.0	48.7		ug/L		97	69 - 132
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
1,2-Dichlorobenzene	50.0	52.0		ug/L		104	67 - 130
1,3-Dichlorobenzene	50.0	52.6		ug/L		105	70 - 130
1,4-Dichlorobenzene	50.0	51.9		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	32.7		ug/L		65	41 - 146
1,1-Dichloroethane	50.0	47.4		ug/L		95	70 - 130
1,2-Dichloroethane	50.0	44.7		ug/L		89	69 - 130
1,1-Dichloroethene	50.0	46.1		ug/L		92	63 - 134
1,2-Dichloropropane	50.0	51.5		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	47.7		ug/L		95	70 - 130
2,2-Dichloropropane	50.0	42.1		ug/L		84	52 - 135
1,1-Dichloropropene	50.0	47.9		ug/L		96	70 - 130
Ethylbenzene	50.0	49.7		ug/L		99	70 - 130
Ethyl methacrylate	50.0	44.9		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	56.0		ug/L		112	53 - 140
2-Hexanone	200	177		ug/L		89	65 - 137
Isopropylbenzene	50.0	50.9		ug/L		102	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	50.9		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	176		ug/L		88	69 - 138
Methyl tert-butyl ether	50.0	42.9		ug/L		86	66 - 130
m-Xylene & p-Xylene	50.0	49.3		ug/L		99	70 - 130
Naphthalene	50.0	45.2		ug/L		90	47 - 149
n-Butylbenzene	50.0	51.0		ug/L		102	67 - 130
N-Propylbenzene	50.0	52.6		ug/L		105	70 - 130
o-Chlorotoluene	50.0	47.2		ug/L		94	70 - 130
o-Xylene	50.0	49.1		ug/L		98	70 - 130
p-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130

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

Lab Sample ID: LCS 400-689647/1002
Matrix: Water
Analysis Batch: 689647

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	52.0		ug/L		104	65 - 130
sec-Butylbenzene	50.0	51.4		ug/L		103	66 - 130
Styrene	50.0	51.0		ug/L		102	70 - 130
tert-Butylbenzene	50.0	46.0		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.7		ug/L		99	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/L		88	70 - 131
Tetrachloroethene	50.0	50.5		ug/L		101	65 - 130
Toluene	50.0	48.7		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	49.2		ug/L		98	70 - 130
trans-1,3-Dichloropropene	50.0	45.2		ug/L		90	63 - 130
1,2,3-Trichlorobenzene	50.0	50.6		ug/L		101	60 - 138
1,2,4-Trichlorobenzene	50.0	51.9		ug/L		104	60 - 140
1,1,1-Trichloroethane	50.0	45.6		ug/L		91	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	51.0		ug/L		102	70 - 130
Trichlorofluoromethane	50.0	36.8		ug/L		74	65 - 138
1,2,3-Trichloropropane	50.0	42.6		ug/L		85	70 - 130
1,2,4-Trimethylbenzene	50.0	50.0		ug/L		100	70 - 130
1,3,5-Trimethylbenzene	50.0	48.6		ug/L		97	69 - 130
Vinyl acetate	100	73.6		ug/L		74	26 - 150
Vinyl chloride	50.0	38.7		ug/L		77	59 - 136
Xylenes, Total	100	98.4		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

Lab Sample ID: 400-264600-4 MS
Matrix: Water
Analysis Batch: 689647

Client Sample ID: MW4-ROX-101824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	ND	F1	200	70.9	F1	ug/L		35	43 - 150
Acrolein	ND		500	538		ug/L		108	38 - 150
Acrylonitrile	ND		500	478		ug/L		96	62 - 149
Benzene	0.64	J	50.0	45.9		ug/L		91	56 - 142
Bromobenzene	ND		50.0	40.8		ug/L		82	59 - 136
Bromochloromethane	ND		50.0	48.2		ug/L		96	64 - 140
Bromodichloromethane	ND		50.0	43.0		ug/L		86	59 - 143
Bromoform	ND		50.0	39.3		ug/L		79	50 - 140
Bromomethane	ND		50.0	37.5		ug/L		75	10 - 150
2-Butanone (MEK)	ND		200	113		ug/L		57	55 - 150
Carbon disulfide	ND		50.0	44.2		ug/L		88	48 - 150
Carbon tetrachloride	ND		50.0	41.3		ug/L		83	55 - 145
Chlorobenzene	ND		50.0	41.7		ug/L		83	64 - 130
Chloroethane	ND		50.0	41.8		ug/L		84	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150

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

Lab Sample ID: 400-264600-4 MS
Matrix: Water
Analysis Batch: 689647

Client Sample ID: MW4-ROX-101824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloroform	ND		50.0	44.3		ug/L		89	60 - 141
1-Chlorohexane	ND		50.0	38.7		ug/L		77	56 - 136
Chloromethane	ND		50.0	48.2		ug/L		96	49 - 148
cis-1,2-Dichloroethene	ND		50.0	43.7		ug/L		87	59 - 143
cis-1,3-Dichloropropene	ND		50.0	42.7		ug/L		85	57 - 140
Dibromochloromethane	ND		50.0	43.0		ug/L		86	56 - 143
1,2-Dichlorobenzene	ND		50.0	41.9		ug/L		84	52 - 137
1,3-Dichlorobenzene	ND		50.0	40.2		ug/L		80	54 - 135
1,4-Dichlorobenzene	ND		50.0	40.1		ug/L		80	53 - 135
Dichlorodifluoromethane	ND		50.0	39.5		ug/L		79	16 - 150
1,1-Dichloroethane	ND		50.0	44.7		ug/L		89	61 - 144
1,2-Dichloroethane	ND		50.0	41.5		ug/L		83	60 - 141
1,1-Dichloroethene	ND		50.0	43.4		ug/L		87	54 - 147
1,2-Dichloropropane	ND		50.0	46.6		ug/L		93	66 - 137
1,3-Dichloropropane	ND		50.0	43.5		ug/L		87	66 - 133
2,2-Dichloropropane	ND		50.0	38.6		ug/L		77	42 - 144
1,1-Dichloropropene	ND		50.0	42.7		ug/L		85	65 - 136
Ethylbenzene	ND		50.0	39.6		ug/L		79	58 - 131
Ethyl methacrylate	ND		50.0	40.8		ug/L		82	64 - 130
Hexachlorobutadiene	ND		50.0	34.0		ug/L		68	31 - 149
2-Hexanone	ND	F1	200	117	F1	ug/L		58	65 - 140
Isopropylbenzene	ND		50.0	38.9		ug/L		78	56 - 133
Methylene bromide	ND		50.0	44.4		ug/L		89	63 - 138
Methylene Chloride	ND		50.0	52.4		ug/L		105	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	167		ug/L		83	63 - 146
Methyl tert-butyl ether	ND		50.0	43.2		ug/L		86	59 - 137
m-Xylene & p-Xylene	ND		50.0	39.3		ug/L		79	57 - 130
Naphthalene	ND		50.0	39.3		ug/L		79	25 - 150
n-Butylbenzene	ND		50.0	33.7		ug/L		67	41 - 142
N-Propylbenzene	ND		50.0	38.6		ug/L		77	51 - 138
o-Chlorotoluene	ND		50.0	37.2		ug/L		74	53 - 134
o-Xylene	ND		50.0	39.8		ug/L		80	61 - 130
p-Chlorotoluene	ND		50.0	36.4		ug/L		73	54 - 133
p-Isopropyltoluene	ND		50.0	35.4		ug/L		71	48 - 139
sec-Butylbenzene	ND		50.0	36.1		ug/L		72	50 - 138
Styrene	ND		50.0	41.9		ug/L		84	58 - 131
tert-Butylbenzene	ND		50.0	34.0		ug/L		68	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	42.9		ug/L		86	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	40.7		ug/L		81	66 - 135
Tetrachloroethene	ND		50.0	41.2		ug/L		82	52 - 133
Toluene	ND		50.0	42.5		ug/L		85	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.9		ug/L		90	61 - 143
trans-1,3-Dichloropropene	ND		50.0	40.2		ug/L		80	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	40.6		ug/L		81	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	40.0		ug/L		80	39 - 148
1,1,1-Trichloroethane	ND		50.0	41.8		ug/L		84	57 - 142
1,1,2-Trichloroethane	ND		50.0	43.8		ug/L		88	66 - 131
Trichloroethene	ND		50.0	44.9		ug/L		90	64 - 136
Trichlorofluoromethane	ND		50.0	43.0		ug/L		86	54 - 150

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

Lab Sample ID: 400-264600-4 MS
Matrix: Water
Analysis Batch: 689647

Client Sample ID: MW4-ROX-101824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,3-Trichloropropane	ND		50.0	40.0		ug/L		80	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	37.0		ug/L		74	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	36.1		ug/L		72	52 - 135
Vinyl acetate	ND		100	91.9		ug/L		92	26 - 150
Vinyl chloride	ND		50.0	45.9		ug/L		92	46 - 150
Xylenes, Total	ND		100	79.2		ug/L		79	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 130*
Dibromofluoromethane	*100*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

Lab Sample ID: 400-264600-4 MSD
Matrix: Water
Analysis Batch: 689647

Client Sample ID: MW4-ROX-101824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetone	ND	F1	200	71.9	F1	ug/L		36	43 - 150	1	30
Acrolein	ND		500	532		ug/L		106	38 - 150	1	31
Acrylonitrile	ND		500	475		ug/L		95	62 - 149	0	30
Benzene	0.64	J	50.0	46.9		ug/L		93	56 - 142	2	30
Bromobenzene	ND		50.0	41.3		ug/L		83	59 - 136	1	30
Bromochloromethane	ND		50.0	48.6		ug/L		97	64 - 140	1	30
Bromodichloromethane	ND		50.0	43.6		ug/L		87	59 - 143	1	30
Bromoform	ND		50.0	39.3		ug/L		79	50 - 140	0	30
Bromomethane	ND		50.0	39.3		ug/L		79	10 - 150	5	50
2-Butanone (MEK)	ND		200	113		ug/L		57	55 - 150	0	30
Carbon disulfide	ND		50.0	45.8		ug/L		92	48 - 150	3	30
Carbon tetrachloride	ND		50.0	42.8		ug/L		86	55 - 145	4	30
Chlorobenzene	ND		50.0	42.1		ug/L		84	64 - 130	1	30
Chloroethane	ND		50.0	43.0		ug/L		86	50 - 150	3	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.5		ug/L		91	60 - 141	3	30
1-Chlorohexane	ND		50.0	38.5		ug/L		77	56 - 136	1	30
Chloromethane	ND		50.0	48.9		ug/L		98	49 - 148	1	31
cis-1,2-Dichloroethene	ND		50.0	45.0		ug/L		90	59 - 143	3	30
cis-1,3-Dichloropropene	ND		50.0	43.3		ug/L		87	57 - 140	1	30
Dibromochloromethane	ND		50.0	43.3		ug/L		87	56 - 143	1	30
1,2-Dichlorobenzene	ND		50.0	41.7		ug/L		83	52 - 137	1	30
1,3-Dichlorobenzene	ND		50.0	40.7		ug/L		81	54 - 135	1	30
1,4-Dichlorobenzene	ND		50.0	40.0		ug/L		80	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	40.2		ug/L		80	16 - 150	2	31
1,1-Dichloroethane	ND		50.0	47.0		ug/L		94	61 - 144	5	30
1,2-Dichloroethane	ND		50.0	41.9		ug/L		84	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	45.6		ug/L		91	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	48.2		ug/L		96	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	43.9		ug/L		88	66 - 133	1	30
2,2-Dichloropropane	ND		50.0	40.2		ug/L		80	42 - 144	4	31

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

Lab Sample ID: 400-264600-4 MSD
Matrix: Water
Analysis Batch: 689647

Client Sample ID: MW4-ROX-101824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloropropene	ND		50.0	44.0		ug/L		88	65 - 136	3	30
Ethylbenzene	ND		50.0	39.8		ug/L		80	58 - 131	1	30
Ethyl methacrylate	ND		50.0	41.1		ug/L		82	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	36.1		ug/L		72	31 - 149	6	36
2-Hexanone	ND	F1	200	112	F1	ug/L		56	65 - 140	4	30
Isopropylbenzene	ND		50.0	39.3		ug/L		79	56 - 133	1	30
Methylene bromide	ND		50.0	45.0		ug/L		90	63 - 138	1	30
Methylene Chloride	ND		50.0	54.3		ug/L		109	60 - 146	3	32
4-Methyl-2-pentanone (MIBK)	ND		200	160		ug/L		80	63 - 146	4	30
Methyl tert-butyl ether	ND		50.0	44.7		ug/L		89	59 - 137	3	30
m-Xylene & p-Xylene	ND		50.0	39.5		ug/L		79	57 - 130	0	30
Naphthalene	ND		50.0	39.5		ug/L		79	25 - 150	1	30
n-Butylbenzene	ND		50.0	33.9		ug/L		68	41 - 142	1	31
N-Propylbenzene	ND		50.0	39.3		ug/L		79	51 - 138	2	30
o-Chlorotoluene	ND		50.0	36.6		ug/L		73	53 - 134	2	30
o-Xylene	ND		50.0	39.8		ug/L		80	61 - 130	0	30
p-Chlorotoluene	ND		50.0	36.4		ug/L		73	54 - 133	0	30
p-Isopropyltoluene	ND		50.0	36.7		ug/L		73	48 - 139	4	30
sec-Butylbenzene	ND		50.0	37.0		ug/L		74	50 - 138	3	30
Styrene	ND		50.0	41.6		ug/L		83	58 - 131	1	30
tert-Butylbenzene	ND		50.0	35.0		ug/L		70	54 - 146	3	30
1,1,1,2-Tetrachloroethane	ND		50.0	43.4		ug/L		87	59 - 137	1	30
1,1,2,2-Tetrachloroethane	ND		50.0	40.3		ug/L		81	66 - 135	1	30
Tetrachloroethene	ND		50.0	41.6		ug/L		83	52 - 133	1	30
Toluene	ND		50.0	42.5		ug/L		85	65 - 130	0	30
trans-1,2-Dichloroethene	ND		50.0	46.4		ug/L		93	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	40.4		ug/L		81	53 - 133	1	30
1,2,3-Trichlorobenzene	ND		50.0	40.4		ug/L		81	43 - 145	1	30
1,2,4-Trichlorobenzene	ND		50.0	40.8		ug/L		82	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	43.4		ug/L		87	57 - 142	4	30
1,1,2-Trichloroethane	ND		50.0	43.2		ug/L		86	66 - 131	2	30
Trichloroethene	ND		50.0	46.2		ug/L		92	64 - 136	3	30
Trichlorofluoromethane	ND		50.0	46.0		ug/L		92	54 - 150	7	30
1,2,3-Trichloropropane	ND		50.0	40.0		ug/L		80	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	37.6		ug/L		75	50 - 139	2	30
1,3,5-Trimethylbenzene	ND		50.0	36.7		ug/L		73	52 - 135	2	30
Vinyl acetate	ND		100	87.5		ug/L		87	26 - 150	5	33
Vinyl chloride	ND		50.0	47.5		ug/L		95	46 - 150	3	30
Xylenes, Total	ND		100	79.3		ug/L		79	59 - 130	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*72 - 130*
Dibromofluoromethane	*101*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: MB 400-689203/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	8.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
Benzenethiol	ND		10	9.9	ug/L		10/25/24 15:13	10/28/24 13:32	1
Benzoic acid	ND		30	24	ug/L		10/25/24 15:13	10/28/24 13:32	1
Benzyl alcohol	ND		10	7.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
Bis(2-chloroethoxy)methane	ND		10	4.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
Bis(2-chloroethyl)ether	ND		10	3.9	ug/L		10/25/24 15:13	10/28/24 13:32	1
bis (2-chloroisopropyl) ether	ND		10	1.8	ug/L		10/25/24 15:13	10/28/24 13:32	1
Bis(2-ethylhexyl) phthalate	ND		10	8.9	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Bromophenyl phenyl ether	ND		10	8.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
Butyl benzyl phthalate	ND		10	5.8	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Chloroaniline	ND		10	4.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Chloro-3-methylphenol	ND		10	5.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
2-Chloronaphthalene	ND		10	3.8	ug/L		10/25/24 15:13	10/28/24 13:32	1
2-Chlorophenol	ND		10	4.1	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Chlorophenyl phenyl ether	ND		10	3.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
Dibenz[a,h]acridine	ND		10	2.8	ug/L		10/25/24 15:13	10/28/24 13:32	1
Dibenzofuran	ND		10	4.0	ug/L		10/25/24 15:13	10/28/24 13:32	1
3,3'-Dichlorobenzidine	ND		11	11	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4-Dichlorophenol	ND		10	4.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
Diethyl phthalate	ND		10	4.4	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4-Dimethylphenol	ND		10	5.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
Dimethyl phthalate	ND		10	4.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
Di-n-butyl phthalate	ND		10	4.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
4,6-Dinitro-ortho-cresol	ND		10	10	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4-Dinitrophenol	ND		30	4.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4-Dinitrotoluene	ND		10	5.1	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,6-Dinitrotoluene	ND		10	3.9	ug/L		10/25/24 15:13	10/28/24 13:32	1
Di-n-octyl phthalate	ND		10	6.0	ug/L		10/25/24 15:13	10/28/24 13:32	1
1,4-Dioxane	ND		10	4.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	3.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
Hexachlorobenzene	ND		10	9.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
Hexachlorocyclopentadiene	ND		20	4.5	ug/L		10/25/24 15:13	10/28/24 13:32	1
Hexachloroethane	ND		10	5.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
Indene	ND		10	3.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
Isophorone	ND		10	5.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
2-Methylphenol	ND		10	3.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
3 & 4 Methylphenol	ND		20	4.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
2-Nitroaniline	ND		10	5.0	ug/L		10/25/24 15:13	10/28/24 13:32	1
3-Nitroaniline	ND		10	4.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Nitroaniline	ND		10	4.1	ug/L		10/25/24 15:13	10/28/24 13:32	1
Nitrobenzene	ND		10	4.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
2-Nitrophenol	ND		10	4.6	ug/L		10/25/24 15:13	10/28/24 13:32	1
4-Nitrophenol	ND		10	3.3	ug/L		10/25/24 15:13	10/28/24 13:32	1
N-Nitrosodimethylamine	ND		10	2.2	ug/L		10/25/24 15:13	10/28/24 13:32	1
N-Nitrosodi-n-propylamine	ND		10	2.5	ug/L		10/25/24 15:13	10/28/24 13:32	1
N-Nitrosodiphenylamine	ND		10	3.7	ug/L		10/25/24 15:13	10/28/24 13:32	1
Pentachlorophenol	ND		20	12	ug/L		10/25/24 15:13	10/28/24 13:32	1
Phenol	ND		10	4.2	ug/L		10/25/24 15:13	10/28/24 13:32	1

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

Lab Sample ID: MB 400-689203/1-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyridine	ND		10	10	ug/L		10/25/24 15:13	10/28/24 13:32	1
Quinoline	ND		10	2.4	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4,5-Trichlorophenol	ND		10	4.0	ug/L		10/25/24 15:13	10/28/24 13:32	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		10/25/24 15:13	10/28/24 13:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*21 - 114*	*10/25/24 15:13*	*10/28/24 13:32*	*1*
2-Fluorophenol	*28*		*10 - 105*	*10/25/24 15:13*	*10/28/24 13:32*	*1*
Nitrobenzene-d5	*53*		*16 - 127*	*10/25/24 15:13*	*10/28/24 13:32*	*1*
Phenol-d5	*16*		*10 - 129*	*10/25/24 15:13*	*10/28/24 13:32*	*1*
Terphenyl-d14	*87*		*13 - 150*	*10/25/24 15:13*	*10/28/24 13:32*	*1*
2,4,6-Tribromophenol	*77*		*10 - 150*	*10/25/24 15:13*	*10/28/24 13:32*	*1*

Lab Sample ID: LCS 400-689203/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aniline	120	58.3		ug/L		49	10 - 127
Benzoic acid	493	116		ug/L		23	19 - 126
Benzyl alcohol	120	63.3		ug/L		53	17 - 109
Bis(2-chloroethoxy)methane	120	102		ug/L		85	24 - 125
Bis(2-chloroethyl)ether	120	107		ug/L		90	10 - 121
bis (2-chloroisopropyl) ether	120	101		ug/L		84	14 - 123
Bis(2-ethylhexyl) phthalate	120	113		ug/L		94	16 - 150
4-Bromophenyl phenyl ether	120	109		ug/L		91	17 - 150
Butyl benzyl phthalate	120	114		ug/L		95	21 - 150
4-Chloroaniline	120	85.0		ug/L		71	10 - 124
4-Chloro-3-methylphenol	120	105		ug/L		88	37 - 131
2-Chloronaphthalene	120	108		ug/L		90	24 - 132
2-Chlorophenol	120	96.7		ug/L		81	27 - 124
4-Chlorophenyl phenyl ether	120	117		ug/L		98	27 - 147
Dibenz[a,h]acridine	120	73.0		ug/L		61	40 - 140
Dibenzofuran	120	120		ug/L		100	30 - 135
3,3'-Dichlorobenzidine	240	244		ug/L		102	10 - 150
2,4-Dichlorophenol	120	103		ug/L		86	33 - 132
Diethyl phthalate	120	119		ug/L		100	37 - 145
2,4-Dimethylphenol	120	175	*+	ug/L		146	38 - 132
Dimethyl phthalate	120	119		ug/L		99	32 - 137
Di-n-butyl phthalate	120	117		ug/L		98	27 - 150
4,6-Dinitro-ortho-cresol	240	243		ug/L		101	14 - 150
2,4-Dinitrophenol	240	262		ug/L		109	15 - 150
2,4-Dinitrotoluene	120	123		ug/L		102	35 - 136
2,6-Dinitrotoluene	120	113		ug/L		94	29 - 140
Di-n-octyl phthalate	120	121		ug/L		100	26 - 150
1,4-Dioxane	120	45.3		ug/L		38	10 - 87
1,2-Diphenylhydrazine (as Azobenzene)	120	106		ug/L		89	23 - 138
Hexachlorobenzene	120	121		ug/L		100	10 - 150

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

Lab Sample ID: LCS 400-689203/2-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorocyclopentadiene	120	209	*+	ug/L		174	10 - 124
Hexachloroethane	120	83.3		ug/L		69	10 - 127
Indene	120	94.5		ug/L		79	18 - 150
Isophorone	120	98.7		ug/L		82	28 - 127
2-Methylphenol	120	103		ug/L		86	34 - 124
3 & 4 Methylphenol	120	81.4		ug/L		68	32 - 122
2-Nitroaniline	120	106		ug/L		88	24 - 139
3-Nitroaniline	120	87.2		ug/L		73	10 - 128
4-Nitroaniline	120	118		ug/L		99	28 - 118
Nitrobenzene	120	95.7		ug/L		80	29 - 120
2-Nitrophenol	120	102		ug/L		85	25 - 148
4-Nitrophenol	240	162		ug/L		67	12 - 129
N-Nitrosodimethylamine	120	52.9		ug/L		44	10 - 115
N-Nitrosodi-n-propylamine	120	105		ug/L		87	24 - 142
N-Nitrosodiphenylamine	119	107		ug/L		90	29 - 138
Pentachlorophenol	240	213		ug/L		89	19 - 150
Phenol	120	44.4		ug/L		37	11 - 95
Pyridine	240	64.4		ug/L		27	10 - 82
Quinoline	120	48.2		ug/L		40	10 - 141
2,4,5-Trichlorophenol	120	113		ug/L		94	30 - 144
2,4,6-Trichlorophenol	120	106		ug/L		89	27 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*77*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*79*		*16 - 127*
Phenol-d5	*34*		*10 - 129*
Terphenyl-d14	*92*		*13 - 150*
2,4,6-Tribromophenol	*100*		*10 - 150*

Lab Sample ID: LCS 400-689203/4-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzenethiol	120	95.6		ug/L		80	10 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*64*		*21 - 114*
2-Fluorophenol	*39*		*10 - 105*
Nitrobenzene-d5	*63*		*16 - 127*
Phenol-d5	*25*		*10 - 129*
Terphenyl-d14	*97*		*13 - 150*
2,4,6-Tribromophenol	*84*		*10 - 150*

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

Lab Sample ID: LCSD 400-689203/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689203

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aniline	120	38.0	*1	ug/L		32	10 - 127	42	40
Benzoic acid	493	130		ug/L		26	19 - 126	12	40
Benzyl alcohol	120	65.5		ug/L		55	17 - 109	3	40
Bis(2-chloroethoxy)methane	120	102		ug/L		85	24 - 125	0	40
Bis(2-chloroethyl)ether	120	99.1		ug/L		83	10 - 121	8	40
bis (2-chloroisopropyl) ether	120	99.3		ug/L		83	14 - 123	2	40
Bis(2-ethylhexyl) phthalate	120	111		ug/L		93	16 - 150	2	40
4-Bromophenyl phenyl ether	120	109		ug/L		91	17 - 150	0	40
Butyl benzyl phthalate	120	112		ug/L		94	21 - 150	1	40
4-Chloroaniline	120	84.4		ug/L		70	10 - 124	1	40
4-Chloro-3-methylphenol	120	106		ug/L		88	37 - 131	1	40
2-Chloronaphthalene	120	105		ug/L		87	24 - 132	3	40
2-Chlorophenol	120	95.8		ug/L		80	27 - 124	1	40
4-Chlorophenyl phenyl ether	120	119		ug/L		99	27 - 147	2	40
Dibenz[a,h]acridine	120	66.0		ug/L		55	40 - 140	10	40
Dibenzofuran	120	117		ug/L		98	30 - 135	2	40
3,3'-Dichlorobenzidine	240	234		ug/L		97	10 - 150	4	40
2,4-Dichlorophenol	120	103		ug/L		86	33 - 132	0	40
Diethyl phthalate	120	118		ug/L		98	37 - 145	1	40
2,4-Dimethylphenol	120	175	*+	ug/L		146	38 - 132	0	40
Dimethyl phthalate	120	115		ug/L		96	32 - 137	4	40
Di-n-butyl phthalate	120	118		ug/L		98	27 - 150	0	40
4,6-Dinitro-ortho-cresol	240	235		ug/L		98	14 - 150	3	40
2,4-Dinitrophenol	240	273		ug/L		114	15 - 150	4	40
2,4-Dinitrotoluene	120	120		ug/L		100	35 - 136	3	40
2,6-Dinitrotoluene	120	112		ug/L		94	29 - 140	0	40
Di-n-octyl phthalate	120	115		ug/L		96	26 - 150	5	40
1,4-Dioxane	120	42.1		ug/L		35	10 - 87	7	40
1,2-Diphenylhydrazine (as Azobenzene)	120	106		ug/L		88	23 - 138	0	40
Hexachlorobenzene	120	122		ug/L		101	10 - 150	1	40
Hexachlorocyclopentadiene	120	205	*+	ug/L		171	10 - 124	2	40
Hexachloroethane	120	78.5		ug/L		65	10 - 127	6	40
Indene	120	93.5		ug/L		78	18 - 150	1	40
Isophorone	120	97.5		ug/L		81	28 - 127	1	40
2-Methylphenol	120	103		ug/L		86	34 - 124	0	40
3 & 4 Methylphenol	120	82.2		ug/L		69	32 - 122	1	40
2-Nitroaniline	120	104		ug/L		86	24 - 139	2	40
3-Nitroaniline	120	87.1		ug/L		73	10 - 128	0	40
4-Nitroaniline	120	118		ug/L		98	28 - 118	1	40
Nitrobenzene	120	96.1		ug/L		80	29 - 120	0	40
2-Nitrophenol	120	103		ug/L		86	25 - 148	1	40
4-Nitrophenol	240	147		ug/L		61	12 - 129	9	40
N-Nitrosodimethylamine	120	48.1		ug/L		40	10 - 115	10	40
N-Nitrosodi-n-propylamine	120	106		ug/L		88	24 - 142	1	40
N-Nitrosodiphenylamine	119	105		ug/L		88	29 - 138	2	40
Pentachlorophenol	240	210		ug/L		88	19 - 150	1	40
Phenol	120	44.1		ug/L		37	11 - 95	1	40
Pyridine	240	37.2	*1	ug/L		15	10 - 82	54	40

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

Lab Sample ID: LCSD 400-689203/3-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689203

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Quinoline			120	41.3		ug/L		35	10 - 141	15	40
2,4,5-Trichlorophenol			120	108		ug/L		90	30 - 144	4	40
2,4,6-Trichlorophenol			120	101		ug/L		84	27 - 147	5	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*21 - 114*
2-Fluorophenol	*46*		*10 - 105*
Nitrobenzene-d5	*78*		*16 - 127*
Phenol-d5	*34*		*10 - 129*
Terphenyl-d14	*86*		*13 - 150*
2,4,6-Tribromophenol	*95*		*10 - 150*

Lab Sample ID: LCSD 400-689203/5-A
Matrix: Water
Analysis Batch: 689342

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689203

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzenethiol			120	83.3		ug/L		69	10 - 140	14	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*21 - 114*
2-Fluorophenol	*33*		*10 - 105*
Nitrobenzene-d5	*59*		*16 - 127*
Phenol-d5	*20*		*10 - 129*
Terphenyl-d14	*89*		*13 - 150*
2,4,6-Tribromophenol	*79*		*10 - 150*

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

Lab Sample ID: MB 400-689035/1-A
Matrix: Water
Analysis Batch: 689094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689035

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.085	ug/L		10/24/24 13:08	10/25/24 02:52	1
Acenaphthylene	ND		0.20	0.047	ug/L		10/24/24 13:08	10/25/24 02:52	1
Anthracene	ND		0.20	0.073	ug/L		10/24/24 13:08	10/25/24 02:52	1
Benzo[a]anthracene	ND		0.20	0.040	ug/L		10/24/24 13:08	10/25/24 02:52	1
Benzo[a]pyrene	ND		0.20	0.045	ug/L		10/24/24 13:08	10/25/24 02:52	1
Benzo[b]fluoranthene	ND		0.20	0.042	ug/L		10/24/24 13:08	10/25/24 02:52	1
Benzo[g,h,i]perylene	ND		0.20	0.052	ug/L		10/24/24 13:08	10/25/24 02:52	1
Benzo[k]fluoranthene	ND		0.20	0.040	ug/L		10/24/24 13:08	10/25/24 02:52	1
Chrysene	ND		0.20	0.039	ug/L		10/24/24 13:08	10/25/24 02:52	1
Dibenz(a,h)anthracene	ND		0.20	0.044	ug/L		10/24/24 13:08	10/25/24 02:52	1
Fluoranthene	ND		0.20	0.032	ug/L		10/24/24 13:08	10/25/24 02:52	1
Fluorene	ND		0.20	0.087	ug/L		10/24/24 13:08	10/25/24 02:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.032	ug/L		10/24/24 13:08	10/25/24 02:52	1
1-Methylnaphthalene	ND		0.20	0.066	ug/L		10/24/24 13:08	10/25/24 02:52	1

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

Lab Sample ID: MB 400-689035/1-A
Matrix: Water
Analysis Batch: 689094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 689035

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.077	ug/L		10/24/24 13:08	10/25/24 02:52	1
Phenanthrene	ND		0.20	0.044	ug/L		10/24/24 13:08	10/25/24 02:52	1
Pyrene	ND		0.20	0.040	ug/L		10/24/24 13:08	10/25/24 02:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*80*		*50 - 150*	*10/24/24 13:08*	*10/25/24 02:52*	*1*
Nitrobenzene-d5	*115*		*50 - 150*	*10/24/24 13:08*	*10/25/24 02:52*	*1*
Terphenyl-d14	*84*		*50 - 150*	*10/24/24 13:08*	*10/25/24 02:52*	*1*

Lab Sample ID: LCS 400-689035/2-A
Matrix: Water
Analysis Batch: 689094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 689035

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	3.34	2.53		ug/L		76	50 - 150
Acenaphthylene	3.34	2.74		ug/L		82	50 - 150
Anthracene	3.34	2.76		ug/L		83	50 - 150
Benzo[a]anthracene	3.34	3.14		ug/L		94	50 - 150
Benzo[a]pyrene	3.34	2.86		ug/L		86	50 - 150
Benzo[b]fluoranthene	3.34	2.75		ug/L		83	50 - 150
Benzo[g,h,i]perylene	3.34	2.59		ug/L		78	50 - 150
Benzo[k]fluoranthene	3.34	2.85		ug/L		85	50 - 150
Chrysene	3.34	2.67		ug/L		80	50 - 150
Dibenz(a,h)anthracene	3.34	2.42		ug/L		73	50 - 150
Fluoranthene	3.34	2.56		ug/L		77	50 - 150
Fluorene	3.34	2.64		ug/L		79	50 - 150
Indeno[1,2,3-cd]pyrene	3.34	2.52		ug/L		76	50 - 150
1-Methylnaphthalene	3.34	2.15		ug/L		64	50 - 150
2-Methylnaphthalene	3.34	1.84		ug/L		55	50 - 150
Phenanthrene	3.34	2.59		ug/L		78	50 - 150
Pyrene	3.34	2.51		ug/L		75	50 - 150

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*76*		*50 - 150*
Nitrobenzene-d5	*108*		*50 - 150*
Terphenyl-d14	*81*		*50 - 150*

Lab Sample ID: LCSD 400-689035/3-A
Matrix: Water
Analysis Batch: 689094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689035

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	3.34	2.62		ug/L		78	50 - 150	3	40
Acenaphthylene	3.34	2.69		ug/L		81	50 - 150	2	40
Anthracene	3.34	2.69		ug/L		81	50 - 150	2	40
Benzo[a]anthracene	3.34	3.05		ug/L		91	50 - 150	3	40
Benzo[a]pyrene	3.34	2.76		ug/L		83	50 - 150	4	40
Benzo[b]fluoranthene	3.34	2.71		ug/L		81	50 - 150	2	40

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

Lab Sample ID: LCSD 400-689035/3-A
Matrix: Water
Analysis Batch: 689094

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 689035

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[g,h,i]perylene			3.34	2.52		ug/L		76	50 - 150	3	40
Benzo[k]fluoranthene			3.34	2.66		ug/L		80	50 - 150	7	40
Chrysene			3.34	2.58		ug/L		77	50 - 150	3	40
Dibenz(a,h)anthracene			3.34	2.33		ug/L		70	50 - 150	4	40
Fluoranthene			3.34	2.59		ug/L		78	50 - 150	1	40
Fluorene			3.34	2.68		ug/L		80	50 - 150	2	40
Indeno[1,2,3-cd]pyrene			3.34	2.39		ug/L		72	50 - 150	5	40
1-Methylnaphthalene			3.34	1.99		ug/L		60	50 - 150	8	40
2-Methylnaphthalene			3.34	1.66		ug/L		50	50 - 150	10	40
Phenanthrene			3.34	2.64		ug/L		79	50 - 150	2	40
Pyrene			3.34	2.52		ug/L		76	50 - 150	0	40

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*74*		*50 - 150*
Nitrobenzene-d5	*105*		*50 - 150*
Terphenyl-d14	*76*		*50 - 150*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-688716/1-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 688716

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		10/22/24 10:34	10/22/24 15:52	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		10/22/24 10:34	10/22/24 15:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*10/22/24 10:34*	*10/22/24 15:52*	*1*

Lab Sample ID: LCS 400-688716/2-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 688716

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0865		ug/L		86	60 - 140		
1,2-Dibromoethane			0.100	0.0788	p	ug/L		79	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*89*		*51 - 149*

Lab Sample ID: LCSD 400-688716/3-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688716

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0926		ug/L		92	60 - 140	7	30
1,2-Dibromoethane			0.100	0.0873	*1	ug/L		87	60 - 140	32	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-688716/3-A
Matrix: Water
Analysis Batch: 688762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 688716

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		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 (_____)

Lab Vendor # 1364589 (TestAmerica)

Please Check Appropriate Box:

☐ GW 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: 10/18/2024
PO #	**GSAP Project ID**	PAGE: __1__ of __1__
60721927 – 3.4.2	USPC/00114/R/02	

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS: Street and City	State	AECOM Project / Task Number:
AECOM		900 South Central Ave; ROXANA	IL	Roxana Quarterly GW 60721927 – 3.4.2

ADDRESS:	EDF DELIVERABLE TO (Name, Company, Office Location):	PHONE NO.:	E-MAIL:	AECOM Other ID:
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Melissa Remiger - please see special instructions	314-802-1207	melissa.remiger@aecom.com	Roxana 4Q24 Groundwater

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger, Mary Massa, Brett Howell

TELEPHONE:	FAX:	Bill To Contact E-MAIL:
314-429-0100	314-429-0462	melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): C. McDavid, S. McLean

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

*** Include "J" values on Reports.**
*** Provide sample receipt upon login.**
*** 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 – 3.4.2

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes:

400-264600 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-101824-8260	10/18/2024	0000	Water	2					2	X			
	TB-ROX-101824-8011	10/18/2024	0000	Water	2					2		X		
	MW4-ROX-101824-EB	10/18/2024	0745	Water	6			4		10	X	X	X	X
	MW4-ROX-101824	10/18/2024	0900	Water	6			4		10	X	X	X	X
	MW25-ROX-101824	10/18/2024	1000	Water	6			4		10	X	X	X	X
	MW25-ROX-101824-DUP	10/18/2024	1000	Water	6			4		10	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Sahoi McLean	FEDEX: 7252 0547 1840	10/18/2024	1300
		10/19/24	803

Version: 19Sept24

CUSTODY SEALS: 1599971, 1599970

0.0C IR10

Login Sample Receipt Checklist

Client: AECOM

Job Number: 400-264600-1

Login Number: 264600
List Number: 1
Creator: Perez, Trina M

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-10
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM
Job ID: 400-264600-1
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	08-01-25
California	State	2510	06-30-25
Florida	NELAP	E81010	06-30-25
Georgia	State	E81010(FL)	06-30-25
Illinois	NELAP	200041	10-09-25
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	08-31-25
Pennsylvania	NELAP	68-00467	01-31-25
South Carolina	State	96026	06-30-25
Tennessee	State	TN02907	06-30-25
Texas	NELAP	T104704286	09-30-25
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

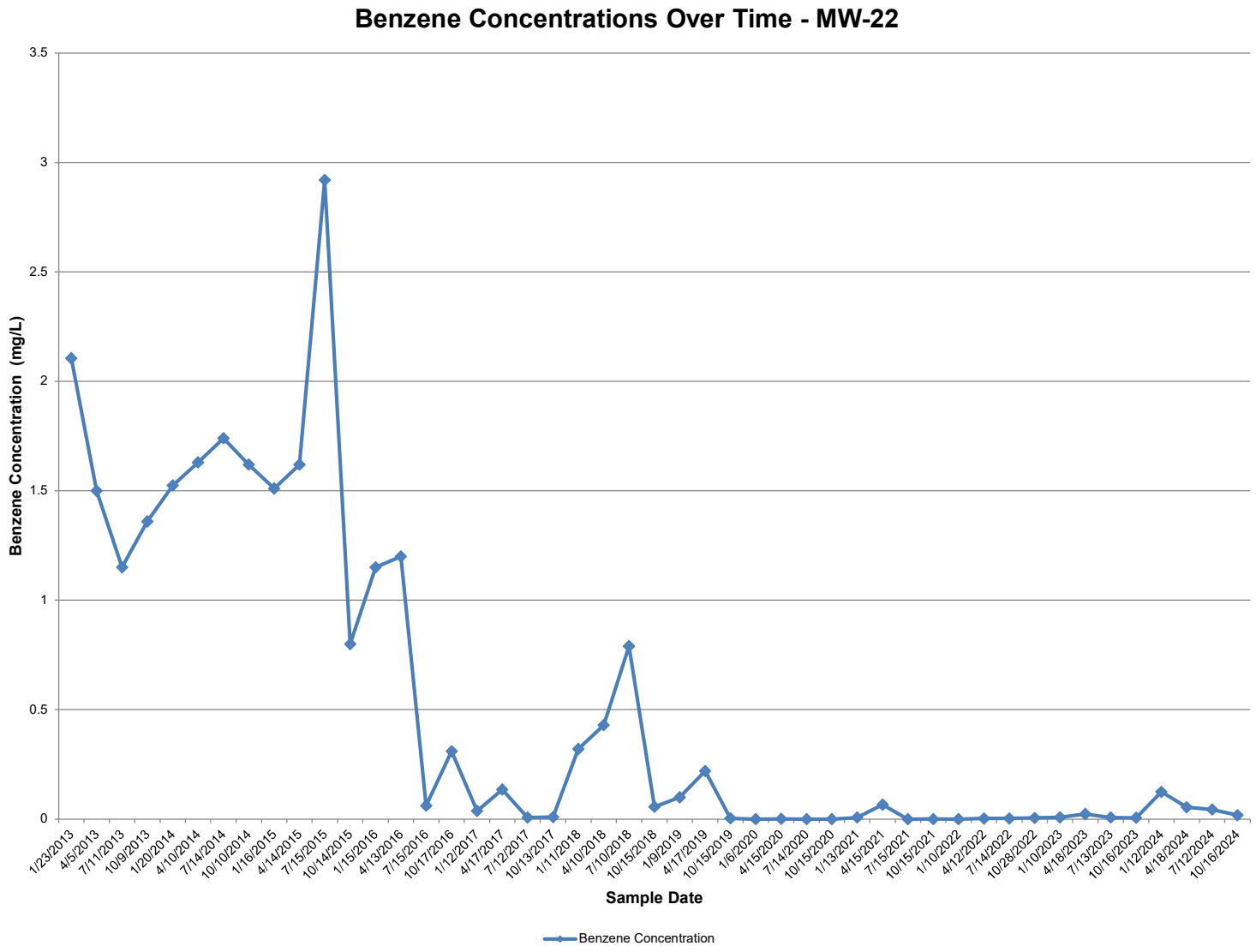
Appendix D

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



Notes:

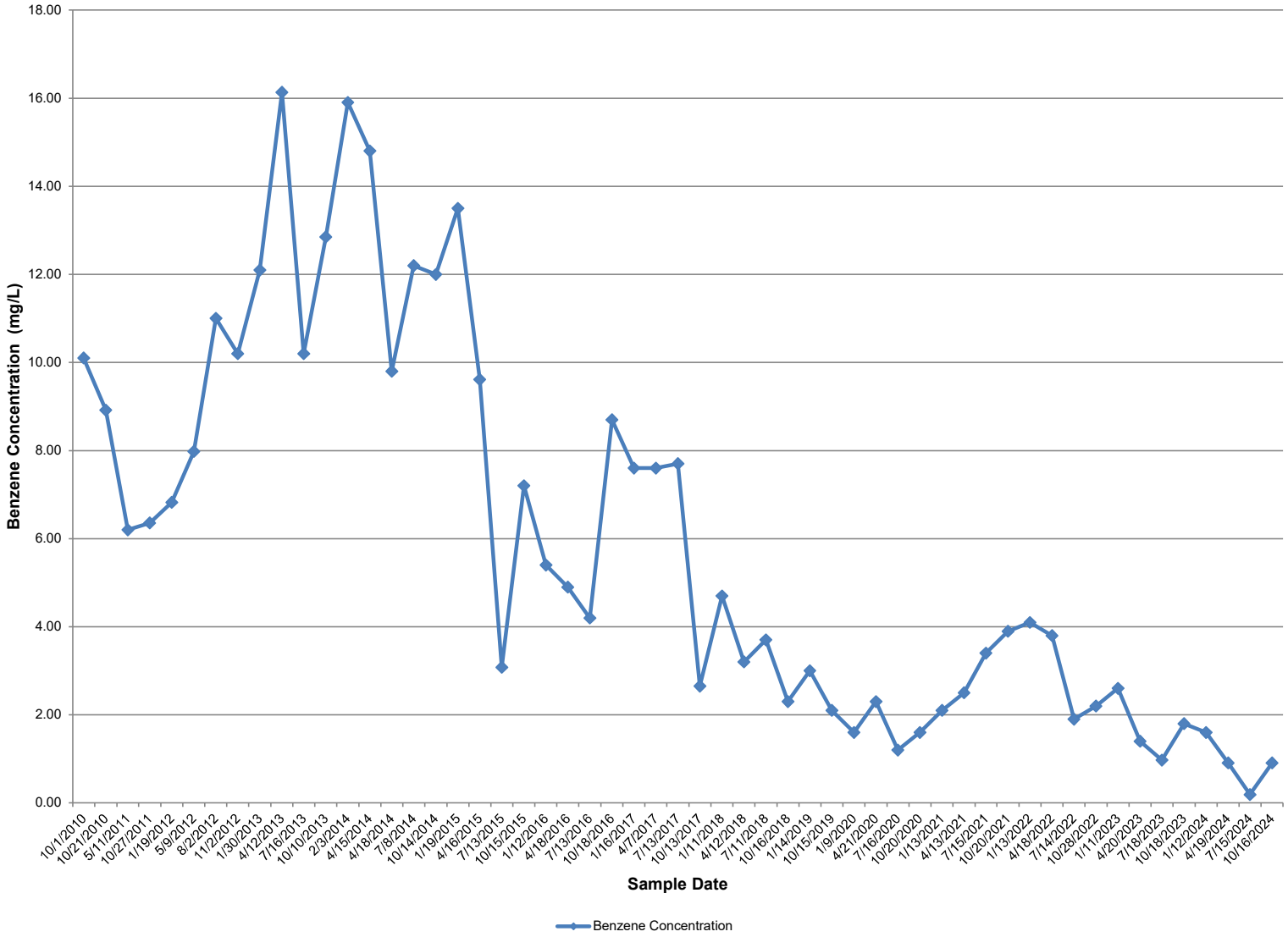
mg/L = milligrams per liter

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



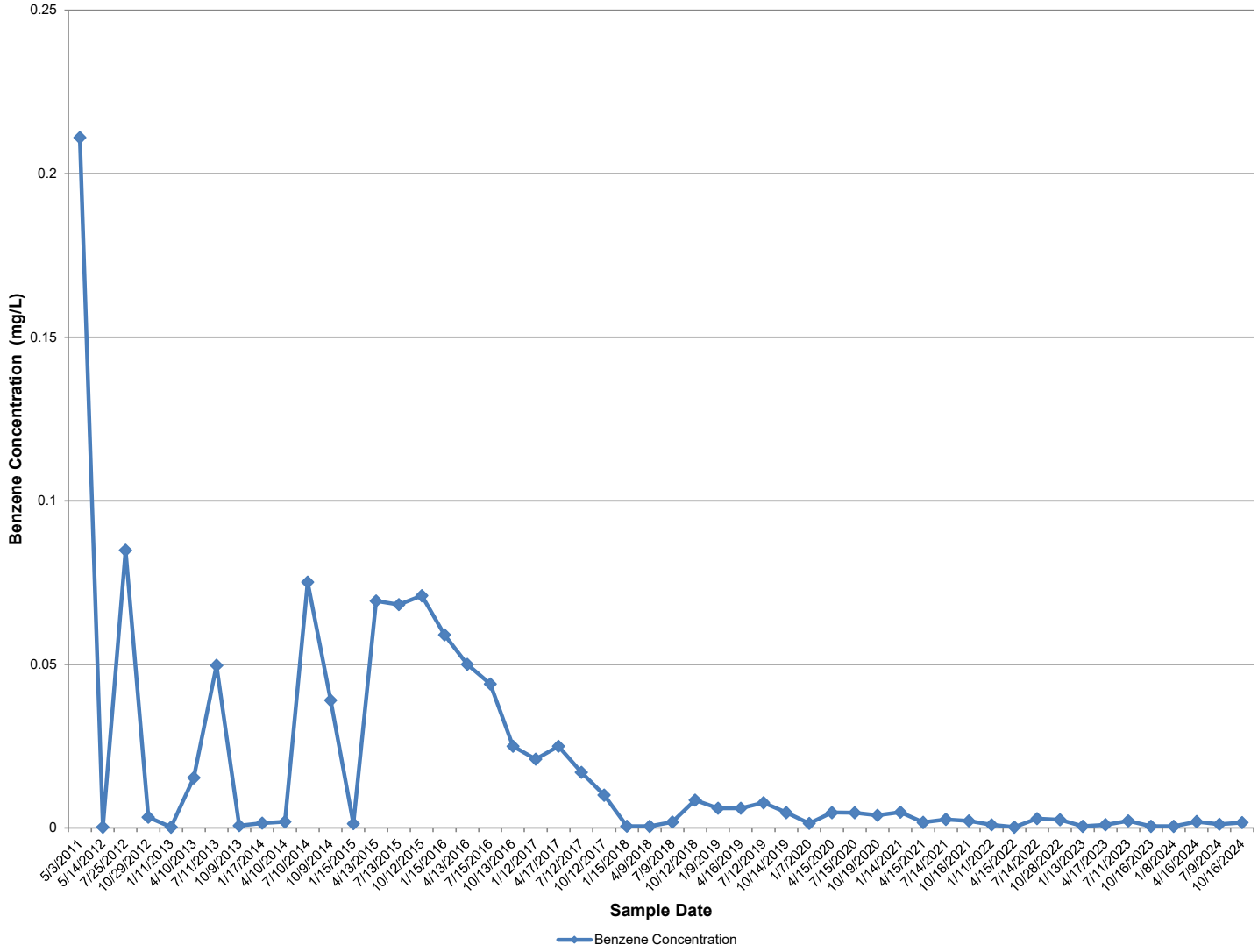
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - ROST-4-PZ(C)



Notes:

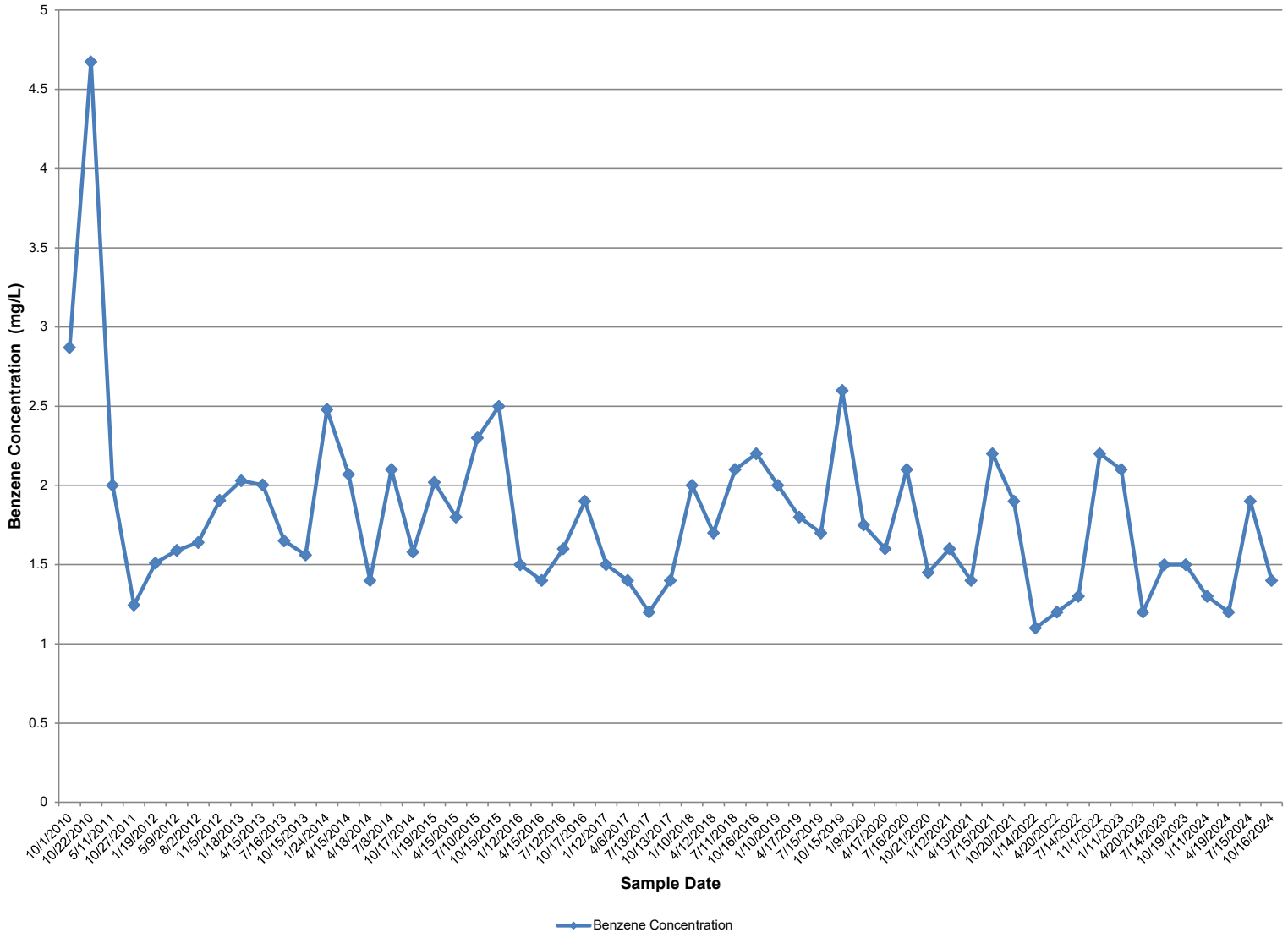
mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

Benzene Concentrations Over Time - T-12



Notes:

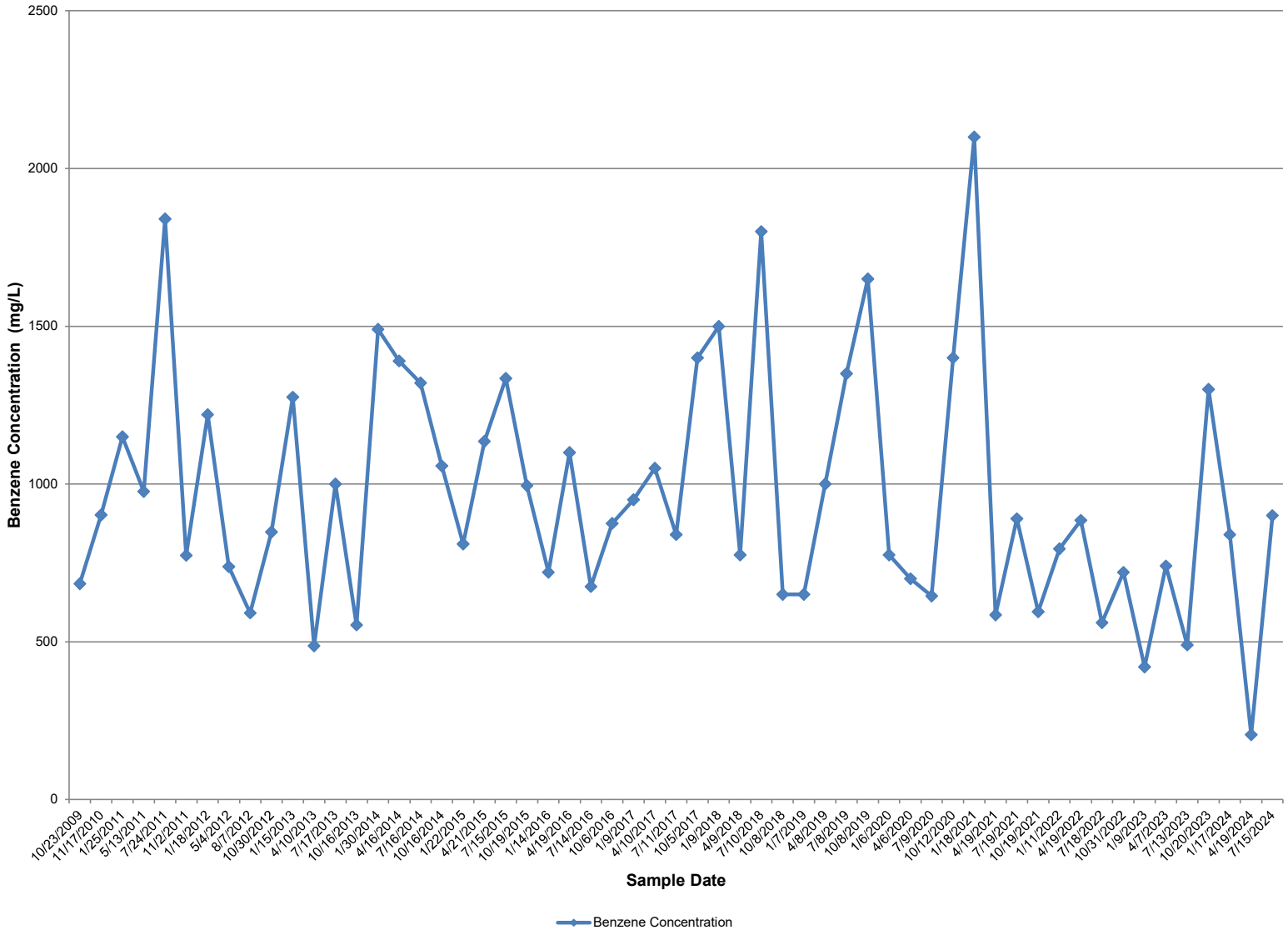
mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area

Benzene Concentrations Over Time - MW-07

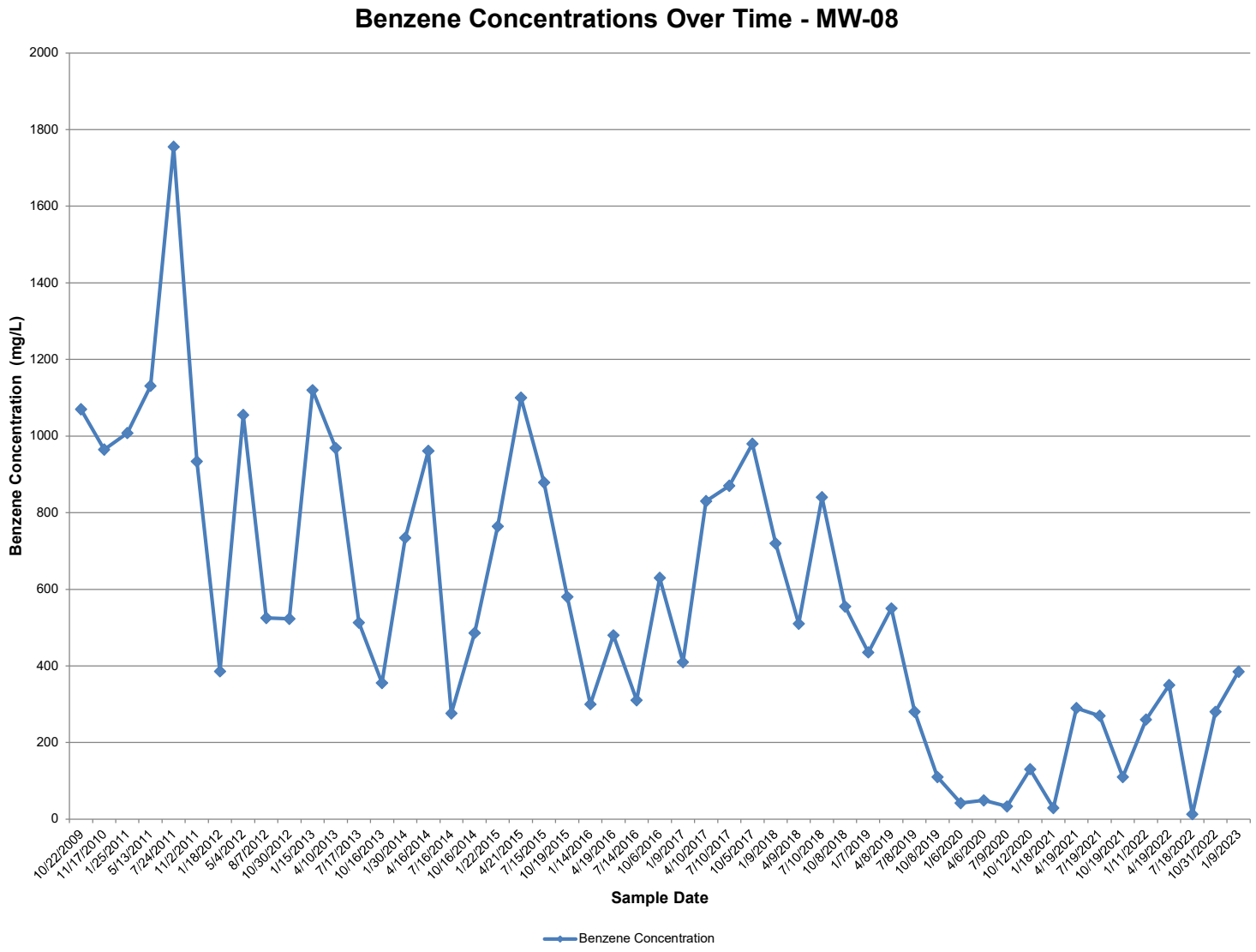


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



Notes:

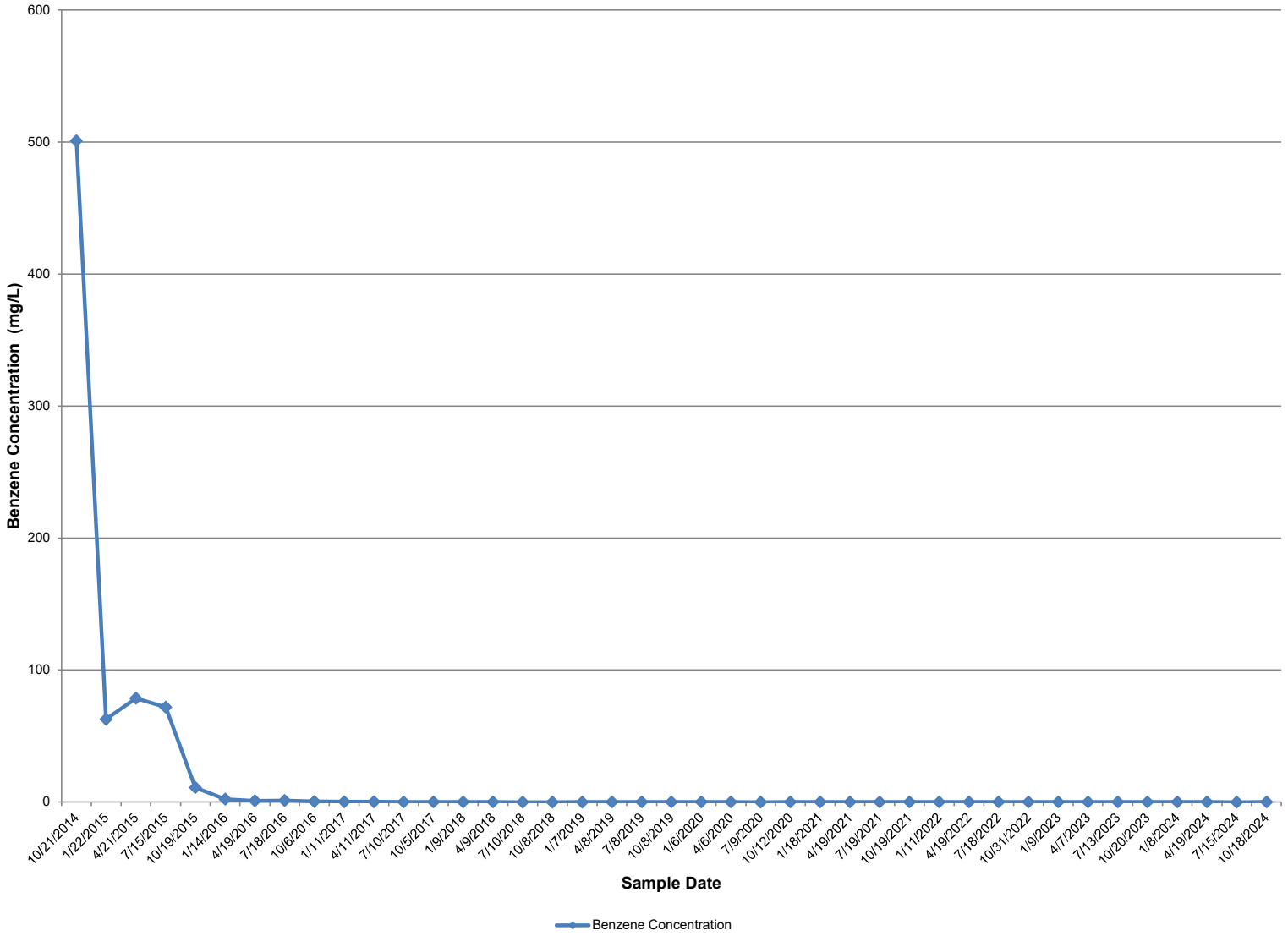
mg/L = milligrams per liter

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



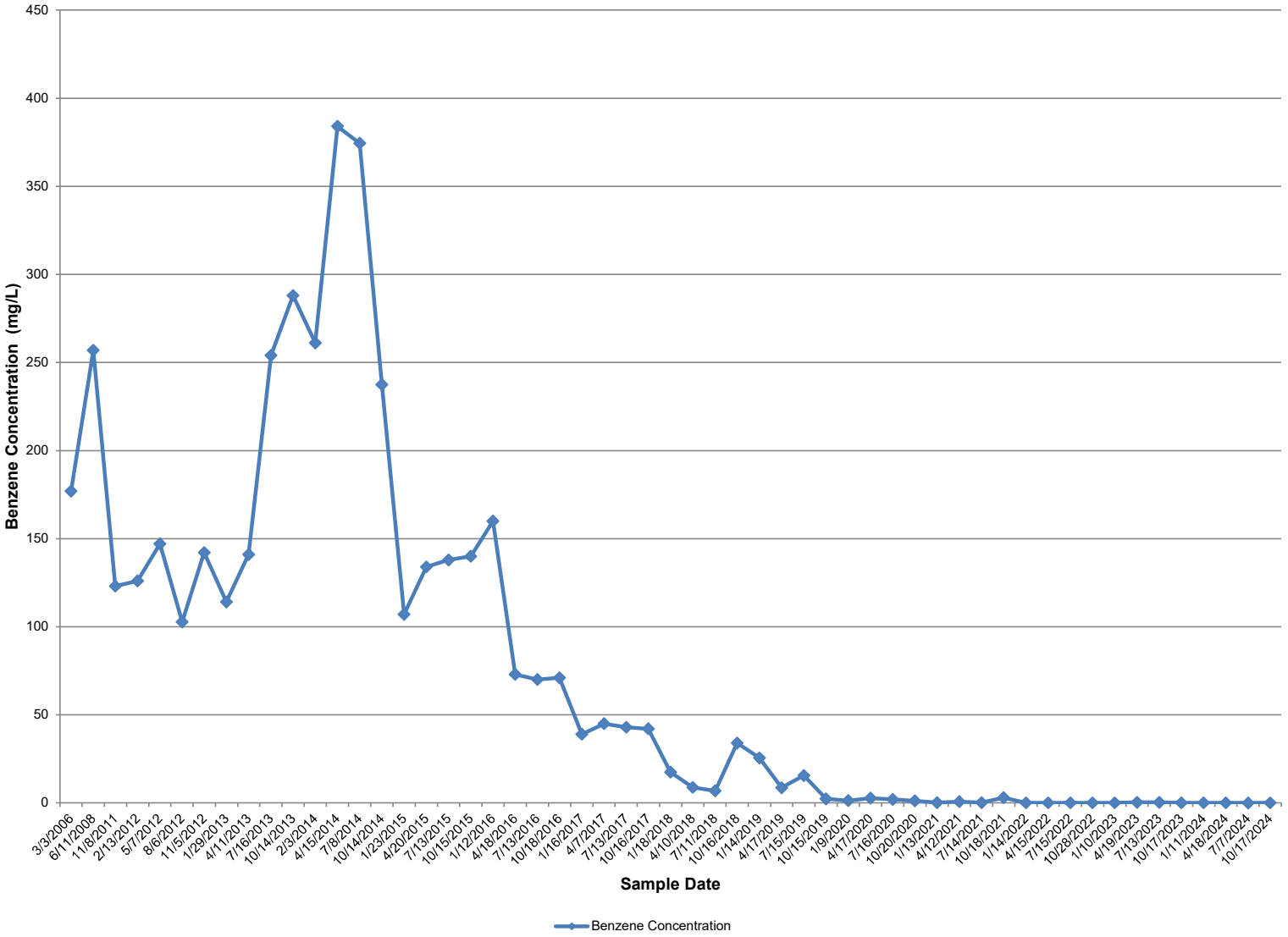
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - P-57



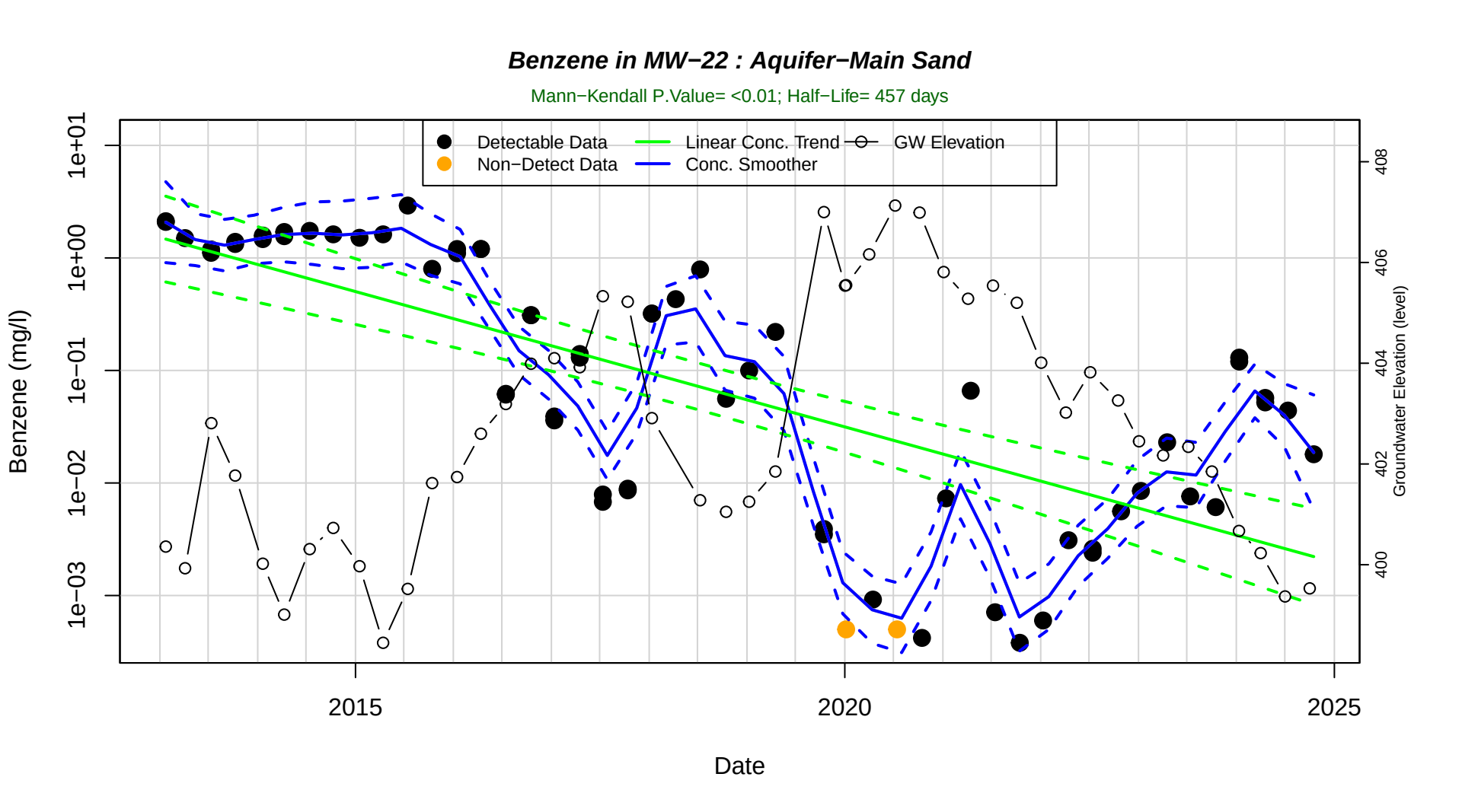
Notes:

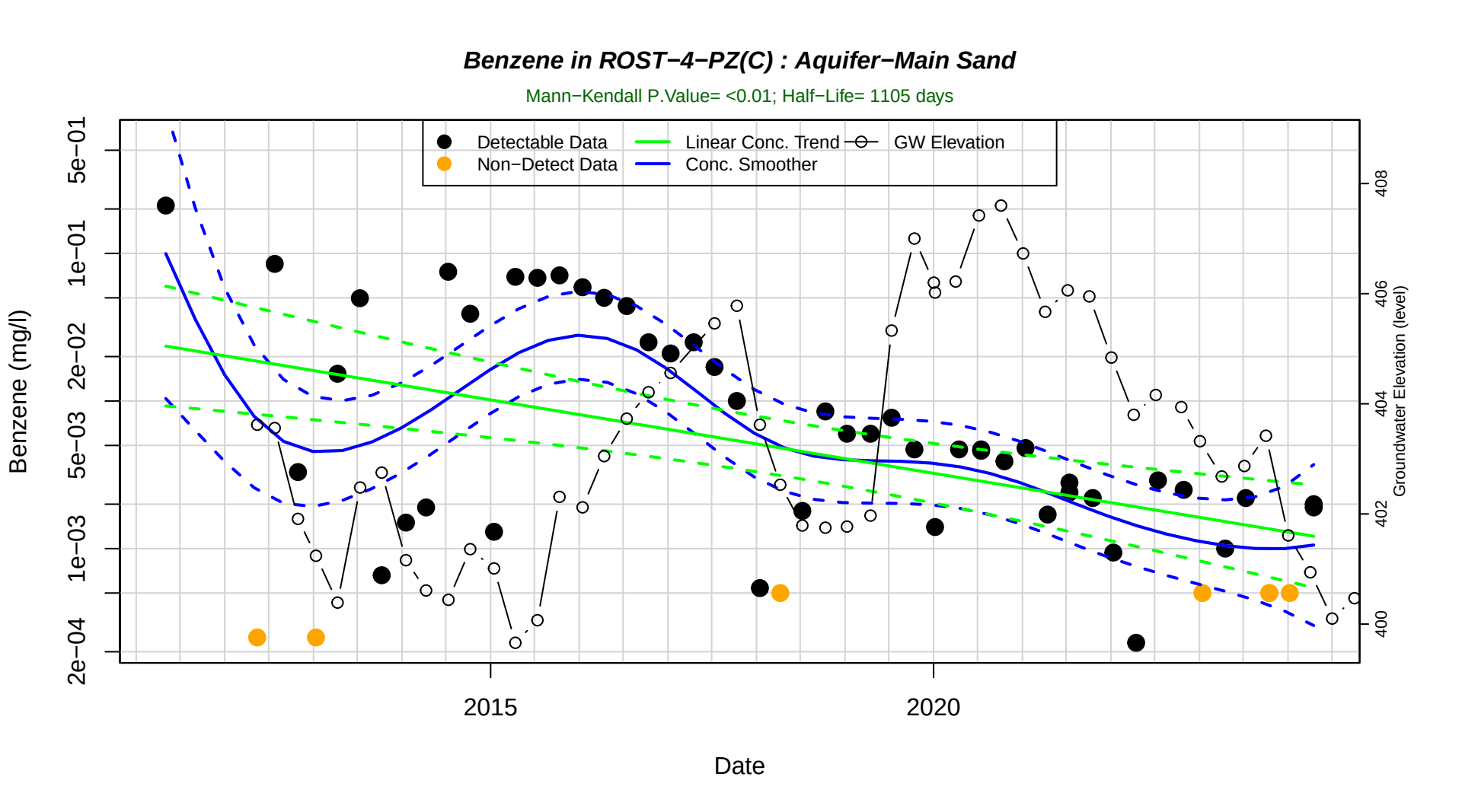
mg/L = milligrams per liter

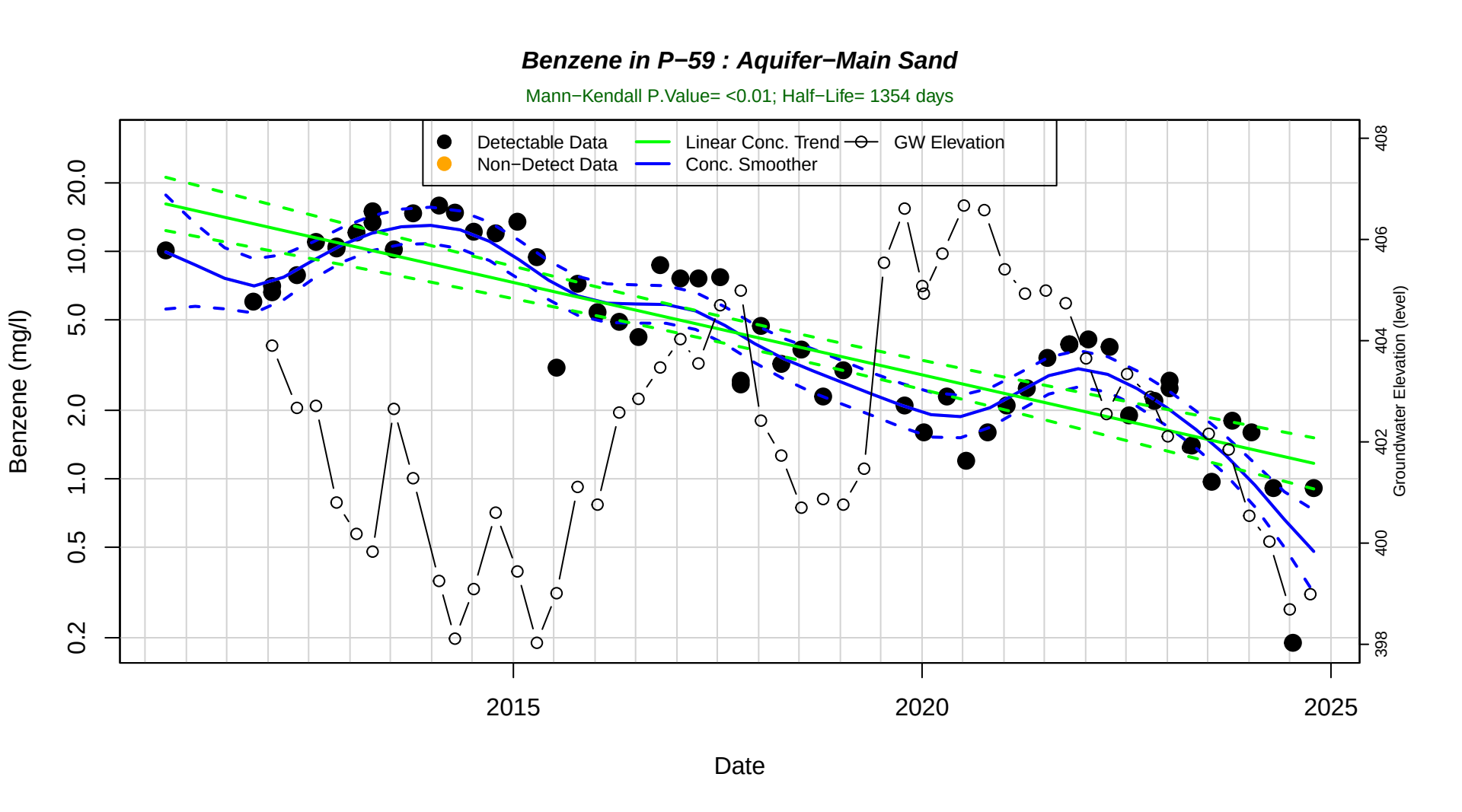
Duplicate values were averaged.

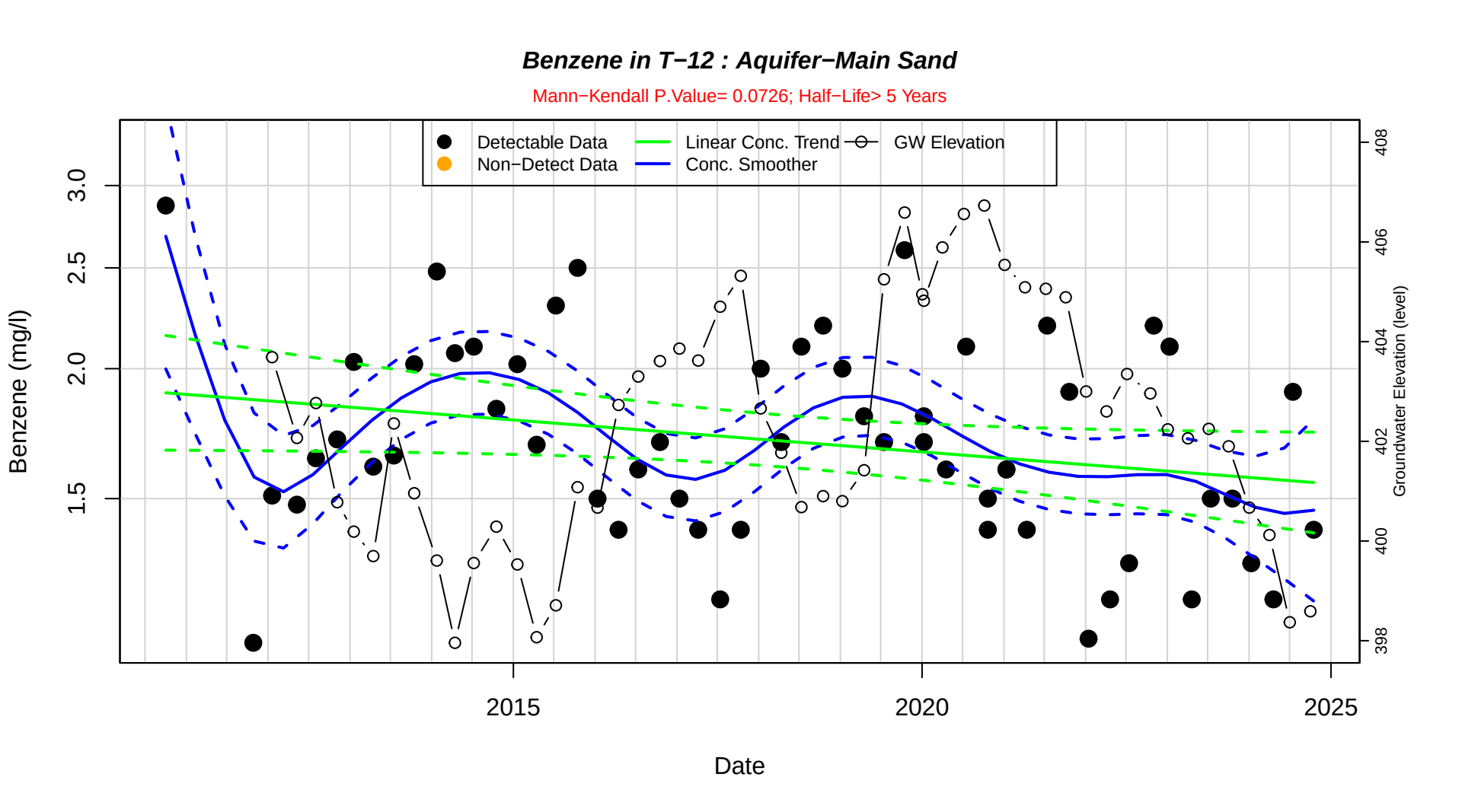
Timeframe specific to available data.

4th Street Area

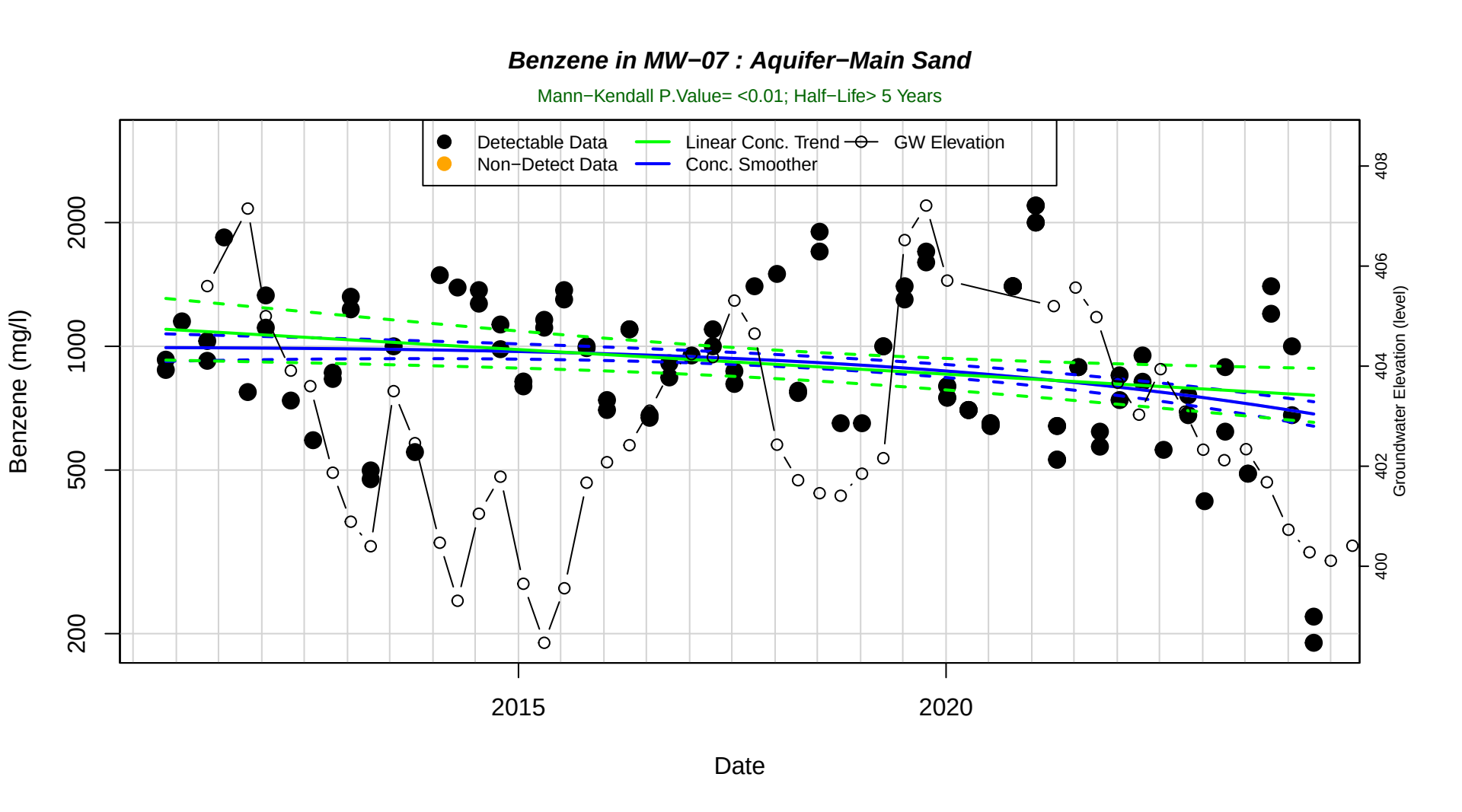

Benzene in MW−22 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 457 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−03
1e−02
1e−01
1e+00
1e+01
Groundwater Elevation (level)
400
402
404
406
408
2015
2020
2025
Date

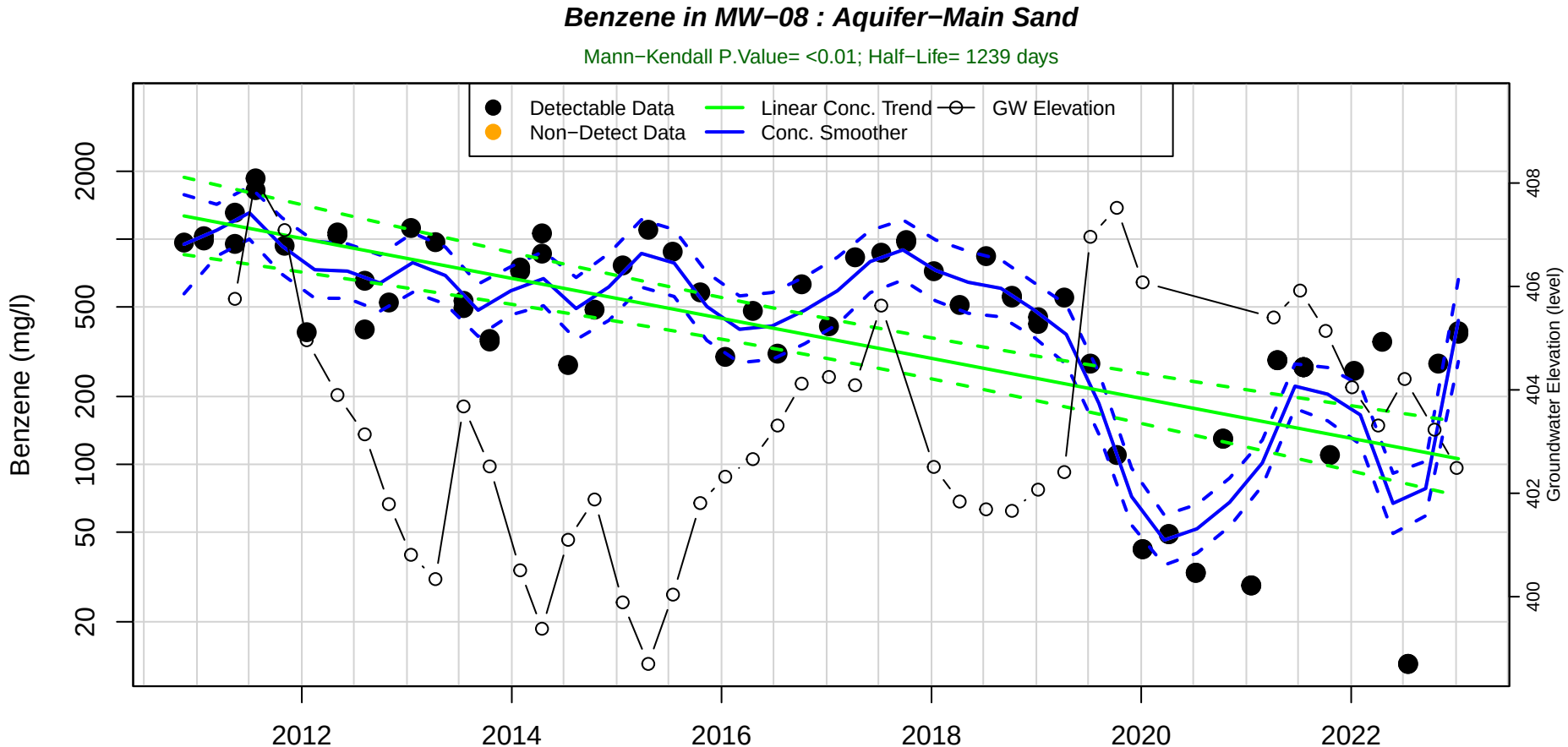

Benzene in ROST−4−PZ(C) : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1105 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
5e−01
1e−01
2e−02
5e−03
1e−03
2e−04
2015
2020
Date
Groundwater Elevation (level)
408
406
404
402
400


Benzene in P−59 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 1354 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
0.2
0.5
1.0
2.0
5.0
10.0
20.0
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

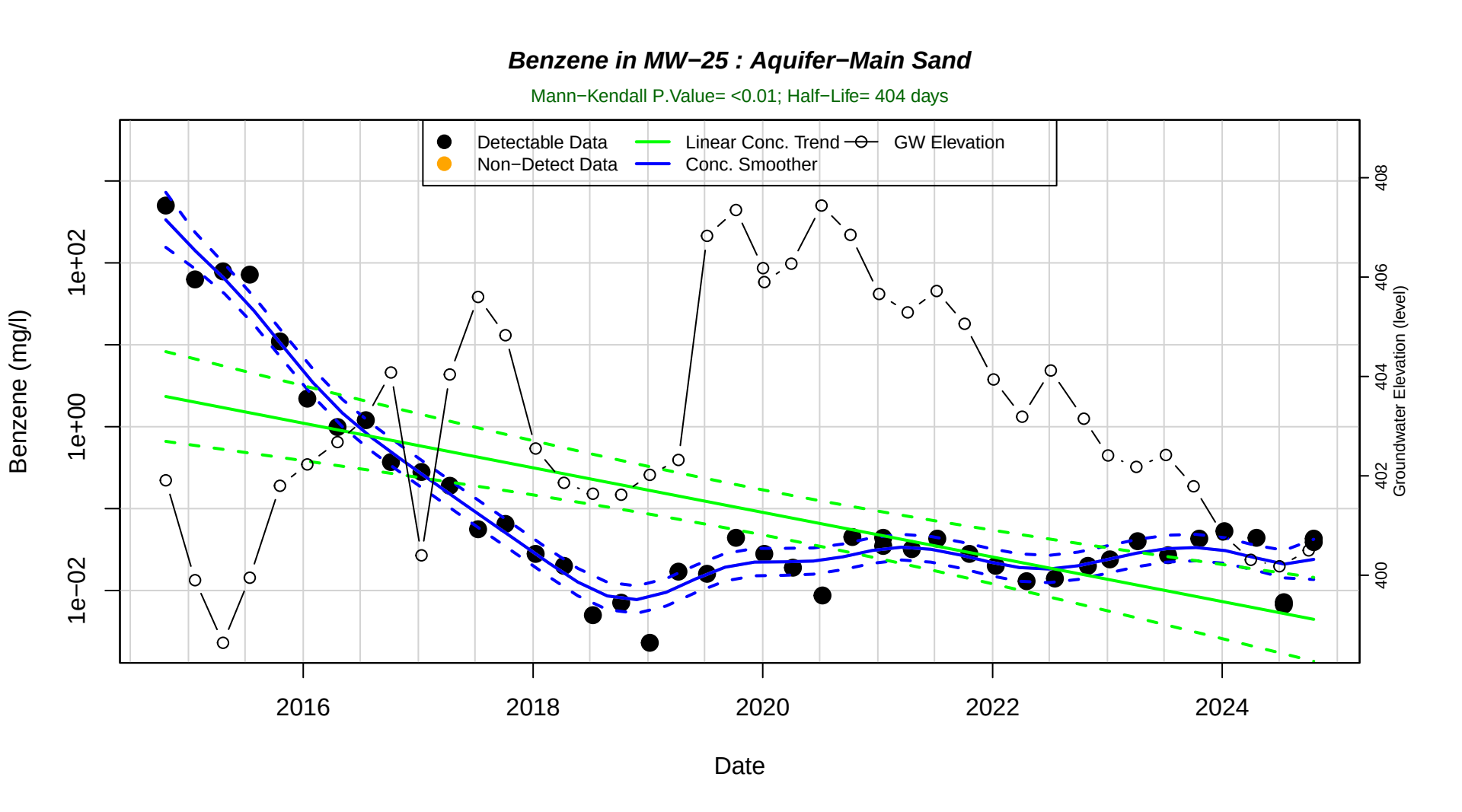

Benzene in T−12 : Aquifer−Main Sand
Mann−Kendall P.Value= 0.0726; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1.5
2.0
2.5
3.0
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

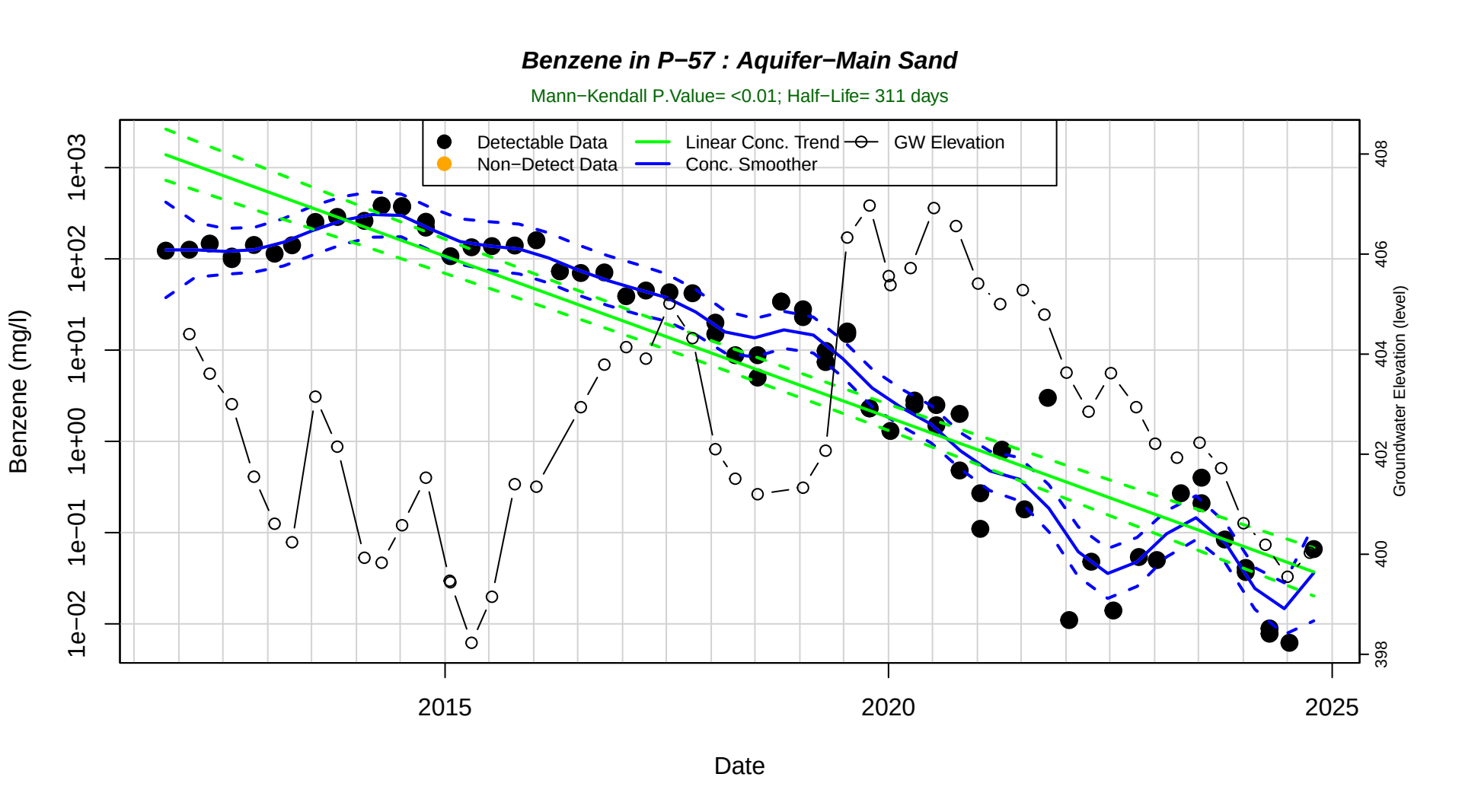
Public Works Yard Area


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 (mg/l)
200
500
1000
2000
Groundwater Elevation (level)
400
402
404
406
408
2015
2020
Date



Note: Well MW-8 was abandoned on January 10, 2023 after 1Q23 quarterly sampling. Abandonment of MW-8 was approved with conditions in the August 22, 2022 IEPA letter (IEPA 2022) in response to the PWY SEE Work Plan (AECOM 2022a).


Benzene in MW−25 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 404 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−02
1e+00
1e+02
Groundwater Elevation (level)
400
402
404
406
408
2016
2018
2020
2022
2024
Date


Benzene in P−57 : Aquifer−Main Sand
Mann−Kendall P.Value= <0.01; Half−Life= 311 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−02
1e−01
1e+00
1e+01
1e+02
1e+03
Groundwater Elevation (level)
398
400
402
404
406
408
2015
2020
2025
Date

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