Illinois Environmental Protection Agency

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RCRA FACILITY GROUNDWATER, LEACHATE AND GAS REPORTING FORM

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

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

Facility Name: Equilon Enterprises LLC dba Shell Oil Products US

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

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

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

☐ LPC-160 Forms

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

☑ Groundwater Data (without LPC-160 Forms)

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

☐ Well Construction Information

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

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

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

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

☐ Gas Monitoring Reports

☑ Other (identify)

Copies of this submittal sent separately directly to Amy Butler and IEPA Collinsville FOS with IEPA.

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

April 12, 2022

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

Groundwater Monitoring Report – 1st Quarter 2022

Roxana, Illinois

1191150002 – Madison County

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

Log No. B-43R-CA-21

Dear Mr. Smith:

On behalf of Shell Oil Products US (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.

Copies of the referenced report are being submitted separately directly to Ms. Amy Butler and IEPA Collinsville FOS with Illinois Environmental Protection Agency (IEPA).

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

Yours sincerely,

AECOM, on behalf of Shell Oil Products US

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

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

enclosures: 1st Quarter 2022 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form
(Original plus 1 copy)

cc: Leroy (Buddy) Bealer, Shell
Thomas Morgan, Phillips 66
Amy Butler, IEPA, Springfield
IEPA Collinsville FOS, IEPA, Collinsville
Michelle Knapp, Atlantic Richfield Company
Greensfelder
Repositories - Roxana Public Library, website

AECOM

1st Quarter 2022 Report

Roxana Interim Groundwater Monitoring Program

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

Project number: 60674381

April 2022

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Quality information

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		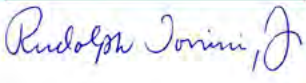	
Melissa Remiger Environmental Scientist	Brett Howell, PG Geologist	Rudy Torrini, Jr., Ph.D. Senior Project Manager	Wendy Pennington, PE Project Manager

Revision History

Revision	Revision date	Details	Authorized	Name	Position

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None	Yes	Ms. Michelle Knapp Atlantic Richfield Company
None	Yes	Greensfelder
None	Yes	Roxana Public L brary
None	Yes	website

Prepared for:

Equilon Enterprises LLC dba Shell Oil Products US

Prepared by:

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

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

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1 Introduction

AECOM Technical Services, Inc. (AECOM) is submitting this report on behalf of Equilon Enterprises LLC d/b/a Shell Oil Products US (Shell) for the 1st Quarter 2022 (1Q22) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). The Interim Groundwater Monitoring Program (Program) was established based on direction from Illinois Environmental Protection Agency (IEPA) dated August 5, 2010 (IEPA, 2010a), The study area within the Village of Roxana (Village) is generally bounded by the alley north of First Street, Illinois Route 111, the West Fenceline of the WRB Refining, LP (WRB) Wood River Refinery (WRR), and the Roxana Public Works Yard. Some groundwater monitoring wells within the WRR were also sampled as part of this event; this was conducted in cooperation with WRB/Phillips 66 (P66). For purposes of presentation in this report only, the combined area is collectively referred to as the "Investigation Area."

The bulleted list below summarizes current and ongoing regulatory-related correspondence between AECOM, on behalf of Shell, and the IEPA during this reporting period (January 2022 through March 2022); prior regulatory-related correspondence which has not yet been addressed by IEPA can be found in **Appendix A**.

- On January 31, 2022, the *Public Works Yard (PWY) Steam Enhanced Extraction (SEE) Workplan* was submitted for IEPA review and approval (AECOM, 2022a). This Workplan provided the final design as well as the plan and schedule for construction, operation, post-shutdown monitoring and decommissioning for the proposed SEE system at the Roxana PWY.
- 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).

Groundwater samples were collected and analyzed during 1Q22 to meet the requirements of the Interim Groundwater Monitoring Program, as specified in the guidance presented in **Appendix A**. **Figure 2** shows the groundwater monitoring wells that are part of the interim monitoring well network.

2 Groundwater Sampling and Analytical Procedures

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

2.1 Health & Safety

The quarterly sampling activities were performed in general accordance with the project-specific Health and Safety Plan (HASP), dated February 2, 2022 (AECOM, 2022c).

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

2.2 Additional Activities or Modifications

The following additional work activities were conducted during 1Q22:

- Depth to bottom measurements were collected from the groundwater monitoring wells in the Interim Groundwater Monitoring Program and compared to corresponding well construction information. Well P-93B contained sediment above redevelopment criteria in the SOP (10% screen occlusion for sampled wells, and 75% screen occlusion for gauged-only wells); therefore, P-93B will be redeveloped prior to 2nd Quarter 2022 (2Q22) sampling activities.
- During the comprehensive 1Q22 quarterly groundwater gauging event, 0.01 feet of LNAPL was detected in groundwater monitoring well ROST-4-PZ(E); however, no LNAPL was observed in ROST-4-PZ(E) on January 11, 2022 during the quarterly groundwater sampling event. ROST-4-PZ(E) was successfully sampled on January 12, 2022.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between January 3 and 5, 2022. Well T-7 was remeasured on January 6, 2022 due to anomalous initial results. The gauging activities were conducted in conjunction with the 1Q22 gauging event for the WRR to evaluate groundwater flow direction and identify possible LNAPL in the Investigation Area. Depth to LNAPL (if present) and depth to water were recorded. Quarterly groundwater monitoring well gauging results can be found in **Table 1**. The groundwater gauging data table also includes well-head PID (photoionization detector) results.

Low-Flow Groundwater Purging and Sampling

Groundwater samples were collected from groundwater monitoring wells between January 6 and 14, 2022. Groundwater samples were collected using the most current low-flow groundwater purging and sampling related SOPs, which have previously been provided to IEPA. Data are included in this report and discussed in **Section 3**.

Groundwater monitoring wells MW-1 through MW-14; MW-16; MW-22 through MW-28; P-54; P-56 through P-59; P-66; 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 (Well Wizard®) and dedicated bonded polyethylene tubing.

For both sampling methods pumping was performed at a low flow rate (≤ 300 mL/minute) to minimize drawdown of the water level within the groundwater monitoring well. During groundwater purging, water quality parameters (pH, temperature, specific conductivity, turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP)) were measured and recorded after every flow-through cell volume. Once stabilization was achieved or a maximum purge 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 and P-68, contained LNAPL when gauged and, therefore, were not sampled. Groundwater monitoring well ROST-4-PZ(E), located in the Village and designated for sampling in the Interim Groundwater Monitoring Program, contained LNAPL on January 3, 2022 when gauged during the groundwater gauging event. ROST-4-PZ(E) was gauged on January 11, 2022 during the quarterly groundwater sampling event; no LNAPL was detected and therefore, well ROST-4-PZ(E) was sampled on January 12, 2022.

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

2.4 Decontamination and Investigation-Derived Waste

Decontamination

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

Investigation-Derived Waste

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

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

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

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

2.5 Groundwater Sample Handling and Laboratory Testing

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

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

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

2.6 Data Quality Review and Data Management

Laboratory data were provided in electronic form and included data qualifiers on the basis of the laboratory's quality control or to indicate sample analysis information. The data were independently reviewed and qualified by AECOM. One hundred percent of the data were subjected to a data quality review and ten percent of the data were further subjected to Level 4 data validation. 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 1Q22 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 1Q22 event was conducted between January 3 and 5, 2022. Well T-7 was remeasured on January 6, 2022 due to anomalous initial results. This groundwater monitoring well gauging was conducted in accordance with the Interim Groundwater Monitoring Program, and the results can be found in **Table 1**. Groundwater levels in most wells in the vicinity of the West Fenceline have fallen approximately 1 to 1.5 feet since the 4Q21 gauging event. Groundwater levels in most wells in the central portion of the WRR have fallen approximately 0.5 to 1 foot, and most wells in the eastern portion of the WRR have fallen approximately 1.5 to 2.5 feet since the 4Q21 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 1Q22 event. The potentiometric surface observed during the 1Q22 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates an inward gradient with groundwater flow toward the WRR groundwater production wells.

During the 1Q22 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells (P-55R, P-68, and ROST-4-PZ(E)) (**Table 1**). In these wells, LNAPL thicknesses ranged from 0.01 to 0.05 feet. Monitoring wells P-55R and P-68 are located in the WRR. Monitoring well ROST-4-PZ(E) is located in the Village; however, LNAPL was not observed in ROST-4-PZ(E) during the quarterly groundwater sampling event. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 1Q22 gauging event.

LNAPL thickness greater than 0.10 feet was not observed during 1Q22; therefore, LNAPL recovery efforts were not performed during 1Q22[2].

3.2 Data Quality Review Results

A total of 8 sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 1Q22 event. Fifty-three different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 52 samples included 42 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 1Q22 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. Seven different EB sets were collected for this quarter. A TB set was included in every cooler that contained samples for VOC analysis. A total of 14 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

Based on laboratory control sample (LCS), MS/MSD, surrogate, holding time, and field duplicate criteria, the groundwater analytical results reported were accepted for their intended use. Analytical results qualified by AECOM are specified in the data reviews presented in **Appendix C**.

3.3 Analytical Results and Discussion

Table 2 presents cumulative information on groundwater sampling field parameters for Main Sand aquifer wells. These results are consistent with those observed in the 4Q21 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

[2] LNAPL > 0.10 feet is a project specific criterion for removal, based on practicality with the removal technique.
[3] IEPA requested that the Interim Groundwater Monitoring Program be consistent with the RCRA Part B Permit.

Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route (35 IAC 742, Appendix B, Table E) (IEPA, 2007), and the IEPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables) (IEPA, 2018). Where screening values were available from multiple sources from the ones mentioned above, screening values from Part 620 were used preferentially over the screening values found in TACO and Chemicals not in TACO sources. All three sources are checked on a quarterly basis to ensure the most current published screening values are being used. The results of this screening comparison are presented in **Table 3**.

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

- Benzene
- 1,2,4-Trimethylbenzene
- 2-Methylnaphthalene
- Naphthalene
- Benzo(a)anthracene
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 1Q22. These findings are generally consistent with the results from previous sampling events, with the exception of several analytes in P-66. Results for P-66 were consistent with 3Q21 and 4Q21, however continue to be outside the historical range prior to 3Q21.

WRB/P66 notified the Illinois Emergency Management Agency (IEMA) on November 22, 2020 of a release of gasoline from a Buckeye Partners (Wood River Pipeline, LLC) pipeline located to the south of well P-58 along the WRR West Fenceline, and to the north of well P-66 on WRR Main Property as indicated on **Figures 2, 3b, 4a,** and **5**. The release is associated with IEPA Violation Notice L-2021-00084, LPC #1190905036 – Madison County. Wells P-58 and P-66 will be gauged and sampled in the absence of LNAPL during the 2nd Quarter 2022 (2Q22) Roxana Interim Groundwater Monitoring program.

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

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

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

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 1Q22, statistically significant downward trends were displayed for six wells, no wells displayed statistically significant increasing trends, and the remaining two wells displayed trends that were not statistically significant[5]. Results from the Mann-Kendall analysis conducted via GWSDAT are presented in **Appendix D-2**.

[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 1Q22 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 1Q22, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in wells in the vicinity of the West Fenceline have fallen approximately 1 to 1.5 feet since the 4Q21 gauging event. Groundwater levels in most wells in the central portion of the WRR have fallen approximately 0.5 to 1 foot, and most wells in the eastern portion of the WRR have fallen approximately 1.5 to 2.5 feet since the previous quarter.

- The analytical results from 1Q22 are generally consistent with the results from previous sampling events, with the exception of several analytes in P-66. Results for P-66 were consistent with 3Q21 and 4Q21, however continue to be outside the historical range prior to 3Q21. 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 2Q22 Roxana Interim Groundwater Monitoring program.

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

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

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

4.1 Limitations

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

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

5 References

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

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

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

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

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

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

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

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

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

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

AECOM, 2022 (AECOM, 2022c); *Shell GESS Health and Safety Plan: Rand Avenue, Roxana / Route 111, and WRR Investigation and Remediation*. Prepared for Shell Oil Products US (Shell), dated February 2, 2022.

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 March 2, 2022.

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, 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.

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.

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Tables

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 01											
2Q21	442.83	4/5/2021	NE	37.66	NA	NA	NA	405.17	394.03 - 384.03 (48.80 - 58.80)	0.0	*
3Q21		7/7/2021	NE	37.27	NA	NA	NA	405.56		0.0	*
4Q21		10/5/2021	NE	37.81	NA	NA	NA	405.02		0.1	*
1Q22		1/3/2022	NE	39.03	NA	NA	NA	403.80		0.0	*
MW 02											
2Q21	443.93	4/5/2021	NE	38.94	NA	NA	NA	404.99	394.06 - 384.06 (49.87 - 59.87)	65.2	*
3Q21		7/6/2021	NE	38.66	NA	NA	NA	405.27		40.3	*
4Q21		10/4/2021	NE	39.11	NA	NA	NA	404.82		9.8	*
1Q22		1/3/2022	NE	40.41	NA	NA	NA	403.52		317.2	*
MW 03											
2Q21	430.23	4/5/2021	NE	24.90	NA	NA	NA	405.33	395.56 - 385.56 (34.67 - 44.67)	0.0	*
3Q21		7/7/2021	NE	24.30	NA	NA	NA	405.93		0.0	*
4Q21		10/5/2021	NE	25.09	NA	NA	NA	405.14		0.2	*
1Q22		1/4/2022	NE	26.20	NA	NA	NA	404.03		0.3	*
MW 04											
2Q21	441.31	4/5/2021	NE	36.08	NA	NA	NA	405.23	396.25 - 386.25 (45.06 - 55.06)	0.0	*
3Q21		7/7/2021	NE	35.64	NA	NA	NA	405.67		0.0	*
4Q21		10/5/2021	NE	36.29	NA	NA	NA	405.02		0.4	*
1Q22		1/4/2022	NE	37.43	NA	NA	NA	403.88		0.0	*
MW 05											
2Q21	429.98	4/6/2021	NE	24.60	NA	NA	NA	405.38	396.01 - 386.01 (33.97 - 43.97)	0.0	*
3Q21		7/7/2021	NE	24.02	NA	NA	NA	405.96		0.0	*
4Q21		10/5/2021	NE	24.79	NA	NA	NA	405.19		2.8	*
1Q22		1/4/2022	NE	25.90	NA	NA	NA	404.08		0.0	*
MW 06A											
2Q21	432.33	4/6/2021	NE	26.61	NA	NA	NA	405.72	398.48 - 388.48 (33.85 - 43.85)	0.0	*
3Q21		7/7/2021	NE	26.06	NA	NA	NA	406.27		0.0	*
4Q21		10/5/2021	NE	26.94	NA	NA	NA	405.39		0.0	*
1Q22		1/4/2022	NE	28.02	NA	NA	NA	404.31		0.1	*
MW 06B											
2Q21	432.37	4/6/2021	NE	26.65	NA	NA	NA	405.72	368.32 - 363.32 (64.05 - 69.05)	0.0	*
3Q21		7/7/2021	NE	26.12	NA	NA	NA	406.25		0.0	*
4Q21		10/5/2021	NE	26.98	NA	NA	NA	405.39		0.0	*
1Q22		1/4/2022	NE	28.07	NA	NA	NA	404.30		0.1	*
MW 06C											
2Q21	432.18	4/6/2021	NE	26.44	NA	NA	NA	405.74	347.23 - 342.23 (84.95 - 89.95)	0.0	*
3Q21		7/7/2021	NE	25.94	NA	NA	NA	406.24		0.0	*
4Q21		10/5/2021	NE	26.78	NA	NA	NA	405.40		0.0	*
1Q22		1/4/2022	NE	27.86	NA	NA	NA	404.32		0.1	*
MW 06D											
2Q21	432.06	4/6/2021	NE	26.30	NA	NA	NA	405.76	327.34 - 322.34 (104.72 - 109.72)	0.0	*
3Q21		7/7/2021	NE	25.76	NA	NA	NA	406.30		0.0	*
4Q21		10/5/2021	NE	26.63	NA	NA	NA	405.43		0.0	*
1Q22		1/4/2022	NE	27.73	NA	NA	NA	404.33		0.1	*
MW 07											
2Q21	443.31	4/5/2021	NE	38.11	NA	NA	NA	405.20	400.39 - 390.39 (42.92 - 52.92)	0.0	*
3Q21		7/6/2021	NE	37.74	NA	NA	NA	405.57		1005	*
4Q21		10/4/2021	NE	38.33	NA	NA	NA	404.98		18.2	*
1Q22		1/3/2022	NE	39.64	NA	NA	NA	403.67		65.6	*
MW 08											
2Q21	434.43	4/6/2021	NE	29.03	NA	NA	NA	405.40	400.83 - 390.83 (33.60 - 43.60)	3.6	*
3Q21		7/7/2021	NE	28.51	NA	NA	NA	405.92		27.3	*
4Q21		10/5/2021	NE	29.29	NA	NA	NA	405.14		0.0	*
1Q22		1/4/2022	NE	30.38	NA	NA	NA	404.05		0.0	*
MW 09											
2Q21	445.28	4/5/2021	NE	39.31	NA	NA	NA	405.97	399.24 - 389.24 (46.04 - 56.04)	0.0	*
3Q21		7/6/2021	NE	38.86	NA	NA	NA	406.42		0.0	*
4Q21		10/4/2021	NE	39.21	NA	NA	NA	406.07		0.1	*
1Q22		1/3/2022	NE	40.43	NA	NA	NA	404.85		0.2	*
MW 10											
2Q21	445.06	4/5/2021	NE	39.07	NA	NA	NA	405.99	400.63 - 390.63 (44.43 - 54.43)	0.0	*
3Q21		7/6/2021	NE	38.78	NA	NA	NA	406.28		0.0	*
4Q21		10/4/2021	NE	39.09	NA	NA	NA	405.97		0.1	*
1Q22		1/3/2022	NE	40.33	NA	NA	NA	404.73		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 11											
2Q21	442.38	4/5/2021	NE	36.93	NA	NA	NA	405.45	400.72 - 390.72 (41.66 - 51.66)	0.0	*
3Q21		7/6/2021	NE	36.53	NA	NA	NA	405.85		0.0	*
4Q21		10/4/2021	NE	36.90	NA	NA	NA	405.48		0.0	*
1Q22		1/3/2022	NE	38.14	NA	NA	NA	404.24		0.2	*
MW 12											
2Q21	442.64	4/5/2021	NE	37.43	NA	NA	NA	405.21	400.72 - 390.72 (41.92 - 51.92)	0.0	*
3Q21		7/7/2021	NE	36.95	NA	NA	NA	405.69		0.0	*
4Q21		10/5/2021	NE	37.49	NA	NA	NA	405.15		0.3	*
1Q22		1/3/2022	NE	38.72	NA	NA	NA	403.92		0.2	*
MW 13											
2Q21	430.30	4/6/2021	NE	24.52	NA	NA	NA	405.78	405.50 - 395.50 (24.80 - 34.80)	0.0	*
3Q21		7/7/2021	NE	23.75	NA	NA	NA	406.55		0.0	*
4Q21		10/5/2021	NE	24.71	NA	NA	NA	405.59		0.0	*
1Q22		1/4/2022	NE	25.72	NA	NA	NA	404.58		5.7	
MW 14											
2Q21	434.61	4/7/2021	NE	28.55	NA	NA	NA	406.06	401.19 - 391.19 (33.42 - 43.42)	43.3	*
3Q21		7/7/2021	NE	28.15	NA	NA	NA	406.46		94.3	*
4Q21		10/6/2021	NE	29.02	NA	NA	NA	405.59		41.3	*
1Q22		1/5/2022	NE	30.17	NA	NA	NA	404.44		2.9	*
MW 16											
2Q21	443.60	4/5/2021	NE	38.45	NA	NA	NA	405.15	406.10 - 396.10 (37.50 - 47.50)	0.0	
3Q21		7/7/2021	NE	38.18	NA	NA	NA	405.42		0.0	
4Q21		10/4/2021	NE	38.57	NA	NA	NA	405.03		0.0	
1Q22		1/4/2022	NE	39.62	NA	NA	NA	403.98		0.0	
MW 17											
2Q21	441.78	4/5/2021	NE	36.61	NA	NA	NA	405.17	407.49 - 392.49 (34.29 - 49.29)	1.0	
3Q21		7/6/2021	NE	36.63	NA	NA	NA	405.15		18.0	
4Q21		10/4/2021	NE	36.85	NA	NA	NA	404.93		0.1	
1Q22		1/3/2022	NE	38.02	NA	NA	NA	403.76		0.1	
MW 18											
2Q21	442.24	4/5/2021	NE	37.20	NA	NA	NA	405.04	407.32 - 392.32 (34.92 - 49.92)	0.0	
3Q21		7/6/2021	NE	37.26	NA	NA	NA	404.98		0.0	
4Q21		10/4/2021	NE	37.46	NA	NA	NA	404.78		0.0	
1Q22		1/3/2022	NE	38.68	NA	NA	NA	403.56		0.0	
MW 19											
2Q21	442.98	4/5/2021	NE	37.93	NA	NA	NA	405.05	406.64 - 391.64 (36.34 - 51.34)	0.0	
3Q21		7/6/2021	NE	37.88	NA	NA	NA	405.10		0.0	
4Q21		10/4/2021	NE	38.16	NA	NA	NA	404.82		0.0	
1Q22		1/3/2022	NE	39.38	NA	NA	NA	403.60		0.0	
MW 20											
2Q21	443.86	4/5/2021	NE	38.87	NA	NA	NA	404.99	407.98 - 392.98 (35.88 - 50.88)	0.0	
3Q21		7/6/2021	NE	38.70	NA	NA	NA	405.16		0.0	
4Q21		10/4/2021	NE	39.06	NA	NA	NA	404.80		0.0	
1Q22		1/3/2022	NE	40.35	NA	NA	NA	403.51		0.0	
MW 21											
2Q21	444.01	4/5/2021	NE	38.95	NA	NA	NA	405.06	409.00 - 394.00 (35.01 - 50.01)	0.0	
3Q21		7/6/2021	NE	38.87	NA	NA	NA	405.14		0.0	
4Q21		10/4/2021	NE	39.19	NA	NA	NA	404.82		0.0	
1Q22		1/3/2022	NE	40.55	NA	NA	NA	403.46		0.5	
MW 22											
2Q21	442.38	4/5/2021	NE	37.10	NA	NA	NA	405.28	403.95 - 393.95 (38.43 - 48.43)	0.6	*
3Q21		7/7/2021	NE	36.84	NA	NA	NA	405.54		0.0	*
4Q21		10/4/2021	NE	37.18	NA	NA	NA	405.20		0.0	*
1Q22		1/3/2022	NE	38.37	NA	NA	NA	404.01		0.0	*
MW 23											
2Q21	431.57	4/5/2021	NE	26.03	NA	NA	NA	405.54	402.55 - 392.55 (29.02 - 39.02)	0.0	*
3Q21		7/7/2021	NE	25.31	NA	NA	NA	406.26		0.0	*
4Q21		10/5/2021	NE	26.28	NA	NA	NA	405.29		5.5	*
1Q22		1/4/2022	NE	27.38	NA	NA	NA	404.19		0.2	*
MW 24											
2Q21	443.65	4/5/2021	NE	38.28	NA	NA	NA	405.37	404.04 - 394.04 (39.61 - 49.61)	0.0	*
3Q21		7/7/2021	NE	37.81	NA	NA	NA	405.84		0.0	*
4Q21		10/5/2021	NE	38.28	NA	NA	NA	405.37		0.0	*
1Q22		1/3/2022	NE	39.44	NA	NA	NA	404.21		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW 25											
2Q21	438.53	4/6/2021	NE	33.24	NA	NA	NA	405.29	402.94 - 392.94 (35.59 - 45.59)	44.8	*
3Q21		7/6/2021	NE	32.81	NA	NA	NA	405.72		65.9	*
4Q21		10/5/2021	NE	33.47	NA	NA	NA	405.06		200.8	*
1Q22		1/4/2022	NE	34.59	NA	NA	NA	403.94		140.6	*
MW 26											
2Q21	441.23	4/6/2021	NE	35.92	NA	NA	NA	405.31	403.08 - 393.08 (38.15 - 48.15)	0.0	*
3Q21		7/7/2021	NE	35.63	NA	NA	NA	405.60		0.0	*
4Q21		10/5/2021	NE	36.22	NA	NA	NA	405.01		0.3	*
1Q22		1/3/2022	NE	37.44	NA	NA	NA	403.79		0.2	*
MW 27											
2Q21	443.60	4/6/2021	NE	37.68	NA	NA	NA	405.92	403.81 - 393.81 (39.79 - 49.79)	0.0	*
3Q21		7/6/2021	NE	37.06	NA	NA	NA	406.54		0.0	*
4Q21		10/4/2021	NE	37.19	NA	NA	NA	406.41		0.1	*
1Q22		1/3/2022	NE	38.25	NA	NA	NA	405.35		0.2	*
MW 28											
2Q21	443.55	4/5/2021	NE	36.69	NA	NA	NA	406.86	409.94 - 399.94 (33.61 - 43.61)	0.0	
3Q21		7/6/2021	NE	36.33	NA	NA	NA	407.22		0.0	
4Q21		10/4/2021	NE	36.31	NA	NA	NA	407.24		0.1	
1Q22		1/3/2022	NE	37.48	NA	NA	NA	406.07		0.1	
P 01											
2Q21	442.98	4/6/2021	NE	27.39	NA	NA	NA	415.59	380.76 - 375.76 (62.22 - 67.22)	0.0	*
3Q21		7/7/2021	NE	27.98	NA	NA	NA	415.00		0.0	*
4Q21		10/5/2021	NE	28.95	NA	NA	NA	414.03		0.0	*
1Q22		1/5/2022	NE	31.32	NA	NA	NA	411.66		0.0	*
P 4U											
2Q21	442.74	4/7/2021	NE	28.80	NA	NA	NA	413.94	361.59 - 359.59 (81.15 - 83.15)	0.0	*
3Q21		7/7/2021	NE	29.36	NA	NA	NA	413.38		0.0	*
4Q21		10/5/2021	NE	30.15	NA	NA	NA	412.59		0.0	*
1Q22		1/5/2022	NE	32.32	NA	NA	NA	410.42		0.0	*
P 5L											
2Q21	444.01	4/7/2021	NE	28.14	NA	NA	NA	415.87	303.61 - 301.61 (140.40 - 142.40)	0.0	*
3Q21		7/7/2021	NE	29.02	NA	NA	NA	414.99		0.0	*
4Q21		10/5/2021	NE	30.04	NA	NA	NA	413.97		0.0	*
1Q22		1/5/2022	NE	32.25	NA	NA	NA	411.76		0.0	*
P 5U											
2Q21	444.42	4/7/2021	NE	29.79	NA	NA	NA	414.63	313.79 - 311.79 (130.63 - 132.63)	0.0	*
3Q21		7/7/2021	NE	30.42	NA	NA	NA	414.00		0.0	*
4Q21		10/5/2021	NE	31.19	NA	NA	NA	413.23		0.0	*
1Q22		1/5/2022	NE	33.44	NA	NA	NA	410.98		0.0	*
P 6U											
2Q21	443.63	4/7/2021	NE	29.26	NA	NA	NA	414.37	363.13 - 361.13 (80.50 - 82.50)	0.0	*
3Q21		7/7/2021	NE	29.97	NA	NA	NA	413.66		0.0	*
4Q21		10/5/2021	NE	30.81	NA	NA	NA	412.82		0.0	*
1Q22		1/5/2022	NE	32.95	NA	NA	NA	410.68		0.0	*
P 7U											
2Q21	444.08	4/7/2021	NE	29.34	NA	NA	NA	414.74	383.00 - 381.00 (61.08 - 63.08)	0.0	*
3Q21		7/7/2021	NE	30.12	NA	NA	NA	413.96		0.0	*
4Q21		10/5/2021	NE	31.01	NA	NA	NA	413.07		0.0	*
1Q22		1/5/2022	NE	33.15	NA	NA	NA	410.93		0.0	*
P 8U											
2Q21	442.07	4/7/2021	NE	30.01	NA	NA	NA	412.06	382.72 - 380.72 (59.35 - 61.35)	28.0	*
3Q21		7/7/2021	NE	30.50	NA	NA	NA	411.57		0.0	*
4Q21		10/5/2021	NE	31.12	NA	NA	NA	410.95		0.0	*
1Q22		1/5/2022	NE	33.06	NA	NA	NA	409.01		0.0	*
P 9U											
2Q21	445.20	4/6/2021	NE	34.81	NA	NA	NA	410.39	344.61 - 342.61 (100.59 - 102.59)	0.0	*
3Q21		7/7/2021	NE	35.25	NA	NA	NA	409.95		0.0	*
4Q21		10/5/2021	NE	35.72	NA	NA	NA	409.48		0.0	*
1Q22		1/3/2022	NE	37.48	NA	NA	NA	407.72		0.0	*
P 11L											
2Q21	442.76	4/7/2021	NE	30.99	NA	NA	NA	411.77	332.55 - 330.55 (110.21 - 112.21)	0.0	*
3Q21		7/7/2021	NE	31.44	NA	NA	NA	411.32		0.0	*
4Q21		10/5/2021	NE	31.98	NA	NA	NA	410.78		0.0	*
1Q22		1/5/2022	NE	34.05	NA	NA	NA	408.71		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 11U											
2Q21	443.38	4/7/2021	NE	31.80	NA	NA	NA	411.58	343.46 - 341.46 (99.92 - 101.92)	0.0	*
3Q21		7/7/2021	NE	32.03	NA	NA	NA	411.35		0.0	*
4Q21		10/5/2021	NE	32.63	NA	NA	NA	410.75		0.0	*
1Q22		1/5/2022	NE	34.65	NA	NA	NA	408.73		0.0	*
P 14											
2Q21	443.01	4/6/2021	NE	27.50	NA	NA	NA	415.51	395.54 - 385.54 (47.47 - 57.47)	0.0	*
3Q21		7/7/2021	NE	28.06	NA	NA	NA	414.95		0.0	*
4Q21		10/5/2021	NE	29.01	NA	NA	NA	414.00		0.0	*
1Q22		1/5/2022	NE	31.40	NA	NA	NA	411.61		0.0	*
P 15											
2Q21	443.88	4/7/2021	NE	29.50	NA	NA	NA	414.38	398.43 - 388.43 (45.45 - 55.45)	0.0	*
3Q21		7/7/2021	NE	30.01	NA	NA	NA	413.87		0.0	*
4Q21		10/5/2021	NE	30.81	NA	NA	NA	413.07		0.0	*
1Q22		1/5/2022	NE	32.93	NA	NA	NA	410.95		0.0	*
P 16											
2Q21	442.84	4/7/2021	NE	28.20	NA	NA	NA	414.64	397.10 - 387.10 (45.74 - 55.74)	0.0	*
3Q21		7/7/2021	NE	28.86	NA	NA	NA	413.98		0.0	*
4Q21		10/5/2021	NE	29.71	NA	NA	NA	413.13		0.0	*
1Q22		1/5/2022	NE	31.88	NA	NA	NA	410.96		0.0	*
P 43											
2Q21	444.62	4/7/2021	NE	32.44	NA	NA	NA	412.18	381.06 - 371.06 (63.56 - 73.56)	0.0	*
3Q21		7/7/2021	NE	32.87	NA	NA	NA	411.75		0.0	*
4Q21		10/5/2021	NE	33.50	NA	NA	NA	411.12		0.0	*
1Q22		1/5/2022	NE	35.52	NA	NA	NA	409.10		0.0	*
P 53											
2Q21	446.57	4/6/2021	NE	38.57	NA	NA	NA	408.00	406.26 - 381.26 (40.31 - 65.31)	0.0	*
3Q21		7/7/2021	NE	38.21	NA	NA	NA	408.36		0.0	*
4Q21		10/5/2021	NE	38.52	NA	NA	NA	408.05		0.0	*
1Q22		1/4/2022	NE	39.57	NA	NA	NA	407.00		0.2	*
P 54											
2Q21	442.52	4/5/2021	NE	37.06	NA	NA	NA	405.46	404.52 - 379.52 (38.00 - 63.00)	0.0	*
3Q21		7/6/2021	NE	36.52	NA	NA	NA	406.00		0.0	*
4Q21		10/5/2021	NE	37.02	NA	NA	NA	405.50		0.0	*
1Q22		1/3/2022	NE	38.22	NA	NA	NA	404.30		0.0	
P 55R											
2Q21	444.01	4/5/2021	37.11	37.17	406.84	406.90	0.06	406.89	403.58 - 393.58 (40.43 - 50.43)	125.4	*
3Q21		7/6/2021	37.04	37.10	406.91	406.97	0.06	406.96		115.3	*
4Q21		10/4/2021	36.85	36.99	407.02	407.16	0.14	407.13		108.5	*
1Q22		1/3/2022	37.44	37.49	406.52	406.57	0.05	406.56		350.1	*
P 56											
2Q21	446.32	4/5/2021	NE	41.38	NA	NA	NA	404.94	405.50 - 380.50 (40.82 - 65.82)	20.2	
3Q21		7/6/2021	NE	41.22	NA	NA	NA	405.10		159.2	
4Q21		10/4/2021	NE	41.54	NA	NA	NA	404.78		76.1	
1Q22		1/3/2022	NE	42.69	NA	NA	NA	403.63		7.4	
P 57											
2Q21	447.15	4/5/2021	NE	42.15	NA	NA	NA	405.00	402.96 - 392.96 (44.19 - 54.19)	47.1	*
3Q21		7/6/2021	NE	41.87	NA	NA	NA	405.28		159.2	*
4Q21		10/4/2021	NE	42.36	NA	NA	NA	404.79		6.0	*
1Q22		1/3/2022	NE	43.52	NA	NA	NA	403.63		117.6	*
P 58											
2Q21	445.16	4/5/2021	NE	39.98	NA	NA	NA	405.18	404.95 - 379.95 (40.21 - 65.21)	0.0	*
3Q21		7/6/2021	39.65	39.69	405.47	405.51	0.04	405.50		33.7	*
4Q21		10/4/2021	40.23	40.24	404.92	404.93	0.01	404.93		0.1	
1Q22		1/3/2022	NE	41.43	NA	NA	NA	403.73		0.1	
P 59											
2Q21	447.07	4/5/2021	NE	42.14	NA	NA	NA	404.93	399.16 - 374.16 (47.91 - 72.91)	155.7	*
3Q21		7/6/2021	NE	42.08	NA	NA	NA	404.99		14.9	*
4Q21		10/4/2021	NE	42.33	NA	NA	NA	404.74		147.2	*
1Q22		1/3/2022	NE	43.42	NA	NA	NA	403.65		262.3	*
P 60											
2Q21	446.88	4/5/2021	NE	41.55	NA	NA	NA	405.33	402.23 - 382.23 (44.65 - 64.65)	0.0	*
3Q21		7/6/2021	NE	41.48	NA	NA	NA	405.40		7.3	*
4Q21		10/4/2021	NE	41.67	NA	NA	NA	405.21		7.7	*
1Q22		1/3/2022	NE	42.83	NA	NA	NA	404.05		14.9	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 61											
2Q21	444.66	4/5/2021	39.70	39.71	404.95	404.96	0.01	404.96	398.98 - 373.98 (45.68 - 70.68)	88.1	*
3Q21		7/6/2021	40.02	40.07	404.59	404.64	0.05	404.63		151.6	*
4Q21		10/4/2021	40.28	40.30	404.36	404.38	0.02	404.38		135.9	*
1Q22		1/4/2022	41.22	41.23	403.43	403.44	0.01	403.44		82.0	*
P 62											
2Q21	442.60	4/5/2021	37.36	37.37	405.23	405.24	0.01	405.24	401.13 - 376.13 (41.47 - 66.47)	159.5	*
3Q21		7/6/2021	37.51	37.54	405.06	405.09	0.03	405.08		185.0	*
4Q21		10/4/2021	37.79	37.80	404.8	404.81	0.01	404.81		60.5	*
1Q22		1/4/2022	38.67	38.70	403.9	403.93	0.03	403.92		12.0	*
P 63											
2Q21	446.06	4/6/2021	40.97	40.98	405.08	405.09	0.01	405.09	398.77 - 373.77 (47.29 - 72.29)	34.0	*
3Q21		7/6/2021	41.13	41.17	404.89	404.93	0.04	404.92		40.1	*
4Q21		10/4/2021	41.32	41.33	404.73	404.74	0.01	404.74		2.8	*
1Q22		1/4/2022	42.35	42.40	403.66	403.71	0.05	403.70		128.5	*
P 64											
2Q21	446.78	4/6/2021	42.17	42.19	404.59	404.61	0.02	404.61	399.55 - 374.55 (47.23 - 72.23)	163.7	*
3Q21		7/6/2021	42.41	42.42	404.36	404.37	0.01	404.37		192.1	*
4Q21		10/4/2021	42.55	42.56	404.22	404.23	0.01	404.23		99.2	*
1Q22		1/4/2022	43.45	43.46	403.32	403.33	0.01	403.33		22.1	*
P 65											
2Q21	444.77	4/6/2021	NE	39.76	NA	NA	NA	405.01	397.75 - 372.75 (47.02 - 72.02)	1.6	*
3Q21		7/6/2021	NE	39.82	NA	NA	NA	404.95		0.8	*
4Q21		10/4/2021	NE	40.16	NA	NA	NA	404.61		2.2	*
1Q22		1/4/2022	NE	41.22	NA	NA	NA	403.55		0.4	*
P 66											
2Q21	437.00	4/7/2021	NE	31.42	NA	NA	NA	405.58	402.28 - 377.28 (34.72 - 59.72)	49.1	*
3Q21		7/7/2021	NE	31.05	NA	NA	NA	405.95		69.8	*
4Q21		10/6/2021	NE	31.89	NA	NA	NA	405.11		37.6	*
1Q22		1/5/2022	NE	33.00	NA	NA	NA	404.00		52.5	*
P 67											
2Q21	444.30	4/7/2021	37.52	37.53	406.77	406.78	0.01	406.78	402.32 - 377.32 (41.98 - 66.98)	0.2	*
3Q21		7/7/2021	37.25	37.29	407.01	407.05	0.04	407.04		1.1	*
4Q21		10/6/2021	NE	38.03	NA	NA	NA	406.27		30.9	*
1Q22		1/5/2022	39.33	39.35	404.95	404.97	0.02	404.97		2.3	*
P 68											
2Q21	445.38	4/5/2021	40.04	40.06	405.32	405.34	0.02	405.34	401.62 - 376.62 (43.76 - 68.76)	157.3	*
3Q21		7/6/2021	40.10	40.14	405.24	405.28	0.04	405.27		60.1	*
4Q21		10/4/2021	40.28	40.64	404.74	405.10	0.36	405.03		154.2	*
1Q22		1/4/2022	41.16	41.17	404.21	404.22	0.01	404.22		171.9	*
P 69											
2Q21	443.77	4/5/2021	NE	38.75	NA	NA	NA	405.02	402.95 - 377.95 (40.82 - 65.82)	59.2	*
3Q21		7/6/2021	NE	38.93	NA	NA	NA	404.84		21.7	*
4Q21		10/4/2021	NE	39.11	NA	NA	NA	404.66		166.0	*
1Q22		1/4/2022	NE	39.98	NA	NA	NA	403.79		47.1	*
P 70											
2Q21	443.11	4/5/2021	NE	38.01	NA	NA	NA	405.10	398.44 - 373.44 (44.67 - 69.67)	217.9	*
3Q21		7/6/2021	NE	38.21	NA	NA	NA	404.90		261.7	*
4Q21		10/4/2021	NE	38.45	NA	NA	NA	404.66		213.0	*
1Q22		1/4/2022	39.36	39.40	403.71	403.75	0.04	403.74		265.9	*
P 71											
2Q21	445.09	4/6/2021	NE	39.62	NA	NA	NA	405.47	402.48 - 377.48 (42.61 - 67.61)	5.0	*
3Q21		7/6/2021	NE	39.42	NA	NA	NA	405.67		46.0	*
4Q21		10/4/2021	NE	39.81	NA	NA	NA	405.28		16.2	*
1Q22		1/4/2022	NE	40.56	NA	NA	NA	404.53		35.4	*
P 72											
2Q21	444.70	4/6/2021	NE	39.06	NA	NA	NA	405.64	398.93 - 373.93 (45.77 - 70.77)	4.2	*
3Q21		7/6/2021	NE	38.99	NA	NA	NA	405.71		9.2	*
4Q21		10/4/2021	NE	39.49	NA	NA	NA	405.21		13.6	*
1Q22		1/4/2022	NE	40.36	NA	NA	NA	404.34		2.2	*
P 73											
2Q21	444.02	4/5/2021	NE	39.36	NA	NA	NA	404.66	402.42 - 377.42 (41.59 - 66.59)	62.9	*
3Q21		7/6/2021	NE	39.35	NA	NA	NA	404.67		76.8	*
4Q21		10/4/2021	NE	39.84	NA	NA	NA	404.18		35.6	*
1Q22		1/4/2022	NE	39.76	NA	NA	NA	404.26		16.8	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 74											
2Q21	442.93	4/5/2021	NE	37.98	NA	NA	NA	404.95	399.10 - 374.10 (43.83 - 68.83)	0.0	*
3Q21		7/6/2021	NE	38.12	NA	NA	NA	404.81		10.7	*
4Q21		10/4/2021	NE	38.32	NA	NA	NA	404.61		6.3	*
1Q22		1/4/2022	NE	39.22	NA	NA	NA	403.71		0.0	*
P 75											
2Q21	446.68	4/7/2021	NE	41.16	NA	NA	NA	405.52	403.55 - 378.55 (43.13 - 68.13)	72.1	*
3Q21		7/7/2021	NE	40.96	NA	NA	NA	405.72		27.4	*
4Q21		10/6/2021	NE	41.78	NA	NA	NA	404.90		43.7	*
1Q22		1/5/2022	NE	43.01	NA	NA	NA	403.67		37.6	*
P 82A											
2Q21	434.94	4/6/2021	NE	25.15	NA	NA	NA	409.79	401.73 - 386.73 (33.21 - 48.21)	0.0	*
3Q21		7/8/2021	NE	27.74	NA	NA	NA	407.20		0.0	*
4Q21		10/6/2021	NE	25.76	NA	NA	NA	409.18		0.0	*
1Q22		1/5/2022	NE	27.03	NA	NA	NA	407.91		0.2	*
P 82B											
2Q21	434.68	4/6/2021	NE	24.87	NA	NA	NA	409.81	371.88 - 369.88 (62.80 - 64.80)	0.0	*
3Q21		7/8/2021	NE	24.44	NA	NA	NA	410.24		0.0	*
4Q21		10/6/2021	NE	25.47	NA	NA	NA	409.21		0.0	*
1Q22		1/5/2022	NE	26.86	NA	NA	NA	407.82		0.0	*
P 82C											
2Q21	434.41	4/6/2021	NE	24.58	NA	NA	NA	409.83	351.64 - 349.64 (82.77 - 84.77)	0.0	*
3Q21		7/8/2021	NE	24.16	NA	NA	NA	410.25		0.0	*
4Q21		10/6/2021	NE	25.19	NA	NA	NA	409.22		0.0	*
1Q22		1/5/2022	NE	26.56	NA	NA	NA	407.85		0.0	*
P 82D											
2Q21	435.09	4/6/2021	NE	25.36	NA	NA	NA	409.73	323.55 - 321.55 (111.54 - 113.54)	0.0	*
3Q21		7/8/2021	NE	24.94	NA	NA	NA	410.15		0.0	*
4Q21		10/6/2021	NE	25.97	NA	NA	NA	409.12		0.0	*
1Q22		1/5/2022	NE	27.35	NA	NA	NA	407.74		0.0	*
P 83A											
2Q21	445.54	4/6/2021	NE	38.12	NA	NA	NA	407.42	398.14 - 383.14 (47.40 - 62.40)	0.0	*
3Q21		7/6/2021	NE	38.54	NA	NA	NA	407.00		0.0	*
4Q21		10/6/2021	NE	38.77	NA	NA	NA	406.77		0.0	*
1Q22		1/3/2022	NE	40.08	NA	NA	NA	405.46		0.0	*
P 83B											
2Q21	445.77	4/6/2021	NE	38.38	NA	NA	NA	407.39	371.97 - 369.97 (73.80 - 75.80)	0.0	*
3Q21		7/6/2021	NE	38.80	NA	NA	NA	406.97		0.0	*
4Q21		10/6/2021	NE	39.03	NA	NA	NA	406.74		0.0	*
1Q22		1/3/2022	NE	40.30	NA	NA	NA	405.47		0.0	*
P 83C											
2Q21	445.95	4/6/2021	NE	38.53	NA	NA	NA	407.42	353.56 - 351.56 (92.39 - 94.39)	0.0	*
3Q21		7/6/2021	NE	38.96	NA	NA	NA	406.99		0.0	*
4Q21		10/6/2021	NE	39.20	NA	NA	NA	406.75		0.0	*
1Q22		1/3/2022	NE	40.46	NA	NA	NA	405.49		0.0	*
P 83D											
2Q21	445.86	4/6/2021	NE	38.51	NA	NA	NA	407.35	312.06 - 310.06 (133.80 - 135.80)	0.0	*
3Q21		7/6/2021	NE	38.94	NA	NA	NA	406.92		0.0	*
4Q21		10/6/2021	NE	39.17	NA	NA	NA	406.69		0.0	*
1Q22		1/3/2022	NE	40.45	NA	NA	NA	405.41		0.0	*
P 84A											
2Q21	446.63	4/6/2021	NE	39.20	NA	NA	NA	407.43	397.71 - 382.71 (48.92 - 63.92)	0.0	*
3Q21		7/7/2021	NE	39.10	NA	NA	NA	407.53		0.0	*
4Q21		10/5/2021	NE	39.44	NA	NA	NA	407.19		0.0	*
1Q22		1/4/2022	NE	40.50	NA	NA	NA	406.13		0.1	*
P 84B											
2Q21	446.35	4/6/2021	NE	38.95	NA	NA	NA	407.40	372.85 - 370.85 (73.50 - 75.50)	0.0	*
3Q21		7/7/2021	NE	38.82	NA	NA	NA	407.53		0.0	*
4Q21		10/5/2021	NE	39.16	NA	NA	NA	407.19		0.0	*
1Q22		1/4/2022	NE	40.25	NA	NA	NA	406.10		0.1	*
P 84C											
2Q21	446.37	4/6/2021	NE	38.96	NA	NA	NA	407.41	352.32 - 350.32 (94.05 - 96.05)	0.0	*
3Q21		7/7/2021	NE	38.83	NA	NA	NA	407.54		0.0	*
4Q21		10/5/2021	NE	39.17	NA	NA	NA	407.20		0.0	*
1Q22		1/4/2022	NE	40.26	NA	NA	NA	406.11		0.1	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 84D											
2Q21	446.38	4/6/2021	NE	38.96	NA	NA	NA	407.42	325.55 - 323.55 (120.83 - 122.83)	0.0	*
3Q21		7/7/2021	NE	38.83	NA	NA	NA	407.55		0.0	*
4Q21		10/5/2021	NE	39.17	NA	NA	NA	407.21		0.0	*
1Q22		1/4/2022	NE	40.26	NA	NA	NA	406.12		0.1	*
P 88A											
2Q21	443.27	4/7/2021	NE	30.92	NA	NA	NA	412.35	404.87 - 389.87 (38.40 - 53.40)	0.0	*
3Q21		7/7/2021	NE	30.58	NA	NA	NA	412.69		0.0	*
4Q21		10/6/2021	NE	31.01	NA	NA	NA	412.26		0.0	*
1Q22		1/4/2022	NE	32.27	NA	NA	NA	411.00		0.1	*
P 88B											
2Q21	443.35	4/7/2021	NE	31.00	NA	NA	NA	412.35	371.70 - 369.70 (71.65 - 73.65)	0.0	*
3Q21		7/7/2021	NE	30.64	NA	NA	NA	412.71		0.0	*
4Q21		10/6/2021	NE	31.07	NA	NA	NA	412.28		0.0	*
1Q22		1/4/2022	NE	32.33	NA	NA	NA	411.02		0.1	*
P 88C											
2Q21	443.31	4/7/2021	NE	30.91	NA	NA	NA	412.40	351.01 - 349.01 (92.30 - 94.30)	0.0	*
3Q21		7/7/2021	NE	30.78	NA	NA	NA	412.53		0.0	
4Q21		10/6/2021	NE	31.02	NA	NA	NA	412.29		0.0	*
1Q22		1/4/2022	NE	32.27	NA	NA	NA	411.04		0.0	*
P 88D											
2Q21	443.38	4/7/2021	NE	31.06	NA	NA	NA	412.32	331.21 - 329.21 (112.17 - 114.17)	0.0	*
3Q21		7/7/2021	NE	30.72	NA	NA	NA	412.66		0.0	
4Q21		10/6/2021	NE	31.17	NA	NA	NA	412.21		0.0	*
1Q22		1/4/2022	NE	32.42	NA	NA	NA	410.96		0.1	*
P 89B											
2Q21	447.64	4/6/2021	NE	37.78	NA	NA	NA	409.86	370.28 - 368.28 (77.36 - 79.36)	0.0	*
3Q21		7/7/2021	NE	38.34	NA	NA	NA	409.30		0.0	*
4Q21		10/5/2021	NE	38.87	NA	NA	NA	408.77		0.0	*
1Q22		1/5/2022	NE	40.52	NA	NA	NA	407.12		0.0	*
P 89C											
2Q21	447.96	4/6/2021	NE	38.13	NA	NA	NA	409.83	351.56 - 349.56 (96.40 - 98.40)	0.0	*
3Q21		7/7/2021	NE	38.68	NA	NA	NA	409.28		0.0	*
4Q21		10/5/2021	NE	39.22	NA	NA	NA	408.74		0.0	*
1Q22		1/5/2022	NE	40.84	NA	NA	NA	407.12		0.0	*
P 89D											
2Q21	447.83	4/6/2021	NE	38.13	NA	NA	NA	409.70	309.33 - 307.33 (138.50 - 140.50)	0.0	*
3Q21		7/7/2021	NE	38.72	NA	NA	NA	409.11		0.0	*
4Q21		10/5/2021	NE	39.30	NA	NA	NA	408.53		0.0	*
1Q22		1/5/2022	NE	40.85	NA	NA	NA	406.98		0.0	*
P 91A											
2Q21	447.43	4/5/2021	NE	43.52	NA	NA	NA	403.91	395.92 - 380.92 (51.51 - 66.51)	2.0	*
3Q21		7/6/2021	43.99	44.00	403.43	403.44	0.01	403.44		37.6	*
4Q21		10/4/2021	43.95	43.96	403.47	403.48	0.01	403.48		10.2	*
1Q22		1/4/2022	44.66	44.67	402.76	402.77	0.01	402.77		7.7	*
P 91B											
2Q21	447.47	4/5/2021	NE	43.67	NA	NA	NA	403.80	372.78 - 370.78 (74.69 - 76.69)	1.5	*
3Q21		7/6/2021	NE	44.12	NA	NA	NA	403.35		14.5	*
4Q21		10/4/2021	NE	44.07	NA	NA	NA	403.40		7.4	*
1Q22		1/4/2022	NE	44.79	NA	NA	NA	402.68		0.0	*
P 91C											
2Q21	447.27	4/5/2021	NE	43.41	NA	NA	NA	403.86	352.54 - 350.54 (94.73 - 96.73)	0.0	*
3Q21		7/6/2021	NE	43.87	NA	NA	NA	403.40		1.3	*
4Q21		10/4/2021	NE	43.84	NA	NA	NA	403.43		0.0	*
1Q22		1/4/2022	NE	44.51	NA	NA	NA	402.76		0.0	*
P 91D											
2Q21	447.26	4/5/2021	NE	43.41	NA	NA	NA	403.85	278.94 - 276.94 (168.32 - 170.32)	0.0	*
3Q21		7/6/2021	NE	43.88	NA	NA	NA	403.38		1.5	*
4Q21		10/4/2021	NE	43.87	NA	NA	NA	403.39		0.0	*
1Q22		1/4/2022	NE	44.52	NA	NA	NA	402.74		0.0	*
P 92A											
2Q21	446.39	4/6/2021	41.68	41.73	404.66	404.71	0.05	404.70	398.82 - 383.82 (47.57 - 62.57)	31.3	*
3Q21		7/6/2021	NE	41.85	NA	NA	NA	404.54		4.2	*
4Q21		10/4/2021	42.19	42.20	404.19	404.20	0.01	404.20		5.2	*
1Q22		1/4/2022	43.05	43.10	403.29	403.34	0.05	403.33		49.3	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 92B											
2Q21	446.33	4/6/2021	NE	41.64	NA	NA	NA	404.69	371.92 - 369.92 (74.41 - 76.41)	0.0	*
3Q21		7/6/2021	NE	41.79	NA	NA	NA	404.54		0.0	*
4Q21		10/4/2021	NE	42.10	NA	NA	NA	404.23		0.0	*
1Q22		1/4/2022	NE	42.97	NA	NA	NA	403.36		0.0	*
P 92C											
2Q21	446.34	4/6/2021	NE	41.64	NA	NA	NA	404.70	353.38 - 348.38 (92.96 - 97.96)	9.2	*
3Q21		7/6/2021	NE	41.78	NA	NA	NA	404.56		1.1	*
4Q21		10/4/2021	NE	42.08	NA	NA	NA	404.26		0.0	*
1Q22		1/4/2022	NE	42.97	NA	NA	NA	403.37		0.0	*
P 92D											
2Q21	446.15	4/6/2021	NE	41.49	NA	NA	NA	404.66	305.15 - 303.15 (141.00 - 143.00)	0.0	*
3Q21		7/6/2021	NE	41.65	NA	NA	NA	404.50		0.0	*
4Q21		10/4/2021	NE	41.08	NA	NA	NA	405.07		0.0	*
1Q22		1/4/2022	NE	42.87	NA	NA	NA	403.28		0.0	*
P 93A											
2Q21	445.37	4/5/2021	NE	40.33	NA	NA	NA	405.04	402.30 - 392.30 (43.07 - 53.07)	0.0	*
3Q21		7/6/2021	NE	40.03	NA	NA	NA	405.34		0.4	*
4Q21		10/4/2021	NE	40.56	NA	NA	NA	404.81		0.0	*
1Q22		1/3/2022	NE	41.79	NA	NA	NA	403.58		0.0	*
P 93B											
2Q21	446.70	4/5/2021	NE	41.67	NA	NA	NA	405.03	371.92 - 369.92 (74.78 - 76.78)	0.0	*
3Q21		7/6/2021	NE	41.37	NA	NA	NA	405.33		0.1	*
4Q21		10/4/2021	NE	41.88	NA	NA	NA	404.82		0.0	*
1Q22		1/3/2022	NE	43.06	NA	NA	NA	403.64		0.0	*
P 93C											
2Q21	446.55	4/5/2021	NE	41.51	NA	NA	NA	405.04	353.67 - 348.67 (92.88 - 97.88)	0.0	*
3Q21		7/6/2021	NE	41.21	NA	NA	NA	405.34		0.0	*
4Q21		10/4/2021	NE	41.47	NA	NA	NA	405.08		0.0	*
1Q22		1/3/2022	NE	42.90	NA	NA	NA	403.65		0.0	*
P 93D											
2Q21	446.97	4/5/2021	NE	41.89	NA	NA	NA	405.08	321.31 - 319.31 (125.66 - 127.66)	0.0	*
3Q21		7/6/2021	NE	41.47	NA	NA	NA	405.50		0.0	*
4Q21		10/4/2021	NE	42.09	NA	NA	NA	404.88		0.0	*
1Q22		1/3/2022	NE	43.28	NA	NA	NA	403.69		0.0	*
P 94											
2Q21	445.04	4/6/2021	NE	33.81	NA	NA	NA	411.23	398.80 - 383.80 (46.24 - 61.24)	0.0	*
3Q21		7/6/2021	NE	34.18	NA	NA	NA	410.86		0.2	*
4Q21		10/5/2021	NE	34.70	NA	NA	NA	410.34		0.0	*
1Q22		1/3/2022	NE	36.49	NA	NA	NA	408.55		0.0	*
P 95											
2Q21	443.95	4/6/2021	NE	28.84	NA	NA	NA	415.11	407.43 - 392.43 (36.52 - 51.52)	0.0	*
3Q21		7/7/2021	NE	28.61	NA	NA	NA	415.34		0.0	*
4Q21		10/6/2021	NE	28.93	NA	NA	NA	415.02		0.0	*
1Q22		1/4/2022	NE	30.18	NA	NA	NA	413.77		0.1	*
P 102											
2Q21	445.14	4/7/2021	NE	31.89	NA	NA	NA	413.25	402.39 - 382.39 (42.75 - 62.75)	19.1	*
3Q21		7/7/2021	NE	31.95	NA	NA	NA	413.19		20.3	*
4Q21		10/6/2021	NE	32.29	NA	NA	NA	412.85		52.8	*
1Q22		1/5/2022	NE	34.26	NA	NA	NA	410.88		1.1	*
P 114R											
2Q21	429.48	4/6/2021	NE	23.60	NA	NA	NA	405.88	406.47 - 396.47 (23.01 - 33.01)	0.0	
3Q21		7/7/2021	NE	22.46	NA	NA	NA	407.02		0.0	*
4Q21		10/5/2021	NE	23.86	NA	NA	NA	405.62		6.2	
1Q22		1/4/2022	NE	24.88	NA	NA	NA	404.60		10.8	
P 115											
2Q21	433.54	4/6/2021	NE	27.54	NA	NA	NA	406.00	401.24 - 381.24 (32.30 - 52.30)	0.0	*
3Q21		7/7/2021	NE	26.52	NA	NA	NA	407.02		0.0	*
4Q21		10/5/2021	NE	27.88	NA	NA	NA	405.66		0.0	*
1Q22		1/4/2022	NE	28.97	NA	NA	NA	404.57		0.1	*
P 116											
2Q21	436.79	4/6/2021	NE	30.98	NA	NA	NA	405.81	399.35 - 379.35 (37.44 - 57.44)	0.0	*
3Q21		7/7/2021	NE	29.89	NA	NA	NA	406.90		0.0	*
4Q21		10/5/2021	NE	31.37	NA	NA	NA	405.42		1.7	*
1Q22		1/4/2022	NE	32.44	NA	NA	NA	404.35		0.1	*

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P 117											
2Q21	432.87	4/6/2021	NE	27.19	NA	NA	NA	405.68	399.94 - 379.94 (32.93 - 52.93)	0.0	*
3Q21		7/8/2021	NE	26.15	NA	NA	NA	406.72		0.0	*
4Q21		10/5/2021	NE	27.62	NA	NA	NA	405.25		1.2	*
1Q22		1/4/2022	NE	28.69	NA	NA	NA	404.18		0.1	*
P 118											
2Q21	431.48	4/6/2021	NE	25.98	NA	NA	NA	405.50	400.36 - 384.43 (31.12 - 47.05)	0.0	*
3Q21		7/7/2021	NE	24.81	NA	NA	NA	406.67		0.0	*
4Q21		10/5/2021	NE	26.65	NA	NA	NA	404.83		0.0	*
1Q22		1/4/2022	NE	27.66	NA	NA	NA	403.82		0.0	*
P 119											
2Q21	432.11	4/6/2021	NE	25.77	NA	NA	NA	406.34	401.44 - 385.51 (30.67 - 46.60)	0.0	*
3Q21		7/7/2021	NE	25.09	NA	NA	NA	407.02		0.0	*
4Q21		10/5/2021	NE	26.11	NA	NA	NA	406.00		0.1	*
1Q22		1/4/2022	NE	27.03	NA	NA	NA	405.08		0.1	*
P 120											
2Q21	433.00	4/6/2021	NE	25.94	NA	NA	NA	407.06	401.62 - 385.69 (31.38 - 47.31)	0.0	*
3Q21		7/7/2021	NE	25.21	NA	NA	NA	407.79		0.0	*
4Q21		10/5/2021	NE	26.25	NA	NA	NA	406.75		0.2	*
1Q22		1/4/2022	NE	27.58	NA	NA	NA	405.42		0.0	*
P 129											
2Q21	432.66	4/6/2021	NE	27.68	NA	NA	NA	404.98	400.69 - 384.76 (31.97 - 47.90)	0.0	*
3Q21		7/7/2021	NE	26.50	NA	NA	NA	406.16		0.0	*
4Q21		10/5/2021	NE	29.28	NA	NA	NA	403.38		0.0	*
1Q22		1/4/2022	NE	30.12	NA	NA	NA	402.54		0.0	*
ROST 3 MW											
2Q21	442.52	4/5/2021	NE	36.97	NA	NA	NA	405.55	404.71 - 394.71 (37.81 - 47.81)	36.1	*
3Q21		7/6/2021	NE	36.61	NA	NA	NA	405.91		66.0	*
4Q21		10/5/2021	NE	36.98	NA	NA	NA	405.54		0.0	*
1Q22		1/3/2022	NE	38.10	NA	NA	NA	404.42		0.0	
ROST 4 PZ											
2Q21	442.15	4/5/2021	NE	36.43	NA	NA	NA	405.72	407.22 - 397.22 (34.93 - 44.93)	119.2	
3Q21		7/6/2021	NE	36.04	NA	NA	NA	406.11		0.6	
4Q21		10/4/2021	NE	36.08	NA	NA	NA	406.07		1.5	
1Q22		1/3/2022	NE	37.27	NA	NA	NA	404.88		0.2	
ROST 4 PZ(A)											
2Q21	442.15	4/5/2021	NE	35.87	NA	NA	NA	406.28	407.38 - 397.38 (34.77 - 44.77)	0.6	
3Q21		7/6/2021	NE	35.30	NA	NA	NA	406.85		40.4	
4Q21		10/4/2021	NE	35.15	NA	NA	NA	407.00		33.3	
1Q22		1/3/2022	NE	36.34	NA	NA	NA	405.81		0.0	
ROST 4 PZ(B)											
2Q21	442.40	4/5/2021	NE	36.50	NA	NA	NA	405.90	407.35 - 397.35 (35.05 - 45.05)	0.0	
3Q21		7/6/2021	NE	35.98	NA	NA	NA	406.42		0.0	
4Q21		10/4/2021	NE	35.95	NA	NA	NA	406.45		0.0	
1Q22		1/3/2022	NE	37.10	NA	NA	NA	405.30		0.0	
ROST 4 PZ(C)											
2Q21	442.97	4/5/2021	NE	37.30	NA	NA	NA	405.67	408.02 - 398.02 (34.95 - 44.95)	0.0	
3Q21		7/6/2021	NE	36.91	NA	NA	NA	406.06		0.0	
4Q21		10/4/2021	NE	37.02	NA	NA	NA	405.95		0.1	
1Q22		1/3/2022	NE	38.13	NA	NA	NA	404.84		0.1	
ROST 4 PZ(D)											
2Q21	442.92	4/5/2021	NE	37.16	NA	NA	NA	405.76	407.95 - 397.95 (34.97 - 44.97)	0.0	
3Q21		7/6/2021	NE	36.83	NA	NA	NA	406.09		0.0	
4Q21		10/4/2021	NE	36.88	NA	NA	NA	406.04		0.7	
1Q22		1/3/2022	NE	38.03	NA	NA	NA	404.89		0.8	
ROST 4 PZ(E)											
2Q21	441.98	4/5/2021	NE	36.33	NA	NA	NA	405.65	407.23 - 397.23 (34.75 - 44.75)	0.0	
3Q21		7/6/2021	NE	36.05	NA	NA	NA	405.93		0.0	
4Q21		10/4/2021	NE	36.14	NA	NA	NA	405.84		1.0	
1Q22		1/3/2022	37.20	37.21	404.77	404.78	0.01	404.78		0.0	
		1/11/2022	NE	37.09	NA	NA	NA	404.89		0.0	Confirmation gauge.
ROST 4 PZ(F)											
2Q21	442.12	4/5/2021	NE	36.58	NA	NA	NA	405.54	407.59 - 397.59 (34.53 - 44.53)	0.0	
3Q21		7/6/2021	NE	36.31	NA	NA	NA	405.81		0.0	
4Q21		10/4/2021	NE	36.40	NA	NA	NA	405.72		0.1	
1Q22		1/3/2022	NE	37.40	NA	NA	NA	404.72		0.0	

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
ROST 4 PZ(G)											
2Q21	442.20	4/5/2021	NE	36.84	NA	NA	NA	405.36	407.92 - 397.92 (34.28 - 44.28)	0.6	
3Q21		7/6/2021	NE	36.69	NA	NA	NA	405.51		89.5	
4Q21		10/4/2021	NE	36.97	NA	NA	NA	405.23		108.9	
1Q22		1/3/2022	NE	38.15	NA	NA	NA	404.05		308.5	
S 1											
2Q21	444.06	4/6/2021	38.97	38.98	405.08	405.09	0.01	405.09	Unknown	24.4	
3Q21		7/6/2021	38.95	38.97	405.09	405.11	0.02	405.11		87.9	
4Q21		10/4/2021	39.35	39.37	404.69	404.71	0.02	404.71		113.8	
1Q22		1/4/2022	40.26	40.28	403.78	403.80	0.02	403.80		61.7	
T 1											
2Q21	445.61	4/5/2021	NE	39.36	NA	NA	NA	406.25	398.61 - 388.61 (47.00 - 57.00)	0.0	*
3Q21		7/6/2021	NE	39.12	NA	NA	NA	406.49		0.2	*
4Q21		10/4/2021	NE	39.40	NA	NA	NA	406.21		0.0	*
1Q22		1/3/2022	NE	40.57	NA	NA	NA	405.04		0.0	*
T 2											
2Q21	443.40	4/5/2021	NE	37.27	NA	NA	NA	406.13	392.90 - 372.76 (50.49 - 70.64)	0.0	*
3Q21		7/6/2021	NE	37.32	NA	NA	NA	406.08		0.0	*
4Q21		10/4/2021	NE	37.54	NA	NA	NA	405.86		0.0	*
1Q22		1/4/2022	NE	38.56	NA	NA	NA	404.84		0.0	*
T 3											
2Q21	449.21	4/5/2021	NE	44.11	NA	NA	NA	405.10	403.99 - 388.99 (45.22 - 60.22)	0.0	*
3Q21		7/6/2021	NE	44.38	NA	NA	NA	404.83		0.0	*
4Q21		10/4/2021	NE	44.46	NA	NA	NA	404.75		0.0	*
1Q22		1/3/2022	NE	45.76	NA	NA	NA	403.45		0.2	
T 4											
2Q21	446.82	4/6/2021	NE	42.40	NA	NA	NA	404.42	396.80 - 381.80 (50.02 - 65.02)	0.0	*
3Q21		7/6/2021	NE	43.02	NA	NA	NA	403.80		0.2	*
4Q21		10/5/2021	NE	43.38	NA	NA	NA	403.44		0.3	*
1Q22		1/4/2022	NE	43.86	NA	NA	NA	402.96		0.0	*
T 5											
2Q21	443.66	4/6/2021	NE	37.87	NA	NA	NA	405.79	395.33 - 378.78 (48.33 - 64.88)	3.8	*
3Q21		7/6/2021	NE	37.86	NA	NA	NA	405.80		1.7	*
4Q21		10/4/2021	NE	38.36	NA	NA	NA	405.30		2.1	*
1Q22		1/4/2022	NE	39.37	NA	NA	NA	404.29		1.0	*
T 6											
2Q21	446.78	4/5/2021	NE	41.83	NA	NA	NA	404.95	394.27 - 380.02 (52.51 - 66.76)	0.0	*
3Q21		7/6/2021	NE	41.57	NA	NA	NA	405.21		0.7	*
4Q21		10/4/2021	NE	41.99	NA	NA	NA	404.79		4.2	*
1Q22		1/3/2022	NE	43.22	NA	NA	NA	403.56		0.2	*
T 7											
2Q21	444.26	4/7/2021	NE	37.48	NA	NA	NA	406.78	395.54 - 380.54 (48.72 - 63.72)	0.1	*
3Q21		7/7/2021	NE	37.18	NA	NA	NA	407.08		1.0	*
4Q21		10/6/2021	NE	38.06	NA	NA	NA	406.20		9.5	*
1Q22		1/6/2022	NE	39.26	NA	NA	NA	405.00		1.2	*
T 12											
2Q21	444.99	4/5/2021	NE	39.90	NA	NA	NA	405.09	398.16 - 372.16 (46.83 - 72.83)	0.0	*
3Q21		7/6/2021	NE	39.93	NA	NA	NA	405.06		50.1	*
4Q21		10/4/2021	NE	40.10	NA	NA	NA	404.89		49.1	*
1Q22		1/3/2022	NE	41.99	NA	NA	NA	403.00		3.5	*
T 13											
2Q21	443.76	4/5/2021	NE	37.16	NA	NA	NA	406.60	399.95 - 373.95 (43.81 - 69.81)	0.0	*
3Q21		7/6/2021	NE	36.87	NA	NA	NA	406.89		0.0	*
4Q21		10/4/2021	NE	37.21	NA	NA	NA	406.55		0.0	*
1Q22		1/3/2022	NE	38.78	NA	NA	NA	404.98		0.0	*
T 15											
2Q21	445.35	4/5/2021	NE	38.86	NA	NA	NA	406.49	396.95 - 370.95 (48.40 - 74.40)	0.0	*
3Q21		7/6/2021	NE	39.06	NA	NA	NA	406.29		0.0	*
4Q21		10/4/2021	NE	39.21	NA	NA	NA	406.14		0.0	*
1Q22		1/4/2022	NE	40.31	NA	NA	NA	405.04		0.0	*
T 17											
2Q21	446.19	4/6/2021	NE	37.18	NA	NA	NA	409.01	401.72 - 375.72 (44.47 - 70.47)	0.0	*
3Q21		7/6/2021	NE	37.54	NA	NA	NA	408.65		0.0	*
4Q21		10/5/2021	NE	38.02	NA	NA	NA	408.17		0.1	*
1Q22		1/3/2022	NE	39.53	NA	NA	NA	406.66		0.2	*

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T 19											
2Q21	446.99	4/6/2021	NE	42.48	NA	NA	NA	404.51	396.22 - 370.22 (50.77 - 76.77)	4.5	*
3Q21		7/6/2021	NE	43.01	NA	NA	NA	403.98		30.8	*
4Q21		10/5/2021	NE	43.42	NA	NA	NA	403.57		52.7	*
1Q22		1/4/2022	NE	43.91	NA	NA	NA	403.08		2.3	*
T 21											
2Q21	444.22	4/6/2021	NE	28.96	NA	NA	NA	415.26	412.26 - 386.26 (31.96 - 57.96)	0.0	*
3Q21		7/7/2021	NE	28.81	NA	NA	NA	415.41		0.0	*
4Q21		10/6/2021	NE	29.15	NA	NA	NA	415.07		0.0	*
1Q22		1/5/2022	NE	30.91	NA	NA	NA	413.31		0.5	*
T 22											
2Q21	442.37	4/7/2021	NE	30.88	NA	NA	NA	411.49	410.82 - 385.12 (31.55 - 57.25)	0.0	*
3Q21		7/7/2021	NE	30.46	NA	NA	NA	411.91		0.0	*
4Q21		10/6/2021	NE	31.14	NA	NA	NA	411.23		0.0	*
1Q22		1/5/2022	NE	32.83	NA	NA	NA	409.54		0.2	
T 23											
2Q21	432.90	4/7/2021	NE	23.57	NA	NA	NA	409.33	405.67 - 379.67 (27.23 - 53.23)	0.0	*
3Q21		7/8/2021	NE	23.18	NA	NA	NA	409.72		0.0	*
4Q21		10/6/2021	NE	24.21	NA	NA	NA	408.69		0.0	*
1Q22		1/5/2022	NE	25.92	NA	NA	NA	406.98		0.0	*
T 24											
2Q21	444.00	4/5/2021	38.72	38.74	405.26	405.28	0.02	405.28	402.50 - 376.85 (41.50 - 67.15)	0.0	*
3Q21		7/6/2021	38.80	38.93	405.07	405.20	0.13	405.17		1.1	*
4Q21		10/4/2021	39.05	39.09	404.91	404.95	0.04	404.94		0.1	*
1Q22		1/4/2022	39.94	39.99	404.01	404.06	0.05	404.05		16.8	*
T 28											
2Q21	444.56	4/6/2021	NE	37.07	NA	NA	NA	407.49	Unknown	0.0	
3Q21		7/6/2021	NE	37.47	NA	NA	NA	407.09		0.0	
4Q21		10/4/2021	NE	37.68	NA	NA	NA	406.88		0.0	
1Q22		1/3/2022	NE	39.14	NA	NA	NA	405.42		0.0	
T 37											
2Q21	447.44	4/6/2021	NE	37.63	NA	NA	NA	409.81	398.58 - 378.58 (48.85 - 68.85)	0.0	*
3Q21		7/7/2021	NE	38.18	NA	NA	NA	409.26		0.0	*
4Q21		10/5/2021	NE	38.72	NA	NA	NA	408.72		0.0	*
1Q22		1/5/2022	NE	40.36	NA	NA	NA	407.08		0.0	*
T 38											
2Q21	445.89	4/6/2021	NE	34.55	NA	NA	NA	411.34	396.75 - 376.75 (49.14 - 69.14)	0.0	*
3Q21		7/7/2021	NE	34.89	NA	NA	NA	411.00		0.0	*
4Q21		10/5/2021	NE	35.38	NA	NA	NA	410.51		0.0	*
1Q22		1/5/2022	NE	37.73	NA	NA	NA	408.16		0.0	*
T 62											
2Q21	432.16	4/6/2021	NE	25.47	NA	NA	NA	406.69	412.45 - 382.45 (19.71 - 49.71)	0.0	
3Q21		7/7/2021	NE	24.90	NA	NA	NA	407.26		0.0	
4Q21		10/5/2021	NE	26.07	NA	NA	NA	406.09		0.0	
1Q22		1/4/2022	NE	27.02	NA	NA	NA	405.14		0.1	
T 63											
2Q21	431.55	4/6/2021	NE	25.10	NA	NA	NA	406.45	411.57 - 381.57 (19.98 - 49.98)	0.0	
3Q21		7/7/2021	NE	24.36	NA	NA	NA	407.19		0.0	
4Q21		10/5/2021	NE	25.75	NA	NA	NA	405.80		0.0	
1Q22		1/4/2022	NE	26.79	NA	NA	NA	404.76		0.1	
T 64											
2Q21	429.10	4/6/2021	NE	22.91	NA	NA	NA	406.19	409.29 - 379.29 (19.81 - 49.81)	85.6	
3Q21		7/7/2021	NE	22.08	NA	NA	NA	407.02		67.8	
4Q21		10/5/2021	NE	23.86	NA	NA	NA	405.24		0.0	
1Q22		1/4/2022	NE	24.94	NA	NA	NA	404.16		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 spec fic 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 m llion; 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 we l.

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 mon toring 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 Mon toring 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.

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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
MW-01							
2Q21	7.12	18 00	1.041	34 61	0 64	3.1	
3Q21	6 81	20 00	1.133	8.95	1 86	26.7	
4Q21	6 88	18 90	1.096	27 05	0 64	-23.2	
1Q22	6 85	16 22	0.942	9.52	0 96	122 5	
MW-02							
2Q21	7.10	18.10	1.463	6.00	0 50	-265 8	
3Q21	7 20	20 50	1.093	3.17	1 61	-218 9	
4Q21	7.12	19 00	0.990	5.36	0 66	21.2	
1Q22	7.14	16 07	1.003	10 30	0.46	-129 2	
MW-03							
2Q21	6 68	17 00	1.349	5.25	0 63	-126.7	
3Q21	6 85	20.40	1.109	1.12	1.49	-140 2	
4Q21	6 69	19 20	1.368	11 84	0.45	-88.4	
1Q22	6 84	15 94	1.347	1.19	0.44	-135.4	
MW-04							
2Q21	6.75	18 00	1.084	38 86	0 65	-88.7	
3Q21	6 62	19.70	1.147	1.17	1 22	96.7	
4Q21	6 54	17 90	0.990	42 34	0.71	171.4	
1Q22	6.79	16.13	0.961	17 03	0.70	-53.0	
MW-05							
2Q21	6 52	17 30	1.484	12 62	0 67	-106 5	
3Q21	6 38	19 50	0.976	5.89	2 02	-92.7	
4Q21	6 60	19.10	1.050	3.43	0 59	47.1	
1Q22	6 94	16.46	1.190	2.53	0.47	-144.4	
MW-06A							
2Q21	6 55	19.40	1.005	85.15	0.43	-76.9	
3Q21	6 98	22.10	1.130	49 88	0 81	-88.9	
4Q21	6 52	20 30	1.444	30.10	0 50	-51.2	
1Q22	6 80	18 30	1.196	33 24	0.44	-121 2	
MW-06B							
2Q21	7.11	18 60	0.789	17 29	0.72	-98.2	
3Q21	7 37	21.10	0.756	15 28	0 92	-58.9	
4Q21	6 93	20 50	0.963	0.00	0.41	-35.4	
1Q22	7 06	16 20	0.794	2.89	0 53	-106 6	
MW-06C							
2Q21	7.18	18 60	0.708	6.60	0 64	-120 9	
3Q21	7.40	20.10	0.666	0.06	0 89	-14.3	
4Q21	6 63	19 60	0.690	4.65	0 52	101 9	
1Q22	7 24	14 31	0.655	8.62	2.79	83.9	
MW-06D							
2Q21	7.19	18.40	0.947	43 01	0 60	-133 5	
3Q21	7 02	20.70	0.992	30 23	1 04	-41.4	
4Q21	7 03	19.40	0.964	43.70	0.44	-105.4	
1Q22	7 09	15 04	1.056	27.13	2.43	97.5	

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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
MW-07							
2Q21	6 95	19.40	1.367	9.32	0 66	-84.2	
3Q21	6 80	20 60	1.275	0.00	1.15	65.5	
4Q21	6.73	19 00	1.197	6.06	0 59	72.3	
1Q22	6.72	16.49	1.216	12.14	0 64	-59.6	
MW-08							
2Q21	6 86	19.40	1.362	17.72	0.75	-123 3	
3Q21	6.78	19.40	1.435	0.00	1 08	-25.5	
4Q21	6.70	19 00	1.176	15 33	0 62	59.0	
1Q22	6 83	16 57	1.255	7.91	0.71	-133 9	
MW-09							
2Q21	6 81	17.10	1.747	36 25	1.49	-89.7	
3Q21	7.70	21.40	1.578	15.74	0 88	-15.2	
4Q21	6 81	18 50	1.257	6.01	0 64	6 0	
1Q22	6 84	14 57	1.142	16 63	0.72	-67.7	
MW-10							
2Q21	7 07	17 30	0.920	31 88	1 25	-107.1	
3Q21	7 92	23 00	1.060	36 30	0 85	-81.0	
4Q21	6.76	19 20	1.641	16.40	0.49	-32.1	
1Q22	6 99	18 01	1.365	47.48	0 67	-105 6	
MW-11							
2Q21	6.74	17.10	1.593	47 62	0 67	-76.8	
3Q21	6 54	19 00	1.462	10.16	2 01	-69.1	
4Q21	6.75	18.70	1.647	6.20	0 67	8.7	
1Q22	6 84	14 59	1.437	48 34	0.72	-53.4	
MW-12							
2Q21	7 01	18.10	1.058	12.10	0 60	34.4	
3Q21	6 96	20 80	0.893	1.56	1.71	130.1	
4Q21	6 56	18 20	0.987	1.77	0 59	140.1	
1Q22	6 97	17 06	0.859	16.40	0 84	109 6	
MW-13							
2Q21	6 52	19 90	1.316	45 80	0 63	-107 8	
3Q21	6 82	23 20	1.029	49 53	0 83	-168.4	
4Q21	6 57	20.70	1.305	22 98	0 55	-94.1	
1Q22	6.70	17 90	1.206	49 63	0 57	-124 8	
MW-14							
2Q21	6 84	19 90	1.176	47.70	0 56	-111 3	
3Q21	6 84	20.40	1.264	10.71	0 93	-43.4	
4Q21	6 57	19 20	1.008	10.70	0 66	92.4	
1Q22	6.71	17 08	1.202	17 96	0.71	52.3	
MW-16							
2Q21	6 82	17 30	1.156	9.35	1 69	-13.3	
3Q21	6.45	20 00	0.913	12 51	1 94	21.2	
4Q21	6.78	19 80	0.927	15 32	0.72	39.2	
1Q22	6 85	15 29	0.803	34 63	0 85	-57.4	

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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
MW-22							
2Q21	6 95	19 00	1.252	22 96	0 62	-138 5	
3Q21	7 00	21 60	1.254	11 53	1 57	-68.0	
4Q21	6.79	19 60	1.269	10 34	0 69	9 8	
1Q22	6 98	15.75	1.289	7.46	0 57	-52.7	
MW-23							
2Q21	6 52	18.10	1.094	45 02	0 69	-110 0	
3Q21	6 20	19.40	0.990	70 02	1 89	-63.2	
4Q21	6 52	18 80	1.192	38 55	0.48	-48.0	
1Q22	6 50	16 07	0.985	32 59	0.74	-76.3	
MW-24							
2Q21	6 84	17.40	1.354	37 66	0.77	8.7	
3Q21	6 90	20 00	1.204	0.00	1 95	144 0	
4Q21	6 88	19.10	1.453	1.90	0.75	49.3	
1Q22	6 92	15.79	1.221	29 33	1 01	13.7	
MW-25							
2Q21	6 88	18 30	1.250	14 61	0.74	-108 3	
3Q21	6 85	21 20	1.139	23.78	1.14	62.9	
4Q21	6.74	18 80	1.061	13.45	0.74	135 0	
1Q22	6 90	17 03	1.022	10 55	0.72	-96.8	
MW-26							
2Q21	6 26	18 00	1.616	18 82	0.77	140 3	
3Q21	6 81	20 60	1.382	5.43	1.78	136 5	
4Q21	6 67	19.40	1.607	14 57	0 67	56.1	
1Q22	6.70	15.13	1.528	12 68	0 58	127 2	
MW-27							
2Q21	6 89	16 60	0.971	7.04	2.77	123 0	
3Q21	6.71	19 00	0.927	7.66	3 00	66.8	
4Q21	6 81	18.70	0.924	12 33	2.17	45.3	
1Q22	6 91	16 99	0.810	39.42	1 61	104 5	
MW-28							
2Q21	6.43	17 50	1.640	26.49	0.71	-40.4	
3Q21	6.42	19 90	1.345	20 96	1 80	-33.1	
4Q21	6 56	18 30	1.473	33 87	0 66	113.1	
1Q22	6.74	17 92	1.150	36.79	0 52	-53.2	
P-54							
2Q21	6 95	17 60	1.332	27 92	3 58	38.1	
3Q21	6.71	21 00	0.892	0.00	2 00	115 8	
4Q21	6 69	19.10	1.135	1.02	2 57	34.6	
1Q22	6 82	13 91	1.367	1.97	2 87	194 5	
P-55R							
2Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-56							
2Q21	6 96	20 00	1.073	12.19	0 51	-170.1	
3Q21	7.13	23 30	1.259	9.93	0 83	-92.5	
4Q21	7.14	18 91	1.055	2.14	0 88	-123.7	
1Q22	7 02	17.70	1.092	5.85	0.43	-144 6	
P-57							
2Q21	6 87	21 00	1.093	8.84	0 60	-138 5	
3Q21	6 92	24.40	1.067	0.88	0 95	-129 5	
4Q21	6 88	21 20	0.979	4.65	0 54	-54.3	
1Q22	7 01	16.18	1.106	6.75	0.79	-51.2	
P-58							
2Q21	6 80	19 90	1.494	16 65	0 62	-126 0	
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q22	6 83	18.70	1.382	17 01	0.41	-141 3	
P-59							
2Q21	6.73	22 20	1.170	6.80	0 63	-132 9	
3Q21	6 62	24 80	1.185	0.00	0 90	-48.8	
4Q21	6 60	22 96	1.224	23 30	0 88	-87.3	
1Q22	6 53	19 20	1.397	2.21	0.45	-120 6	
P-66							
2Q21	6 82	22.40	1.110	10.45	0 58	-139 9	
3Q21	6.76	23.40	1.243	7.86	0 91	-142.7	Initial sample.
	6.76	22 99	1.314	1.61	0 32	-120 5	Confirmation sample.
4Q21	6 65	20 07	1.334	4.04	1 21	-70.1	
1Q22	6 66	17.48	1.335	2.70	0 67	-63.3	
P-68							
2Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q21	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q22	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
P-74							
2Q21	7 65	18 50	0.178	19 91	8.71	103 3	
3Q21	7 04	25 50	0.292	1.84	6 82	93.2	
4Q21	6 57	22 60	0.209	8.01	0 62	11.5	
1Q22	6.43	16.70	0.207	9.12	0 57	69.7	
P-93A							
2Q21	6.74	21 30	1.210	1.26	0.73	-57.5	
3Q21	6 54	22.10	1.152	0.00	1.11	102 9	
4Q21	6.44	18.40	1.181	2.03	1 03	60.4	
1Q22	6.47	18 60	1.398	0.00	0.44	-51.9	
P-93B							
2Q21	6.75	18 20	1.307	16.18	0 67	-105.7	
3Q21	6 55	19.40	1.337	0.00	1.15	85.2	
4Q21	6.71	18.70	1.276	46 31	0 90	-68.8	
1Q22	6 69	17 35	1.362	3.14	0 51	-119.4	

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							
2Q21	7 05	19 50	1.100	10 39	0 63	-120 8	
3Q21	7 04	20 20	1.017	1.14	0 88	-54.3	
4Q21	6 85	20 20	1.023	0.00	0 68	-24.7	
1Q22	6 87	15 50	1.067	4.93	0.75	-43.7	
P-93D							
2Q21	7 08	18 20	1.209	7.71	0 87	-98.6	
3Q21	7 04	19 30	1.180	0.00	1 22	56.2	
4Q21	6 97	18 25	1.120	8.00	0 92	-70.0	
1Q22	7.17	13 50	1.200	6.66	1 06	-11.5	
P-114R							
2Q21	7 37	21.40	0.712	18 91	0.45	-132.4	
3Q21	6 88	24 00	0.915	49 97	0.76	-189 8	
4Q21	6 58	22 50	1.078	28.72	0.40	-132.4	
1Q22	6.78	19 93	0.934	45 55	0 55	-133 0	
ROST-3-MW							
2Q21	6 86	16.70	1.569	10 26	0.70	-94.0	
3Q21	6.48	18 80	1.220	4.65	1 88	-74.0	
4Q21	6 64	19 00	1.463	7.60	0 53	-29.2	
1Q22	6.76	14.79	1.333	15.79	0 80	-97.5	
ROST-4-PZ(C)							
2Q21	6 87	17.70	1.525	27.18	0 59	-148 0	
3Q21	6 85	19.70	1.151	24.47	1 59	-111 9	
4Q21	6.71	17.70	1.301	19 63	0 80	163 5	
1Q22	6 91	16 86	1.504	6.73	0 35	-273 0	
ROST-4-PZ(E)							
2Q21	6 92	18 60	1.597	13 01	0 68	-120 2	
3Q21	6 90	21.70	1.595	8.43	1.46	-108.1	
4Q21	6.79	19 20	1.864	20.16	0 59	47.0	
1Q22	6 82	18 09	1.731	8.60	0 53	-110.1	
ROST-4-PZ(G)							
2Q21	6 51	17.70	1.501	5.20	0 66	-81.0	
3Q21	6.49	20 20	1.147	4.46	1.77	-97.0	
4Q21	6 69	19.10	1.314	2.80	0 57	-4.1	
1Q22	6 91	17.13	1.252	3.65	0.47	-149 3	
T-12							
2Q21	6 97	20.10	1.722	5.69	0 66	-158.7	
3Q21	6 80	23.70	1.690	4.18	0 95	-27.9	
4Q21	6 86	20 65	1.512	6.27	1 08	-104 9	
1Q22	7.11	18.15	1.453	5.07	0 64	-99.3	

NOTES:

1) Field parameters were collected using a YSI ProDSS.

2) NM = Not Measured

3) * = Equipment malfunction. Results are suspect.

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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs																		
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Styrene	Toluene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Screening Values (mg/L)			6.3 [1]	0.005 [1]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [1]	0.07 [1]		0.7 [1]	0.7 [1]	0.07 [1]	0.14 [1]	0.7 [3]	0.1 [1]	1.0 [1]	2.1 [1]	0.07 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-041321	4/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW1-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00076 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW1-ROX-101321	10/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW1-ROX-011222	1/12/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-02	MW2-ROX-041521	4/15/2021	<0 05	0.0012 J	<0.05	<0.002	0.0023	<0.002	<0 002	<0 002	<0 002	0 002	0 095	0 023	<0.002	0.0099	0.033	<0.002	0.0031	<0 002	0.011
	MW2-ROX-041521-DUP	4/15/2021	<0 05	<0.002	<0.05	<0.002	0.0022	<0.002	<0 002	<0 002	<0 002	0.0021	0.09	0 022	<0.002	0.009	0.031	<0.002	0.0033	<0 002	0.011
	MW2-ROX-071421	7/14/2021	<0.13	0.0024 J	<0.13	<0.005	0.0071	<0.005	<0 005	<0 005	<0 005	0.0059	0.31	0 063	<0.005	0.031	0.096	<0.005	0.0055	<0 005	0.046
	MW2-ROX-101521	10/15/2021	<0.025	0.0016	0.007 J	0 0045	0.0047	<0.001	<0 001	<0 001	<0 001	0.0039	0 063	0 043	<0.001	0.013	0.066	<0.001	0.0039	<0 001	0.019
	MW2-ROX-011122	1/11/2022	<0.13	<0.005	<0.13	<0.005	0.0061	<0.005	<0 005	<0 005	<0 005	0.0059	0.14	0 057	<0.005	0.019	0.086	<0.005	0.005	<0 005	0.013
MW-03	MW3-ROX-041321	4/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0.00063 J	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW3-ROX-071221	7/12/2021	<0.025	0.00065 J	<0.025	<0.001	0.00078 J	0.00066 J	<0 001	<0 001	<0 001	<0 001	<0.001	0 013	0 00079 J	<0 001	0.023	<0.001	0.0096	<0.001	<0 001
	MW3-ROX-101521	10/15/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0.0016	<0.001	<0 001	0.004	<0.001	0.0016	<0.001	<0 001
	MW3-ROX-101521-DUP	10/15/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0.0014	<0.001	<0 001	0 0035	<0.001	0.0012	<0.001	<0 001
	MW3-ROX-011022	1/10/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-04	MW4-ROX-041921	4/19/2021	<0.025	0.00059 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0021	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW4-ROX-071921	7/19/2021	<0.025	0.00059 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0015	<0 001	<0.001	<0.001	0.00047 J	<0.001	<0 001
	MW4-ROX-101921	10/19/2021	<0.025 UJ	0.00068 J	<0 025 UJ	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00066 J	<0 001	<0.001	<0.001	0.00086 J	<0.001	<0 001
	MW4-ROX-011122	1/11/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00054 J	<0 001	<0.001	<0.001	0.00049 J	<0.001	<0 001
MW-05	MW5-ROX-041421	4/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	0.0013	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 002	<0 001	<0.001	<0.001	0.00065 J	<0.001	<0 001
	MW5-ROX-071421	7/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	0.00097 J	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0042	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW5-ROX-101421	10/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	0.0014	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0071	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW5-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	0.0016	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0024	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-06A	MW6A-ROX-041421	4/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6A-ROX-070921	7/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6A-ROX-101121	10/11/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00059 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6A-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00054 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-06B	MW6B-ROX-041421	4/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	0.00042 J	<0.001	<0 001
	MW6B-ROX-070921	7/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6B-ROX-101121	10/11/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00052 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6B-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00041 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-06C	MW6C-ROX-041421	4/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6C-ROX-070921	7/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6C-ROX-101221	10/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00034 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6C-ROX-010622	1/6/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00031 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-06D	MW6D-ROX-041421	4/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6D-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6D-ROX-101221	10/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW6D-ROX-010622	1/6/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-07	MW7-ROX-041921	4/19/2021	<25 UJ	640	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ
	MW7-ROX-041921-DUP	4/19/2021	<25 UJ	530	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ
	MW7-ROX-071921	7/19/2021	<130	890	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	MW7-ROX-101921	10/19/2021	<63	570	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2 5	<2 5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
	MW7-ROX-101921-DUP	10/19/2021	<63	620	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2 5	<2 5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
	MW7-ROX-011122	1/11/2022	<13 UJ	850	<13 UJ	<0.5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ
	MW7-ROX-011122-DUP	1/11/2022	<13 UJ	740	<13 UJ	<0.5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0.5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ	<0 5 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Styrene	Toluene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.100** [1]	**0.07** [1]		**0.7** [1]	**0.7** [1]	**0.07** [1]	**0.14** [1]	**0.7** [3]	**0.1** [1]	**1.0** [1]	**2.1** [1]	**0.07** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-08	MW8-ROX-041921	4/19/2021	<25 UJ	290	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ
	MW8-ROX-071921	7/19/2021	<50	270	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	MW8-ROX-071921-DUP	7/19/2021	<50	270	<50	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
	MW8-ROX-101921	10/19/2021	<25	110	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.43 J	<1	<1
	MW8-ROX-011122	1/11/2022	<5	260	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.16 J	<0 2	<0 2	<0.2	<0.2	<0.2	0.11 J	<0.2	<0.2
MW-09	MW9-ROX-040821	4/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW9-ROX-070821	7/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW9-ROX-100721	10/7/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW9-ROX-010622	1/6/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-10	MW10-ROX-040821	4/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW10-ROX-070821	7/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW10-ROX-100721	10/7/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW10-ROX-011222	1/12/2022	<0.025	0.00036 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-11	MW11-ROX-041221	4/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW11-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW11-ROX-100721	10/7/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW11-ROX-010622	1/6/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-12	MW12-ROX-041221	4/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW12-ROX-070921	7/9/2021	<0.025	0.0005 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW12-ROX-101521	10/15/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW12-ROX-011222	1/12/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-13	MW13-ROX-041221	4/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0015	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW13-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW13-ROX-100821	10/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00049 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW13-ROX-011022	1/10/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0023	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-14	MW14-ROX-040921	4/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW14-ROX-071321	7/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW14-ROX-101321	10/13/2021	<0.025	<0.001	<0.025	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0 001	<0.001 UJ	<0 001	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001	<0 001	<0 001 UJ	<0.001 UJ	<0.001 UJ	<0.001	<0.001 UJ
	MW14-ROX-011322	1/13/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-16	MW16-ROX-040821	4/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW16-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW16-ROX-100821	10/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW16-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-22	MW22-ROX-041521	4/15/2021	<0.13	0.066	<0.13	<0.005	<0.005	<0.005	<0 005	<0 005	<0 005	<0 005	0.53	0 032	<0.005	0 07	0.053	<0.005	0.045	<0 005	0 33
	MW22-ROX-071521	7/15/2021	<0.025	0.00071 J	<0.025	<0.001	<0.001	0.00095 J	<0 001	<0 001	<0 001	0.00081 J	0.01	0.0043	<0.001	0.0075	0 0064	<0.001	0.00082 J	<0.001	0.043
	MW22-ROX-071521-DUP	7/15/2021	<0.025	<0.001	<0.025	<0.001	0.00081 J	0.00066 J	<0 001	<0 001	<0 001	0 001	0 011	0 005	<0.001	0.0091	0 0081	<0.001	0.00085 J	<0.001	0.051
	MW22-ROX-101521	10/15/2021	<0.025	0.00038 J	<0.025	<0.001	<0.001	0.00089 J	<0 001	<0 001	<0 001	<0 001	0.0023	0 0009 J	<0.001	0.0015	0 0016	<0.001	<0.001	<0.001	0.014
	MW22-ROX-011022	1/10/2022	<0.025	0.0006 J	<0.025	<0.001	<0.001	0.0011	<0 001	<0 001	<0 001	<0 001	0.0014	0.00063 J	<0.001	0.0011	0.00073 J	<0.001	<0.001	<0.001	0.028
MW-23	MW23-ROX-040921	4/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW23-ROX-071321	7/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW23-ROX-101321	10/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0.001 UJ	<0 001	<0.001	<0.001	0 00025 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW23-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00028 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Styrene	Toluene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.100** [1]	**0.07** [1]		**0.7** [1]	**0.7** [1]	**0.07** [1]	**0.14** [1]	**0.7** [3]	**0.1** [1]	**1.0** [1]	**2.1** [1]	**0.07** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-24	MW24-ROX-041321	4/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW24-ROX-070921	7/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW24-ROX-100721	10/7/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW24-ROX-010722	1/7/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-25	MW25-ROX-041921	4/19/2021	<0.025	0.032	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW25-ROX-071921	7/19/2021	<0.025	0.043	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	0.0026	<0.001	<0.001	<0.001	<0.001	<0 001
	MW25-ROX-101921	10/19/2021	<0.025	0.028	0.0027 J	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	0.0019	<0.001	<0.001	<0.001	<0.001	<0 001
	MW25-ROX-011122	1/11/2022	<0.025	0 02	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00039 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-26	MW26-ROX-040921	4/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW26-ROX-070921	7/9/2021	<0.025	0.00043 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW26-ROX-101421	10/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	0.006	0.00057 J	<0 001
	MW26-ROX-011122	1/11/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-27	MW27-ROX-040821	4/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW27-ROX-071321	7/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW27-ROX-101321	10/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW27-ROX-011222	1/12/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
MW-28	MW28-ROX-041621	4/16/2021	<0.025	0.004	<0.025	<0.001	0.0022	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0.0025	0 069	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW28-ROX-041621-DUP	4/16/2021	<0.025	0.004	<0.025	<0.001	0.0013	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0.0014	0 074	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW28-ROX-071521	7/15/2021	<0.025	0.0066	<0.025	<0.001	0.0023	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	0 001	0 073	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW28-ROX-101821	10/18/2021	<0.025	0.0071	<0.025	<0.001	0 0012	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 027	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW28-ROX-101821-DUP	10/18/2021	<0.025	0.0066	<0.025	<0.001	0.00091 J	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 024	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	MW28-ROX-011222	1/12/2022	<0.025	<0.001	<0.025	<0.001	0.00085 J	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0028	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
P-54	P54-ROX-041321	4/13/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P54-ROX-070921	7/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P54-ROX-101421	10/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	0 0005 J	<0.001	<0.001	<0 001	<0.001	<0.001	0.0062	0.00062 J	<0 001
	P54-ROX-011022	1/10/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
P-56	P56-ROX-040921	4/9/2021	0.17	<0.001	0.012 J	<0.001	0.00089 J	<0.001	<0 001	<0 001	<0 001	<0 001	0 001	0.0085	<0.001	0.0016	0 0079	<0.001	0.0006 J	<0.001	0.0017
	P56-ROX-071421	7/14/2021	<0.13	<0.005	<0.13	<0.005	<0.005	<0.005	<0 005	<0 005	<0 005	<0 005	0.0052	0 016	<0.005	0.0092	0.019	<0.005	<0.005	<0.005	0.023
	P56-ROX-101821	10/18/2021	<0.025	0.0029	<0.025	0 00082 J	0 0015	<0.001	<0 001	<0 001	<0 001	0.0011	0.00088 J	0.0016	0 012	<0.001	0.0039	0.015	<0.001	0.0012	<0.001	0.017
	P56-ROX-011222	1/12/2022	0 024 J	0.0006 J	0.004 J	0 00094 J	0 0018	<0.001	<0 001	<0 001	<0 001	0.00092 J	0 001	0 012	<0.001	0.0017	0.014	<0.001	0.00082 J	<0.001	0.011
	P56-ROX-011222-DUP	1/12/2022	0 024 J	0.00058 J	0.0041 J	0 00088 J	0.0017	<0.001	<0 001	<0 001	<0 001	0 0009 J	0.0012	0 013	<0.001	0.0019	0.014	<0.001	0.00089 J	<0.001	0.013
P-57	P57-ROX-041221	4/12/2021	<0.13	0.79	<0.13	<0.005	0.0049 J	0.0051	0.0032 J	<0 005	<0 005	<0 005	0 0025 J	0 022	<0.005	0.046	0.025	<0.005	0.005	<0.005	<0 005
	P57-ROX-041221-DUP	4/12/2021	<0.13	0 81	<0.13	<0.005	0 0052	0.005	0.0047 J	<0 005	<0 005	<0 005	0 0029 J	0 023	<0.005	0.049	0.027	<0.005	0.0056	<0.005	<0 005
	P57-ROX-071421	7/14/2021	<0.025	0.18	0.0095 J *+ J	0 0036	0 0059	0.0061	<0 001	<0 001	<0 001	0.0012	0.0022	0 027	<0.001	0.044	0.03	<0.001	0.0062	<0.001	<0 001
	P57-ROX-101821	10/18/2021	<0 63	3	<0.63	<0.025	<0.025	<0.025	<0 025	<0 025	<0 025	<0 025	0.02 J	0.022 J	<0.025	0.055	0 02 J	<0.025	<0.025	<0.025	<0 025
	P57-ROX-011422	1/14/2022	<0.025	0.011	<0.025	0 0025	0.0039	0.0064	<0 001	<0 001	<0 001	0.00086 J	0.00054 J	0 017	<0.001	0.011	0.017	<0.001	0.0037	<0.001	<0 001
P-58	P58-ROX-041421	4/14/2021	<13	110	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0 5	<0 5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	P58-ROX-011322	1/13/2022	<25	180	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
	P58-ROX-011322-DUP	1/13/2022	<25	170	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
P-59	P59-ROX-041321	4/13/2021	<0.5	2.5	<0 5	<0 02	<0 02	<0 02	<0.02	<0.02	<0.02	<0.02	0.25	0 041	<0.02	0.17	0.066	<0 02	0.15	<0.02	0.14
	P59-ROX-071521	7/15/2021	<0.5	3.4	<0 5	<0 02	<0 02	<0 02	<0.02	<0.02	<0.02	<0.02	0.3	0 048	<0.02	0.15	0.07	<0 02	0.15	<0.02	0.14
	P59-ROX-102021	10/20/2021	<0.5	3.9	<0 5	<0 02	<0 02	<0 02	<0.02	<0.02	<0.02	<0.02	0.24	0 052	<0.02	0.17	0.089	0.02	0.14	<0.02	0.078
	P59-ROX-102021-DUP	10/20/2021	<0.5	3.9	<0 5	<0 02	<0 02	<0 02	<0.02	<0.02	<0.02	<0.02	0.24	0 053	<0.02	0.19	0.096	<0 02	0.14	<0.02	0 08
	P59-ROX-011322	1/13/2022	<0.025	4.1	<0.025	<0.001	0 0023	<0.001	<0 001	<0 001	<0 001	<0 001	0.16	0 044	<0.001	0.18	0.066	<0.001	0.13	<0.001	0.046

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Styrene	Toluene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.100** [1]	**0.07** [1]		**0.7** [1]	**0.7** [1]	**0.07** [1]	**0.14** [1]	**0.7** [3]	**0.1** [1]	**1.0** [1]	**2.1** [1]	**0.07** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-66	P66-ROX-040921	4/9/2021	<0.13	0.18	<0.13	0.0046 J	0 0084	0.0042 J	<0 005	<0 005	<0 005	<0 005	0 013	0 059	<0.005	0.011	0.093	<0.005	0 61	<0.005	<0 005
	P66-ROX-071321	7/13/2021	<0 05	1.2	<0.05	0 0059	0 0096	0.005	<0 002	<0 002	<0 002	<0 002	0.16	0 055	<0.002	0.014	0.091	<0.002	3.9	<0.002	0.038
	P66-ROX-080921	8/9/2021	<0.13	0 82	<0.13	<0.005	0.0047 J	<0.005	<0 005	<0 005	<0 005	<0 005	0.11	0 039	<0.005	0.016	0.069	<0.005	2.3	<0.005	0.024
	P66-ROX-102021	10/20/2021	<0 25	1	<0.25	<0 01	0.0094 J	<0 01	<0.01	<0.01	<0.01	<0.01	0.17	0 073	<0.01	0.017	0.12	<0 01	0.17	<0.01	0.039
	P66-ROX-102021-DUP	10/20/2021	<0 25	0 98	<0.25	<0 01	0.0091 J	<0 01	<0.01	<0.01	<0.01	<0.01	0.16	0 072	<0.01	0.015	0.12	<0 01	0.18	<0.01	0.039
	P66-ROX-011322	1/13/2022	<0.13	0.6	<0.13	<0.005	0.0044 J	<0.005	<0 005	<0 005	<0 005	<0 005	0 062	0 033	<0.005	0.0082	0.041	<0.005	0.78	<0.005	0.013
P-74	P74-ROX-041221	4/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P74-ROX-071421	7/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P74-ROX-101221	10/12/2021	<0.025	0.089	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	0.0015	<0.001	0.0009 J
	P74-ROX-011322	1/13/2022	<0.025	0.18	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00054 J	<0 001	<0.001	<0.001	0.0014	<0.001	0.0011
	P74-ROX-011322-DUP	1/13/2022	<0.025	0.15	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00053 J	<0 001	<0.001	<0.001	0.0012	<0.001	<0 001
P-93A	P93A-ROX-041221	4/12/2021	0 064 J	0 84	<0.13	<0.005	<0.005	<0.005	0 003 J	<0 005	<0 005	<0 005	<0.005	<0.005	<0.005	<0 005	<0.005	<0.005	<0.005	<0.005	<0 005
	P93A-ROX-071521	7/15/2021	<0.025 UJ	<0.001 UJ	<0 025 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0 001 UJ	<0 001	<0 001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ
	P93A-ROX-071521-DUP	7/15/2021	<0.025	0.057	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93A-ROX-101921	10/19/2021	<0.025	0.0033	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93A-ROX-011222	1/12/2022	<0.025	<0.001	<0.025	<0.001	<0.001	0.00086 J	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
P-93B	P93B-ROX-041421	4/14/2021	<130	1300	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
	P93B-ROX-071621	7/16/2021	<50 UJ	1100	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ
	P93B-ROX-071621-DUP	7/16/2021	<50 UJ	990	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ
	P93B-ROX-101921	10/19/2021	<25	940	<25	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.59 J	<1	<1
	P93B-ROX-011322	1/13/2022	<130	870	<130	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
P-93C	P93C-ROX-040921	4/9/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0029	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93C-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0024	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93C-ROX-101221	10/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0022	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93C-ROX-011022	1/10/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0063	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
P-93D	P93D-ROX-041421	4/14/2021	<0.025	0.0018	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0014	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93D-ROX-071621	7/16/2021	<0.025	0.0027	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0014	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93D-ROX-101821	10/18/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00084 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P93D-ROX-011422	1/14/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0 00082 J	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
P-114R	P114R-ROX-041221	4/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P114R-ROX-071221	7/12/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0021	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P114R-ROX-100821	10/8/2021	0.01 J *+ J	0.0006 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0012	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	P114R-ROX-011022	1/10/2022	<0.025	0.00084 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	0.0022	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
ROST-3-MW	ROST3MW-ROX-041321	4/13/2021	<0.025	0.00099 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	0.00063 J	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	ROST3MW-ROX-071421	7/14/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	ROST3MW-ROX-100821	10/8/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	ROST3MW-ROX-010622	1/6/2022	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
ROST-4-PZ(C)	ROST4PZC-ROX-041521	4/15/2021	<0 05	0.0017 J	<0.05	<0.002	<0.002	<0.002	<0 002	<0 002	<0 002	<0 002	0 0014 J	0.0023	<0.002	0.018	0 0037	<0.002	0.0025	<0.002	0.0052
	ROST4PZC-ROX-071421	7/14/2021	<0.13	0.0028 J	<0.13	<0.005	<0.005	<0.005	<0 005	<0 005	<0 005	<0 005	0 014	0.0084	<0.005	0.079	0.013	<0.005	0.0064	<0.005	0 02
	ROST4PZC-ROX-071421-DUP	7/14/2021	<0.13	0.0024 J	<0.13	<0.005	<0.005	<0.005	<0 005	<0 005	<0 005	<0 005	0 011	0.0069	<0.005	0.067	0.013	<0.005	0.0064	<0.005	0.018
	ROST4PZC-ROX-101821	10/18/2021	<0.025	0.0022	0.006 J	<0.001	<0.001	<0.001	0.00058 J	<0 001	<0 001	<0 001	0.0018	0 004	<0.001	0.027	0 0077	<0.001	0.0048	<0.001	0.0091
	ROST4PZC-ROX-011122	1/11/2022	<0.025	0.00094 J	<0.025	<0.001	0.0007 J	<0.001	<0 001	<0 001	<0 001	0 001	0.00089 J	0.0057	<0.001	0.008	0 0095	<0.001	<0.001	<0.001	0.0091

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs																	
			Acetone	Benzene	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	Cymene (p-Isopropyltoluene)	Ethylbenzene	Isopropylbenzene (Cumene)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene	Styrene	Toluene	Trichlorofluoromethane	1,2,4-Trimethylbenzene
Screening Values (mg/L)			**6.3** [1]	**0.005** [1]	**4.2** [1]	**0.35** [3]	**0.7** [3]	**0.7** [3]	**0.7** [1]	**0.100** [1]	**0.07** [1]		**0.7** [1]	**0.7** [1]	**0.07** [1]	**0.14** [1]	**0.7** [3]	**0.1** [1]	**1.0** [1]	**2.1** [1]	**0.07** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
ROST-4-PZ(E)	ROST4PZE-ROX-041621	4/16/2021	<0.13	0.058	<0.13	<0.005	<0.005	<0.005	<0 005	<0 005	<0 005	<0 005	0.43	0 017	<0.005	0.13	0.028	<0.005	0.038	<0.005	0.2
	ROST4PZE-ROX-071521	7/15/2021	<0 05	0 06	<0.05	<0.002	0.0017 J	<0.002	<0 002	<0 002	<0 002	<0 002	0.38	0 015	<0.002	0.13	0.027	<0.002	0.033	<0.002	0.15
	ROST4PZE-ROX-101821	10/18/2021	<0 05	0.043	<0.05	<0.002	<0.002	<0.002	<0 002	<0 002	<0 002	<0 002	0.21	0.0078	<0.002	0.1	0.013	<0.002	0.022	<0.002	0.085
	ROST4PZE-ROX-011222	1/12/2022	0.037 J J	0.044	0.0081 J	0.0016 J	0.0016 J	<0.002	<0 002	0.0005 J	<0 001	0 0017 J	0.34	0 013	<0.002	0.11	0.022	<0.002	0.03	<0.002	0.17
	ROST4PZE-ROX-011222-DUP	1/12/2022	1.3 J	0.037	<0.05	<0.002	0.0017 J	<0.002	<0 002	<0 002	<0 002	0 0015 J	0.38	0 015	<0.002	0.11	0.023	<0.002	0.034	<0.002 UJ	0.18
ROST-4-PZ(G)	ROST4PZG-ROX-041521	4/15/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	ROST4PZG-ROX-041521-DUP	4/15/2021	<0.025	<0.001	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	<0.001	<0.001	<0 001
	ROST4PZG-ROX-071321	7/13/2021	<0.025	0.00046 J	<0 025 UJ	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	0 00075 J	<0.001	0.00084 J	<0.001	<0 001
	ROST4PZG-ROX-101421	10/14/2021	<0.025	0.00042 J *+ J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	0.0024	<0.001	<0 001
	ROST4PZG-ROX-011022	1/10/2022	<0.025	0.00049 J	<0.025	<0.001	<0.001	<0.001	<0 001	<0 001	<0 001	<0 001	<0.001	<0.001	<0.001	<0 001	<0.001	<0.001	0.00041 J	<0.001	<0 001
T-12	T12-ROX-041321	4/13/2021	<0 25	1.4	<0.25	<0 01	<0 01	<0 01	<0.01	<0.01	<0.01	<0.01	0 011	0 0065 J	<0.01	0.018	0.01	<0 01	0.028	<0.01	0.0082 J
	T12-ROX-071521	7/15/2021	<0.5	2.2	<0 5	<0 02	<0 02	<0 02	<0.02	<0.02	<0.02	<0.02	<0 02	<0.02	<0.02	0.031	<0 02	<0 02	0.064	<0.02	0 02
	T12-ROX-102021	10/20/2021	<0 25	1.9	<0.25	<0 01	<0 01	<0 01	<0.01	<0.01	<0.01	<0.01	0.01	0 0058 J	0.0049 J	0.018	0.0082 J	<0 01	0.029	<0.01	<0.01
	T12-ROX-011422	1/14/2022	0.066	1.1	0.024 J	<0.002	<0.002	<0.002	<0 002	<0 002	<0 002	<0 002	0.0032	0 0014 J	0.0039	0.0021	0.002	<0.002	0.012	<0.002	<0 002

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs				SVOCs														
			1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			**0.07** [3]	**10** [1]		**10** [1]	**0.42** [1]	**0.21** [3]	**2.1** [1]	**0.00013** [1]	**0.0002** [1]	**0.00018** [1]	**28** [1]	**0.7** [3]	**0.006** [1]	**1.4** [2]	**0.028** [2]	**0.56** [3]	**0.012** [1]		**0.0003** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-01	MW1-ROX-041321	4/13/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002 UJ	<0 029	<0 0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002 UJ	<0.0098	<0.0002
	MW1-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW1-ROX-101321	10/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW1-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	0.00019	<0.00019	<0 00019	<0.028 UJ	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	0 00016 J	<0.0095	<0 00019
MW-02	MW2-ROX-041521	4/15/2021	0 0076	0.045	0.0047 J	0.049	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW2-ROX-041521-DUP	4/15/2021	0 0074	0.041	0.0048 J	0.046	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW2-ROX-071421	7/14/2021	0.022	0.17	0 015 J	0.18	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0 0099	<0.0099	<0 0099	0 0059 J	<0.0099	<0 0002	<0.0099	<0.0002
	MW2-ROX-101521	10/15/2021	0.026	0.025	0.0026 J	0.028	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW2-ROX-011122	1/11/2022	0.027	0.062	0.0069 J	0.069	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
MW-03	MW3-ROX-041321	4/13/2021	<0.001	<0.005	<0.005	<0.01	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019 H UJ	<0.0095	<0.00019 H UJ
	MW3-ROX-071221	7/12/2021	<0.001	0.03	0.0038 J	0.034	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0.0095 UJ	<0.0096	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW3-ROX-101521	10/15/2021	<0.001	0 0057	0.00084 J	0.0065 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW3-ROX-101521-DUP	10/15/2021	<0.001	0.0047 J	0.00076 J	0.0055 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW3-ROX-011022	1/10/2022	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
MW-04	MW4-ROX-041921	4/19/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW4-ROX-071921	7/19/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.024 J	0 0031 J	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW4-ROX-101921	10/19/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW4-ROX-011122	1/11/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
MW-05	MW5-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
	MW5-ROX-071421	7/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.032	<0 0096	0.0052 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW5-ROX-101421	10/14/2021	<0.001	0.00066 J	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW5-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
MW-06A	MW6A-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	0 000031 J	<0.00019	<0.00019	<0 00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW6A-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW6A-ROX-101121	10/11/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW6A-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
MW-06B	MW6B-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW6B-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW6B-ROX-101121	10/11/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.0073 J	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW6B-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0 0099	<0.0099	<0 0099	<0.0099	<0.0099	<0 0002	<0.0099	<0.0002
MW-06C	MW6C-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 029	<0.0098 UJ	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
	MW6C-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW6C-ROX-101221	10/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW6C-ROX-010622	1/6/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 029	<0 0098	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
MW-06D	MW6D-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.028 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0 0095 H UJ	<0 0002	<0.0095 H UJ	0.000074 J
	MW6D-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 032	<0 011 UJ	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	MW6D-ROX-101221	10/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW6D-ROX-010622	1/6/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 029	<0 0098	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
MW-07	MW7-ROX-041921	4/19/2021	<1 UJ	<5 UJ	<5 UJ	<10 UJ	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW7-ROX-041921-DUP	4/19/2021	<1 UJ	<5 UJ	<5 UJ	<10 UJ	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.031 UJ	<0.01 UJ	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW7-ROX-071921	7/19/2021	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.041 *1	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW7-ROX-101921	10/19/2021	<2.5	<13	<13	<25	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW7-ROX-101921-DUP	10/19/2021	<2.5	<13	<13	<25	0.00038	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW7-ROX-011122	1/11/2022	<0.5 UJ	<2.5 UJ	<2 5 UJ	<5 UJ	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.031	<0 0096	<0.0096	<0 0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW7-ROX-011122-DUP	1/11/2022	<0.5 UJ	<2.5 UJ	<2 5 UJ	<5 UJ	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.031	<0 0095	<0.0095	<0 0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs				SVOCs													
			1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			0.07 [3]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	28 [1]	0.7 [3]	0.006 [1]	1.4 [2]	0.028 [2]	0.56 [3]	0.012 [1]		0.0003 [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-08	MW8-ROX-041921	4/19/2021	<1 UJ	<5 UJ	<5 UJ	<10 UJ	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 032	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	MW8-ROX-071921	7/19/2021	<2	<10	<10	<20	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW8-ROX-071921-DUP	7/19/2021	<2	<10	<10	<20	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW8-ROX-101921	10/19/2021	<1	<5	<5	<10	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW8-ROX-011122	1/11/2022	<0.2	0 35 J	<1	0.45 J	0.00027	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
MW-09	MW9-ROX-040821	4/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW9-ROX-070821	7/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW9-ROX-100721	10/7/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW9-ROX-010622	1/6/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
MW-10	MW10-ROX-040821	4/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW10-ROX-070821	7/8/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0 0098	<0.0098	<0.0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
	MW10-ROX-100721	10/7/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.012 J	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW10-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.028 UJ	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
MW-11	MW11-ROX-041221	4/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.00019 UJ	<0 029	<0 0096	0.0058 J	<0.0096	<0.0096	<0.0096	<0.00019 UJ	<0.0096	<0 00019
	MW11-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW11-ROX-100721	10/7/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW11-ROX-010622	1/6/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
MW-12	MW12-ROX-041221	4/12/2021	<0.001	<0.005	<0.005	<0.01	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0 0096 UJ	<0.00019 H UJ	<0.0096	<0.00019 H UJ
	MW12-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW12-ROX-101521	10/15/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW12-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.028 UJ	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
MW-13	MW13-ROX-041221	4/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	0.00046	<0.00019	<0.00019 UJ	<0.00019	<0.00019 UJ	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019 UJ	<0.0096	<0 00019
	MW13-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01 UJ	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW13-ROX-100821	10/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW13-ROX-011022	1/10/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	0.0055 J	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
MW-14	MW14-ROX-040921	4/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 032	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	MW14-ROX-071321	7/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	0.023 J	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW14-ROX-101321	10/13/2021	<0 001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW14-ROX-011322	1/13/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
MW-16	MW16-ROX-040821	4/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0 0095 H UJ	<0.00019	<0.0095 H UJ	<0 00019
	MW16-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW16-ROX-100821	10/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW16-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	0.0051 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
MW-22	MW22-ROX-041521	4/15/2021	0.055	0 8	0.053	0.86	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0 0096 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ
	MW22-ROX-071521	7/15/2021	0 0067	0.013	0.0016 J	0.015	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW22-ROX-071521-DUP	7/15/2021	0 0085	0.016	0.0019 J	0.018	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW22-ROX-101521	10/15/2021	0 00089 J	0.0017 J	<0.005	0.0021 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW22-ROX-011022	1/10/2022	0 0049	0.0015 J	<0.005	0.0019 J	<0.0002	<0 0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
MW-23	MW23-ROX-040921	4/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.00019 UJ	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019 UJ	<0.0094	<0 00019
	MW23-ROX-071321	7/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
	MW23-ROX-101321	10/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0 0086 J	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW23-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs				SVOCs														
			1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			**0.07** [3]	**10** [1]		**10** [1]	**0.42** [1]	**0.21** [3]	**2.1** [1]	**0.00013** [1]	**0.0002** [1]	**0.00018** [1]	**28** [1]	**0.7** [3]	**0.006** [1]	**1.4** [2]	**0.028** [2]	**0.56** [3]	**0.012** [1]		**0.0003** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-24	MW24-ROX-041321	4/13/2021	<0.001	<0.005	<0.005	<0.01	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0 0095 UJ	<0.00019 H UJ	<0.0095 UJ	<0.00019 H UJ
	MW24-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW24-ROX-100721	10/7/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW24-ROX-010722	1/7/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
MW-25	MW25-ROX-041921	4/19/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW25-ROX-071921	7/19/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	0.023 J	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	MW25-ROX-101921	10/19/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW25-ROX-011122	1/11/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
MW-26	MW26-ROX-040921	4/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW26-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW26-ROX-101421	10/14/2021	<0.001	0.0012 J	<0.005	0.0017 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW26-ROX-011122	1/11/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
MW-27	MW27-ROX-040821	4/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	MW27-ROX-071321	7/13/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.023 J	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	MW27-ROX-101321	10/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	MW27-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.028 UJ	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
MW-28	MW28-ROX-041621	4/16/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	0 000047 J	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
	MW28-ROX-041621-DUP	4/16/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	MW28-ROX-071521	7/15/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.024 J	<0.01	<0.01	0 00055 J	<0.01	<0 01	<0 0002	0.0025 J	<0.0002
	MW28-ROX-101821	10/18/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	MW28-ROX-101821-DUP	10/18/2021	<0.001	<0.005	<0.005	<0.01	<0 00018	<0.00018	<0.00018	<0.00018	<0.00018	<0 00018	<0 027	<0 0092	<0.0092	<0.0092	<0.0092	<0.0092	<0.00018	<0.0092	<0 00018
	MW28-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 03 UJ	<0.01	<0.01	<0.01	<0 01 UJ	<0 01	<0 0002	<0.01	<0.0002
P-54	P54-ROX-041321	4/13/2021	<0.001	<0.005	<0.005	<0.01	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019 H UJ	<0.0094	<0.00019 H UJ
	P54-ROX-070921	7/9/2021	<0.001	<0.005	<0.005	<0.01	0 00012 J	0.000078 J	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	P54-ROX-101421	10/14/2021	<0.001	0.0019 J	0.0009 J	0.0028 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	P54-ROX-011022	1/10/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
P-56	P56-ROX-040921	4/9/2021	0 00074 J	0 0081	<0.005	0.0085 J	<0 00021	<0.00021	0.00009 J	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0 01 H UJ	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P56-ROX-071421	7/14/2021	0 0063	0.055	<0.025	0.057	0.00044	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P56-ROX-101821	10/18/2021	0 0052	0.039	0.0012 J	0.04	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	0.0051 J	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	P56-ROX-011222	1/12/2022	0 0034	0.024	0.00078 J	0.025	0.00047	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0 0096	<0.0096	<0.0096	<0.0096 UJ	<0.0096	<0.00019	<0.0096	<0 00019
	P56-ROX-011222-DUP	1/12/2022	0 0038	0.026	0.00086 J	0.027	0.00041	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 03 UJ	<0.01	<0.01	<0.01	<0 01 UJ	<0 01	<0 0002	<0.01	<0.0002
P-57	P57-ROX-041221	4/12/2021	<0.005	<0.025	<0.025	<0.05	0.00024	<0.00021	<0.00021	<0.00021 UJ	<0.00021	<0.00021 UJ	<0 032	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021 UJ	<0 011	<0 00021
	P57-ROX-041221-DUP	4/12/2021	<0.005	<0.025	<0.025	<0.05	0 0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002 UJ	<0 03 UJ	<0.01 UJ	<0 01 H UJ	<0.01	<0.01	<0 01	<0.0002 UJ	<0.01	<0.0002
	P57-ROX-071421	7/14/2021	<0.001	0.0023 J	<0.005	0.0025 J	0.00029	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.011 H UJ	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P57-ROX-101821	10/18/2021	<0.025	<0.13	<0.13	<0.25	0.00045	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	P57-ROX-011422	1/14/2022	<0.001	0.0013 J	<0.005	0.0016 J	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
P-58	P58-ROX-041421	4/14/2021	<0.5	<2.5	<2.5	<5	0.00094	0.00032	<0.00021	0.00033	0.0003	0.00017 J	<0 031	<0.01 UJ	<0.01	<0.01	<0.01	<0 01	0.00054	<0.01	0.000089 J
	P58-ROX-011322	1/13/2022	<1	<5	<5	<10	0.00088	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.028 UJ	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	P58-ROX-011322-DUP	1/13/2022	<1	<5	<5	<10	0.00094	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.029 UJ	<0 0098	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
P-59	P59-ROX-041321	4/13/2021	0.065	0 3	0 012 J	0.31	0 0003	<0.00021	<0.00021	<0.00021 U	<0.00021	0 000051 J	<0 032	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	P59-ROX-071521	7/15/2021	0.053	0.29	0 013 J	0.31	<0 00021	<0.00021	<0.00021	0 00012 J	<0.00021	<0 00021	0.047	<0.01	<0.01	<0.01	<0.01	<0 01	0.0001 J	<0.01	<0 00021
	P59-ROX-102021	10/20/2021	0.061	0.21	<0.1	0.22	0 00047 J	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P59-ROX-102021-DUP	10/20/2021	0.063	0.21	<0.1	0.22	<0.0002 UJ	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P59-ROX-011322	1/13/2022	0.048	0.16	0.007	0.16	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.034 J	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs				SVOCs													
			1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			**0.07** [3]	**10** [1]		**10** [1]	**0.42** [1]	**0.21** [3]	**2.1** [1]	**0.00013** [1]	**0.0002** [1]	**0.00018** [1]	**28** [1]	**0.7** [3]	**0.006** [1]	**1.4** [2]	**0.028** [2]	**0.56** [3]	**0.012** [1]		**0.0003** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
P-66	P66-ROX-040921	4/9/2021	<0.005	0.038	0 024 J	0.062	0 0012	0.00026	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P66-ROX-071321	7/13/2021	0 0086	0.49	0.27	0.76	0 0013	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.11	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P66-ROX-080921	8/9/2021	0 0076	0.41	0 2	0.61	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.061 J	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P66-ROX-102021	10/20/2021	0.01	0.57	0.28	0.85	0 0015	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021 UJ	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P66-ROX-102021-DUP	10/20/2021	0.01	0.55	0.27	0.82	0 0013	<0.0002	<0.0002	<0 0002	<0.0002	<0 0002 UJ	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P66-ROX-011322	1/13/2022	0.0042 J	0.22	0.11	0.33	0 0016	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.041 J	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
P-74	P74-ROX-041221	4/12/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0 0002 UJ	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.0002 UJ	<0.01	<0.0002
	P74-ROX-071421	7/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0 01 H UJ	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P74-ROX-101221	10/12/2021	<0.001	0.0032 J	<0.005	0.0036 J	<0 00018	<0.00018	<0.00018	<0.00018	<0.00018	<0 00018	<0 028	<0 0092	<0.0092	<0.0092	<0.0092	<0.0092	<0.00018	<0.0092	<0 00018
	P74-ROX-011322	1/13/2022	<0.001	0.0031 J	<0.005	0.0036 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	P74-ROX-011322-DUP	1/13/2022	<0.001	0.0021 J	<0.005	0.0024 J	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0.031 UJ	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
P-93A	P93A-ROX-041221	4/12/2021	<0.005	<0.025	<0.025	<0.05	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	0 0035 J	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93A-ROX-071521	7/15/2021	<0 001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93A-ROX-071521-DUP	7/15/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93A-ROX-101921	10/19/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 029	<0 0098	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
	P93A-ROX-011222	1/12/2022	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.03 J	<0 0098	<0.0098	<0 0098	<0.0098 UJ	<0.0098	<0 0002	<0.0098	<0.0002
P-93B	P93B-ROX-041421	4/14/2021	<5	<25	<25	<50	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	0 000063 J	<0 032	<0 011 UJ	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	P93B-ROX-071621	7/16/2021	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0 00021	0.000074 J	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01 UJ	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93B-ROX-071621-DUP	7/16/2021	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93B-ROX-101921	10/19/2021	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0 0099	<0.0099	<0 0099	<0.0099	<0.0099	<0 0002	<0.0099	<0.0002
	P93B-ROX-011322	1/13/2022	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.029 UJ	<0 0098	<0.0098	<0 0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
P-93C	P93C-ROX-040921	4/9/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	P93C-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 031	<0.01	<0.01	<0.01	<0.01	<0 01	<0.00021	<0.01	<0 00021
	P93C-ROX-101221	10/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0.0094 UJ	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	P93C-ROX-011022	1/10/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
P-93D	P93D-ROX-041421	4/14/2021	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0 031	<0.01 UJ	0.0075 J	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	P93D-ROX-071621	7/16/2021	<0.001	<0.005	<0.005	<0.01	<0.00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0 00022 H UJ	<0.00022 H UJ	<0.032 H UJ	<0 011 H UJ	<0.011 H UJ	<0 011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.00022 H UJ	<0.011 H UJ	<0.00022 H UJ
	P93D-ROX-101821	10/18/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	P93D-ROX-011422	1/14/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
P-114R	P114R-ROX-041221	4/12/2021	<0.001	<0.005	<0.005	<0.01	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.00019 H UJ	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019 H UJ	<0.0096	<0.00019 H UJ
	P114R-ROX-071221	7/12/2021	<0.001	<0.005	<0.005	<0.01	<0 00022	<0.00022	<0.00022	<0.00022	<0.00022	<0 00022	0.021 J	<0 011 UJ	0.0059 J	<0.011	<0 011	<0.011	<0.00022	0.0043 J	<0 00022
	P114R-ROX-100821	10/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	0.031	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	P114R-ROX-011022	1/10/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
ROST-3-MW	ROST3MW-ROX-041321	4/13/2021	<0.001	<0.005	<0.005	0.0016 J	0.000065 J	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.00019 UJ	<0.029 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0 0096 H UJ	<0.00019 UJ	<0.0096 H UJ	<0 00019
	ROST3MW-ROX-071421	7/14/2021	<0.001	<0.005	<0.005	<0.01	<0 00021	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	0.023 J	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	ROST3MW-ROX-100821	10/8/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	ROST3MW-ROX-010622	1/6/2022	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
ROST-4-PZ(C)	ROST4PZC-ROX-041521	4/15/2021	0.0012 J	0.022	<0 01	0.022	0 0012	0.00018 J	0 00032	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019
	ROST4PZC-ROX-071421	7/14/2021	0 0089	0.095	<0.025	0.096	0 0018	<0.0002	0 00042	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	ROST4PZC-ROX-071421-DUP	7/14/2021	0 0078	0.081	<0.025	0.082	0 0018	<0.00019	0 00052	<0.00019	<0.00019	<0 00019	0.024 J	<0 0095	0.0051 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	ROST4PZC-ROX-101821	10/18/2021	0.002	0.02	0.00073 J	0.021	0 0018	0.00026	0 00035	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	ROST4PZC-ROX-011122	1/11/2022	0 00087 J	0 0093	<0.005	0.0099 J	0 0015	0.00027	0 00032	<0.00019	<0.00019	<0 00019	<0 029	<0 0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.0096	<0 00019

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			VOCs				SVOCs														
			1,3,5-Trimethylbenzene	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzoic Acid	Benzyl alcohol	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	2-Chloronaphthalene	Chrysene (1,2-Benzphenanthracene)	Dibenzo(a,h)acridine	Dibenzo(a,h)anthracene
Screening Values (mg/L)			**0.07** [3]	**10** [1]		**10** [1]	**0.42** [1]	**0.21** [3]	**2.1** [1]	**0.00013** [1]	**0.0002** [1]	**0.00018** [1]	**28** [1]	**0.7** [3]	**0.006** [1]	**1.4** [2]	**0.028** [2]	**0.56** [3]	**0.012** [1]		**0.0003** [1]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
ROST-4-PZ(E)	ROST4PZE-ROX-041621	4/16/2021	0.039	0.51	0.068	0.57	0 0027	0.00036	0.0014	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	ROST4PZE-ROX-071521	7/15/2021	0.029	0.42	0.055	0.47	0 0017	0.00026	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
	ROST4PZE-ROX-101821	10/18/2021	0.016	0.24	0.036	0.28	0 0037	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	0.0014 J	<0.00019	<0.0093	<0 00019
	ROST4PZE-ROX-011222	1/12/2022	0.032	0.44	0.054	0.49	0 0011	<0.00019	0 00048	<0.00019	<0.00019	<0 00019	<0.029 UJ	<0 0096	<0.0096	<0.0096	<0.0096 UJ	<0.0096	<0.00019	<0.0096	<0 00019
	ROST4PZE-ROX-011222-DUP	1/12/2022	0.037	0.53	0.057	0.59	0 0013	0.00023	0.0006	<0 0002	<0.0002	<0.0002	<0 029	<0 0098	<0.0098	<0.0098	<0.0098	<0.0098	<0 0002	<0.0098	<0.0002
ROST-4-PZ(G)	ROST4PZG-ROX-041521	4/15/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	0.000049 J	<0.00019	<0 00019	<0 029	<0 0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.0097	<0 00019
	ROST4PZG-ROX-041521-DUP	4/15/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 029	<0 0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.0095	<0 00019
	ROST4PZG-ROX-071321	7/13/2021	<0.001	<0.005	<0.005	<0.01	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.0094	<0 00019
	ROST4PZG-ROX-101421	10/14/2021	<0.001	0.0015 J	<0.005	0.0021 J	<0 00019	<0.00019	<0.00019	<0.00019	<0.00019	<0 00019	<0 028	<0 0093	<0.0093	<0.0093	<0.0093	<0.0093	<0.00019	<0.0093	<0 00019
	ROST4PZG-ROX-011022	1/10/2022	<0.001	0.00066 J	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0 0099	<0.0099	<0.0099	<0.0099	<0.0099	<0 0002	<0.0099	<0.0002
T-12	T12-ROX-041321	4/13/2021	0.0078 J	0.049 J	<0 05	0.052 J	<0 00022	<0.00022	<0.00022	<0.00022 U	<0.00022	<0 00022	<0 032	<0.011	0.0054 J	<0.011	<0 011	<0.011	<0.00022	<0 011	<0 00022
	T12-ROX-071521	7/15/2021	0.014 J	0.17	<0.1	0.18 J	0 00015 J	<0.00021	<0.00021	<0.00021	<0.00021	<0 00021	<0 032	<0.011	<0 011	<0.011	<0 011	<0.011	<0.00021	<0 011	<0 00021
	T12-ROX-102021	10/20/2021	0.011	0.043 J	<0 05	0.046 J	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002
	T12-ROX-011422	1/14/2022	0.003	0.018	0.0021 J	0.021	<0.0002	<0.0002	<0.0002	<0 0002	<0.0002	<0.0002	0.033	<0.01	<0.01	<0.01	<0.01	<0 01	<0 0002	<0.01	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			SVOCs																	
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																	
MW-01	MW1-ROX-041321	4/13/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	0.00008 J	0.00016 J	<0 0096 H UJ	<0.019 H UJ	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
	MW1-ROX-071221	7/12/2021	<0.0096	0.00039 J	<0.0096	0.0028 J	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	MW1-ROX-101321	10/13/2021	<0.0094	<0 0094 U	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW1-ROX-011222	1/12/2022	<0.0095	<0 0095	<0.0095	0.003 J	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095 UJ
MW-02	MW2-ROX-041521	4/15/2021	<0.0095	<0 0095	<0.0095 UJ	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.0078 J	0 007 J	<0 0095 UJ	<0.019 UJ	<0.0095	<0 019 UJ	<0 00019	<0.0095 UJ	<0.00019	<0.0095
	MW2-ROX-041521-DUP	4/15/2021	<0.0096	<0 0096	<0.0096 UJ	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	0.0042 J	0.0037 J	<0 0096 UJ	<0.019 UJ	<0.0096	<0 019 UJ	<0 00019	<0.0096 UJ	<0.00019	<0.0096
	MW2-ROX-071421	7/14/2021	<0.0099	<0 0099	<0.0099	<0.0099	<0.0099	<0.0002	<0 0002	<0.0099	<0.0002	0.0077	0.0069	<0.0099	<0 02	<0.0099	<0.02	<0.0002	<0 0099	<0.0002	<0.0099
	MW2-ROX-101521	10/15/2021	<0.0093	0 0003 J	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	0.0065	0.0099	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW2-ROX-011122	1/11/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.0096	0.015	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
MW-03	MW3-ROX-041321	4/13/2021	<0.0095	0.00048 J	<0.0095	<0.0095	<0.0095	<0.00019 H UJ	<0.00019 H UJ	<0.0095	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0 0096 H UJ	<0.019 H UJ	<0.0095	<0.019	<0.00019 H UJ	<0 0095	<0 00019 H UJ	<0.0095
	MW3-ROX-071221	7/12/2021	<0.0095	0 0006 J	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW3-ROX-101521	10/15/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	0.00011 J	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW3-ROX-101521-DUP	10/15/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW3-ROX-011022	1/10/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01 UJ
MW-04	MW4-ROX-041921	4/19/2021	<0 01	0.00061 J	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.00014 J	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021 U	<0.01
	MW4-ROX-071921	7/19/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW4-ROX-101921	10/19/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW4-ROX-011122	1/11/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
MW-05	MW5-ROX-041421	4/14/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.0097	<0 00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	0 0039 J	<0.019	<0 00019	<0 0097	<0.00019	<0.0097
	MW5-ROX-071421	7/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	MW5-ROX-101421	10/14/2021	<0.0094	0.00059 J	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW5-ROX-010722	1/7/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-06A	MW6A-ROX-041421	4/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	0.00008 J	<0.0096 UJ	0 000065 J	<0.0096
	MW6A-ROX-070921	7/9/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6A-ROX-101121	10/11/2021	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0095	0.00012 J	<0.00019	<0.0095	<0 00019	0.000089 J	0.00008 J	<0 0095 UJ	<0.019 UJ	<0.0095	<0 019 UJ	<0 00019	<0.0095 UJ	0 000072 J	<0.0095
	MW6A-ROX-010722	1/7/2022	<0.0097	<0 0097	<0.0097	<0.0097	<0.0097	<0 00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0 00019	<0 0097	<0.00019	<0.0097
MW-06B	MW6B-ROX-041421	4/14/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0.0096 UJ	<0.00019	<0.0096
	MW6B-ROX-070921	7/9/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6B-ROX-101121	10/11/2021	<0.0095	<0.0095 UJ	<0.0095	<0.0095	0.00033 J	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW6B-ROX-010722	1/7/2022	<0.0099	<0 0099	<0.0099	<0.0099	<0.0099	<0.0002	<0 0002	<0.0099	<0.0002	<0 0002	<0.0002	<0.0099	<0 02	<0.0099	<0.02	<0.0002	<0 0099	<0.0002	<0.0099
MW-06C	MW6C-ROX-041421	4/14/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0.0098 UJ	0.000039 J	<0.0098
	MW6C-ROX-070921	7/9/2021	<0 01	0.00094 J	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6C-ROX-101221	10/12/2021	<0.0094	<0.0094 UJ	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW6C-ROX-010622	1/6/2022	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
MW-06D	MW6D-ROX-041421	4/14/2021	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	0 000067 J	<0 0002	<0.0095 H UJ	0 000072 J	<0 0002	<0.0002	<0 0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0 019 H UJ	0 000057 J	<0.0095 H UJ	0 000054 J	<0 0095 H UJ
	MW6D-ROX-071221	7/12/2021	<0.011	0.001 J	<0 011	<0.011	<0 011	<0 00021	<0.00021	<0 011	<0 00021	0.0016	0.000078 J	<0.011	<0.021	<0 011	<0.021	<0 00021	<0.011	<0.00021	<0.011
	MW6D-ROX-101221	10/12/2021	<0.0094	<0.0094 UJ	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW6D-ROX-010622	1/6/2022	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
MW-07	MW7-ROX-041921	4/19/2021	<0 01	0 0013 J	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.0016	0.0024	<0.01	0 002 J	<0.01	<0.021	<0 00021	0.11 J	<0.00021	<0.01
	MW7-ROX-041921-DUP	4/19/2021	<0 01	<0.01	<0 01 UJ	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.0016	0.0023	<0.01 UJ	0 0009 J J	<0.01	<0 021 UJ	<0 00021	0.019 J	<0.00021	<0.01
	MW7-ROX-071921	7/19/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0.0018	0.0025	<0.01	0.00073 J	<0.01	<0.02	<0.0002	0 038	<0.0002	<0.01
	MW7-ROX-101921	10/19/2021	<0.0093	<0.0093 UJ	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	0.0023 J	0.0028	<0.0093	0.0011 J	<0.0093	<0.019	<0 00019	0.068 J	<0.00019	<0.0093
	MW7-ROX-101921-DUP	10/19/2021	<0.0093	<0 0093	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	0.0017 J	0.003	<0.0093	0.0015 J	<0.0093	<0.019	<0 00019	0.14 J	<0.00019	<0.0093
	MW7-ROX-011122	1/11/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019 UJ	0.0031	<0.0096	0.00089 J	<0.0096	<0.019	<0 00019	0.14	<0.00019	<0.0096
	MW7-ROX-011122-DUP	1/11/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.0029 J	0.0034	<0.0095	0.00097 J	<0.0095	<0.019	<0 00019	0.12	<0.00019	<0.0095

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			SVOCs																	
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																	
MW-08	MW8-ROX-041921	4/19/2021	<0.011	<0.011	<0 011	<0.011	<0 011	<0 00021	<0.00021	<0 011	<0 00021	0.0084	0.0027	<0.011	0.00074 J	<0 011	<0.021	<0 00021	0.29	<0.00021	<0.011
	MW8-ROX-071921	7/19/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.01	0.0022	<0.01	0.00069 J	<0.01	<0.021	<0 00021	0.3	<0.00021	<0.01
	MW8-ROX-071921-DUP	7/19/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.0086	0.0022	<0.01	0.00077 J	<0.01	<0.021	<0 00021	0.33	<0.00021	<0.01
	MW8-ROX-101921	10/19/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	0.00046	<0.0093	<0 00019	0 012	0.0022	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW8-ROX-011122	1/11/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	0.00049	<0.0096	<0 00019	0 018	0.0045	<0.0096	<0.019	<0.0096	<0.019	<0 00019	0.39	<0.00019	<0.0096
MW-09	MW9-ROX-040821	4/8/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095 UJ	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW9-ROX-070821	7/8/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW9-ROX-100721	10/7/2021	<0.0094	<0 0094 U	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW9-ROX-010622	1/6/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
MW-10	MW10-ROX-040821	4/8/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095 UJ	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW10-ROX-070821	7/8/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
	MW10-ROX-100721	10/7/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW10-ROX-011222	1/12/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094 UJ
MW-11	MW11-ROX-041221	4/12/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0 0096 UJ	<0.019 UJ	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	MW11-ROX-071221	7/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW11-ROX-100721	10/7/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW11-ROX-010622	1/6/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
MW-12	MW12-ROX-041221	4/12/2021	<0.0096	<0 0096	<0.0096	<0.0096 UJ	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0 0095 H UJ	<0.019 H UJ	<0.0096	<0.019	<0.00019 H UJ	<0 0096	<0 00019 H UJ	<0.0096
	MW12-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	0.00013 J	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	0.0031 J
	MW12-ROX-101521	10/15/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019 U	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW12-ROX-011222	1/12/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	0 000081 J	<0.00019	<0.0094	<0 00019 U	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094 UJ
MW-13	MW13-ROX-041221	4/12/2021	<0.0096	0.00056 J	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	0.00012 J	<0 0096 H UJ	<0.019 H UJ	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	MW13-ROX-071221	7/12/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW13-ROX-100821	10/8/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW13-ROX-011022	1/10/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094 UJ
MW-14	MW14-ROX-040921	4/9/2021	<0.011	<0.011	<0 011	<0.011	<0.011 UJ	<0 00021	<0.00021	<0 011	<0 00021	<0.00021	<0.00021	<0.011	<0.021	<0 011	<0.021	<0 00021	<0.011	<0.00021	<0.011
	MW14-ROX-071321	7/13/2021	<0 01	0.00071 J	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01
	MW14-ROX-101321	10/13/2021	<0.0094	<0 0094 U	<0.0094 UJ	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0 0094 UJ	<0.019 UJ	<0.0094	<0 019 UJ	<0 00019	<0.0094 UJ	<0.00019	<0.0094
	MW14-ROX-011322	1/13/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0 0096
MW-16	MW16-ROX-040821	4/8/2021	<0 0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0 00019	<0.00019	<0.0095 H UJ	<0 00019	<0.00019	<0.00019	<0 0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0 019 H UJ	<0 00019	<0.0095 H UJ	<0.00019	<0.0095 H UJ
	MW16-ROX-071221	7/12/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0 0095
	MW16-ROX-100821	10/8/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0 0093
	MW16-ROX-010722	1/7/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0 0096
MW-22	MW22-ROX-041521	4/15/2021	<0 0096 H UJ	0.00061 J H J	0.011 H J	<0.0096 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.00019 H UJ	0.0016 J H J	<0.00019 H UJ	0 0043 H J	0.0046 H J	<0.0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0 019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0 00019 H UJ	<0.0096 H UJ
	MW22-ROX-071521	7/15/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.0015	0.0011	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0 0095
	MW22-ROX-071521-DUP	7/15/2021	<0.0095	0.00058 J	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.0015	0.0012	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0 0095
	MW22-ROX-101521	10/15/2021	<0.0093	<0 0093	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	0.00044	0.00014 J	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0 0093
	MW22-ROX-011022	1/10/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0.00083	0.00012 J	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
MW-23	MW23-ROX-040921	4/9/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0 0094 H UJ	<0.019 H UJ	<0.0094	<0.019	0 000041 J	<0 0094	0 000055 J	<0.0094
	MW23-ROX-071321	7/13/2021	<0.0097	0 0009 J	<0.0097	<0.0097	<0.0097	<0 00019	<0.00019	<0.0097	<0 00019	<0.00019	0.000084 J	<0.0097	<0.019	<0.0097	<0.019	<0 00019	<0 0097	<0.00019	<0 0097
	MW23-ROX-101321	10/13/2021	<0.0095	<0 0095 U	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0 0095
	MW23-ROX-010722	1/7/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0 0095

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TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			SVOCs																		
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																		
MW-24	MW24-ROX-041321	4/13/2021	<0 0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 UJ	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.0095 UJ	<0 019 UJ	<0.00019 H UJ	<0.0095 UJ	<0 00019 H UJ	<0 0095 UJ
	MW24-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW24-ROX-100721	10/7/2021	<0.0095	<0 0095 U	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	0.00007 J	0.000057 J	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW24-ROX-010722	1/7/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
MW-25	MW25-ROX-041921	4/19/2021	<0 01	0.00054 J	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01
	MW25-ROX-071921	7/19/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.000095 J	0.000093 J	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01
	MW25-ROX-101921	10/19/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW25-ROX-011122	1/11/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
MW-26	MW26-ROX-040921	4/9/2021	<0.0096	<0 0096	<0.0096 UJ	<0.0096	<0.0096 UJ	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0 0096 UJ	<0.019 UJ	<0.0096	<0 019 UJ	<0 00019	<0.0096 UJ	<0.00019	<0.0096
	MW26-ROX-070921	7/9/2021	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW26-ROX-101421	10/14/2021	<0.0093	<0 0093	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW26-ROX-011122	1/11/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-27	MW27-ROX-040821	4/8/2021	<0.0095	0.00023 J	<0.0095	<0.0095	<0.0095 UJ	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	MW27-ROX-071321	7/13/2021	<0 01	0.00089 J	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW27-ROX-101321	10/13/2021	<0.0093	<0 0093 U	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	0.000058 J	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	MW27-ROX-011222	1/12/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094 UJ
MW-28	MW28-ROX-041621	4/16/2021	<0.0097	<0 0097	<0.0097	<0.0097	<0.0097	<0 00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0 00019	<0 0097	0.000054 J	<0.0097
	MW28-ROX-041621-DUP	4/16/2021	<0.0096	0.00066 J	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	MW28-ROX-071521	7/15/2021	<0 01	<0.01	<0.01	<0.01	0 0025 J	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW28-ROX-101821	10/18/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	MW28-ROX-101821-DUP	10/18/2021	<0.0092	0.00038 J	<0.0092	<0.0092	<0.0092	<0 00018	<0.00018	<0.0092	<0 00018	<0.00018	<0.00018	<0.0092	<0.018	<0.0092	<0.018	<0 00018	<0 0092	<0.00018	<0.0092
	MW28-ROX-011222	1/12/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
P-54	P54-ROX-041321	4/13/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0.00019 H UJ	<0.00019 H UJ	<0.0094	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0 0095 H UJ	<0.019 H UJ	<0.0094	<0.019	<0.00019 H UJ	<0 0094	<0 00019 H UJ	<0.0094
	P54-ROX-070921	7/9/2021	<0.0096	0 0007 J	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019	<0.0096	<0 00019	0.00021	0 00027	<0.0096	<0.019	<0.0096	<0.019	0 000054 J	<0 0096	<0.00019	<0.0096
	P54-ROX-101421	10/14/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	P54-ROX-011022	1/10/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095 UJ
P-56	P56-ROX-040921	4/9/2021	<0 01	0.00051 J	<0.01	<0.01	<0 01 UJ	<0 00021	0.00042	<0.01	<0 00021	0 014	0.013	<0.01	<0.021	<0.01	<0.021	0.00086	<0.01	<0.00021	<0.01
	P56-ROX-071421	7/14/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0 011	0.011	<0.01	<0 02	<0.01	<0.02	0.00074	<0.01	<0.0002	<0.01
	P56-ROX-101821	10/18/2021	0.00051 J	0.00025 J	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	0 016	0.019	<0.0094	<0.019	<0.0094	<0.019	0.0011	<0 0094	<0.00019	<0.0094
	P56-ROX-011222	1/12/2022	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	<0.00019 UJ	<0.0096	<0 00019	0.01 J	0.0091 J FD	<0.0096	<0.019	<0.0096	<0.019	0 00076	<0 0096	<0.00019	<0.0096
	P56-ROX-011222-DUP	1/12/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	0 00043 J	<0.01	<0.0002	0.013 J	0 013 J FD	<0.01	<0 02	<0.01	<0.02	0.00093	<0.01	<0.0002	<0.01
P-57	P57-ROX-041221	4/12/2021	0.00019 J	<0.011	<0 011	<0.011	<0 011	<0 00021	0.00054	<0 011	<0 00021	0 015	0.017	<0.011 H UJ	<0.021 H UJ	<0 011	<0.021	0 00029	0.038 J	0.000045 J	<0.011
	P57-ROX-041221-DUP	4/12/2021	0.00017 J	<0.01	<0 01 UJ	<0.01	<0.01	<0.0002	0.00038	<0.01	<0.0002	0 014	0.016	<0.01 H UJ	<0.02 H UJ	<0.01	<0.02 UJ	0 00023	<0.01 UJ	0.000042 J	<0.01
	P57-ROX-071421	7/14/2021	0.00052 J	<0.01	<0.01	<0.01	<0.01	<0 00021	0 0004	<0.01	<0 00021	0 014	0.018	<0.01	<0.021	<0.01	<0.021	0 00024	0 017	<0.00021	<0 01
	P57-ROX-101821	10/18/2021	<0.0094	0.00039 J	<0.0094	<0.0094	0 0021 J	<0 00019	0 0007	0.016	<0 00019	0 022	0 02	<0.0094	<0.019	<0.0094	<0.019	<0 00019	0 087	<0.00019	<0.0094
	P57-ROX-011422	1/14/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0 012	0.0076	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
P-58	P58-ROX-041421	4/14/2021	0.0024 J	<0.01	<0.01	<0.01	<0.01	0.0003	0 0022	<0.01	0 000065 J	0 049	0.015	<0.01	<0.021	<0.01	<0.021	0.0017	0.7	0.0012	<0.01
	P58-ROX-011322	1/13/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019 UJ	<0.0095	<0 00019	0 055	0.024	<0.0095	<0.019	<0.0095	<0.019	0.0015	0.57	<0 00019 UJ	<0.0095
	P58-ROX-011322-DUP	1/13/2022	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	0.002 J	<0.0098	<0.0002	0 056	0.025	<0.0098	<0 02	<0.0098	<0.02	0.0018	0.45	0.00087 J	<0.0098
P-59	P59-ROX-041321	4/13/2021	<0.011	<0.011	<0 011	<0.011	<0 011	0.00017 J	0.00071	<0 011	<0 00021	0.01	0.015	<0.011	<0.021	<0 011	<0.021	0 00085	0.03	0 00027	<0.011
	P59-ROX-071521	7/15/2021	<0 01	<0.01	0.0043 J	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0 013	0.019	<0.01	0.0018 J	<0.01	<0.021	0 00082	0 069	0.0003	<0 01
	P59-ROX-102021	10/20/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0.02	0.028	<0.01	<0 02	<0.01	<0.02	<0.0002	0 053	<0.0002	<0.01
	P59-ROX-102021-DUP	10/20/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	0.001 J	<0.0002	0 021	0.028	<0.01	<0 02	<0.01	<0.02	<0.0002	0 041	<0.0002	<0.01
	P59-ROX-011322	1/13/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0 018	0.025	<0.01	<0 02	<0.01	<0.02	<0.0002	0 059	<0.0002	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			SVOCs																	
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.28 [1]	0.28 [1]		0.00043 [1]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]	0.028 [3]	0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																	
P-66	P66-ROX-040921	4/9/2021	0.0015 J	<0.01	<0.01	<0.01	<0 01 UJ	<0.0002	0 0013	<0.01	<0.0002	0 074	0.031	<0.01	0.0072 J	<0.01	<0.02	0.00036	0 0028 J	0.00016 J	<0.01
	P66-ROX-071321	7/13/2021	0.0011 J	<0.01	<0.01	<0.01	<0.01	0.00015 J	<0 0002	<0.01	<0.0002	0 041	0.019	0.025	0.026	<0.01	<0.02	<0.0002	0 029	0 00039	<0.01
	P66-ROX-080921	8/9/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	0.04	0.014	0.011	0.022	<0 01 UJ	<0.02	<0.0002	0 015	0.0002	<0.01
	P66-ROX-102021	10/20/2021	0.0014 J	<0.01	<0.01	<0.01	<0.01	<0 00021	0.0011 J	0.0017 J	<0 00021	0 055	0.025	<0.01	0.0025 J	<0.01	<0.021	0.00045 J	0 025	<0.00021	<0.01
	P66-ROX-102021-DUP	10/20/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002 UJ	0.0013 J	<0.0002	0 068	0.032	<0.01	0.0024 J	<0.01	<0.02	<0 0002 UJ	0 021	<0.0002	<0.01
	P66-ROX-011322	1/13/2022	0.00086 J	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	0 0025	<0.0096	<0 00019	0 082	0.029	0.0062 J	0.01 J	<0.0096	<0.019	<0 00019	0 019	<0.00019	<0.0096
P-74	P74-ROX-041221	4/12/2021	<0 01	0.00052 J	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01 H UJ	<0.02 H UJ	<0.01	<0.02	0.00004 J	<0.01	0.000049 J	<0.01
	P74-ROX-071421	7/14/2021	<0 01	<0.01 U	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01
	P74-ROX-101221	10/12/2021	<0.0092	<0 0092 U	<0.0092	<0.0092	<0.0092	<0 00018	<0.00018	<0.0092	<0 00018	0.00035	0 00028	<0.0092	0.00088 J	<0.0092	<0.018	<0 00018	0.02	<0.00018	<0.0092
	P74-ROX-011322	1/13/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	P74-ROX-011322-DUP	1/13/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	0 0032 J	<0.00021	<0.01
P-93A	P93A-ROX-041221	4/12/2021	<0 01	<0.01	<0.01	<0.01	<0 01 UJ	<0 00021	<0.00021	<0.01	<0 00021	0.00019 J	0.00013 J	<0.01	<0.021	<0.01	<0.021	<0 00021	0 0029 J	<0.00021	<0.01
	P93A-ROX-071521	7/15/2021	<0 01	0.001 J	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.00015 J	0.00011 J	<0.01	<0.021	<0.01	<0.021	<0 00021	0 0035 J	0.000046 J	<0.01
	P93A-ROX-071521-DUP	7/15/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	0.00018 J	0.000083 J	<0.01	<0.021	<0.01	<0.021	0 000043 J	<0.01	<0.00021	<0.01
	P93A-ROX-101921	10/19/2021	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
	P93A-ROX-011222	1/12/2022	<0.0098	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	0.00019 J	<0.0002	<0.0098	<0 02	<0.0098	<0.02	<0.0002	<0 0098	<0.0002	<0.0098
P-93B	P93B-ROX-041421	4/14/2021	<0.011	<0.011	<0 011	<0.011	<0 011	0.00011 J	<0.00021	<0 011	<0 00021	0.00028	0.0002 J	<0.011	0 002 J	<0 011	<0.021	<0 00021	0.39	0.000086 J	<0.011
	P93B-ROX-071621	7/16/2021	<0 01	0 0014 J	<0 01 UJ	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	0.00016 J	<0.01 UJ	<0.021 UJ	<0.01	<0 021 UJ	<0 00021	0.0039 J J	<0.00021	<0.01
	P93B-ROX-071621-DUP	7/16/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	0.000079 J	<0.01	0.0019 J	<0.01	<0.021	<0 00021	0.19 J	<0.00021	<0.01
	P93B-ROX-101921	10/19/2021	<0.0099	<0 0099	0.0057 J	<0.0099	<0.0099	<0.0002	<0 0002	<0.0099	<0.0002	<0 0002	<0.0002	<0.0099	0 003 J	<0.0099	<0.02	<0.0002	0.29	<0.0002	<0.0099
	P93B-ROX-011322	1/13/2022	<0.0098	<0 0098	0.0039 J	<0.0098	<0.0098	<0.0002	<0 0002	<0.0098	<0.0002	<0 0002	<0.0002	<0.0098	0 002 J	<0.0098	<0.02	<0.0002	0.37	<0.0002	<0.0098
P-93C	P93C-ROX-040921	4/9/2021	<0.0096	<0 0096 U	<0.0096	<0.0096	<0.0096 UJ	<0 00019	<0.00019	<0.0096	<0 00019	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.019	<0 00019	<0 0096	<0.00019	<0.0096
	P93C-ROX-071221	7/12/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0 00021	<0.00021	<0.01	<0 00021	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.021	<0 00021	<0.01	<0.00021	<0.01
	P93C-ROX-101221	10/12/2021	<0.0094	<0 0094 U	<0.0094 UJ	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0 0094 UJ	<0.019 UJ	<0.0094	<0 019 UJ	<0 00019	<0.0094 UJ	<0.00019	<0.0094
	P93C-ROX-011022	1/10/2022	<0.0095	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095 UJ
P-93D	P93D-ROX-041421	4/14/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	<0.01 UJ	<0.0002	<0.01
	P93D-ROX-071621	7/16/2021	<0.011 H UJ	<0 011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.011 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0.011 H UJ	<0.00022 H UJ	<0.00022 H UJ	<0 00022 H UJ	<0 011 H UJ	<0.022 H UJ	<0.011 H UJ	<0 022 H UJ	<0.00022 H UJ	<0 011 H UJ	<0 00022 H UJ	<0.011 H UJ
	P93D-ROX-101821	10/18/2021	<0.0093	<0 0093	<0.0093	<0.0093	0 0022 J	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	P93D-ROX-011422	1/14/2022	<0.0097	<0 0097	<0.0097	<0.0097	<0.0097	<0 00019	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	<0 00019	<0 0097	<0.00019	<0.0097 UJ
P-114R	P114R-ROX-041221	4/12/2021	<0.0096	0 0003 J	<0.0096	<0.0096	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0.0096	<0.00019 H UJ	<0.00019 H UJ	<0 00019 H UJ	<0 0094 H UJ	<0.019 H UJ	<0.0096	<0.019	<0.00019 H UJ	<0 0096	<0 00019 H UJ	<0.0096
	P114R-ROX-071221	7/12/2021	<0.011	<0.011	<0 011	<0.011	<0 011	<0 00022	<0.00022	<0 011	<0 00022	<0.00022	<0.00022	<0.011	<0.022	<0 011	<0.022	<0 00022	<0.011	<0.00022	<0.011
	P114R-ROX-100821	10/8/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	P114R-ROX-011022	1/10/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094 UJ
ROST-3-MW	ROST3MW-ROX-041321	4/13/2021	<0 0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0 00019	<0.00019	<0.0096 H UJ	<0 00019	0.000093 J	<0.00019	<0 0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0 019 H UJ	<0 00019	<0.0096 H UJ	<0.00019	<0.0096 H UJ
	ROST3MW-ROX-071421	7/14/2021	<0.011	<0.011	<0 011	<0.011	<0 011	<0 00021	<0.00021	<0 011	<0 00021	<0.00021	<0.00021	<0.011	<0.021	<0 011	<0.021	<0 00021	<0.011	<0.00021	<0.011
	ROST3MW-ROX-100821	10/8/2021	<0.0094	<0 0094 U	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	ROST3MW-ROX-010622	1/6/2022	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
ROST-4-PZ(C)	ROST4PZC-ROX-041521	4/15/2021	<0.0096	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	0 0011	<0.0096	<0 00019	0 022	0.013	<0.0096	<0.019	<0.0096	<0.019	0.0027	<0 0096	<0.00019 U	<0.0096
	ROST4PZC-ROX-071421	7/14/2021	0.0016 J	<0.01	<0.01	<0.01	<0.01	<0.0002	0 0015	<0.01	<0.0002	0 052	0.046	<0.01	<0 02	<0.01	<0.02	0.0043	<0.01	0.000078 J	<0.01
	ROST4PZC-ROX-071421-DUP	7/14/2021	0.0016 J	<0 0095	<0.0095	<0.0095	<0.0095	<0 00019	0 0013	<0.0095	<0 00019	0 051	0.045	<0.0095	<0.019	<0.0095	<0.019	0.004	<0 0095	0.000049 J	<0.0095
	ROST4PZC-ROX-101821	10/18/2021	0.00091 J	0.00067 J	<0.0094	<0.0094	<0.0094	<0 00019	0 0013	<0.0094	<0 00019	0 041	0.0086	<0.0094	<0.019	<0.0094	0.0014 J	0.0033	<0 0094	0.0001 J	<0.0094
	ROST4PZC-ROX-011122	1/11/2022	0.00046 J	<0 0096	<0.0096	<0.0096	<0.0096	<0 00019	0 0011	<0.0096	<0 00019	0 032	0.0029	<0.0096	<0.019	<0.0096	<0.019	0.0031	<0 0096	0.000084 J	<0.0096

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL RESULTS AND EXCEEDANCES

			SVOCs																	
			Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	4-Nitrophenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)			**0.007** [3]	**5.6** [1]	**0.14** [2]	**0.7** [1]	**0.14** [2]	**0.28** [1]	**0.28** [1]		**0.00043** [1]	**0.49** [3]	**0.028** [1]	**0.35** [1]	**0.35** [3]	**0.028** [3]	**0.001** [1]	**0.21** [3]	**0.1** [1]	**0.21** [1]	**0.007** [3]
Location	**Sample ID**	**Sample Date**	**Analytical Results (mg/L)**																	
ROST-4-PZ(E)	ROST4PZE-ROX-041621	4/16/2021	0.0015 J	0.00081 J	0.0087 J	<0.0095	<0.0095	0 00021	0 0026	0.0033 J	<0 00019	0 064	0 07	<0.0095	0.0024 J	<0.0095	<0.019	0.0063	<0 0095	0 00048	<0.0095
	ROST4PZE-ROX-071521	7/15/2021	0.002 J	<0 0097	0.0044 J	<0.0097	<0.0097	0 000074 J	0 0016	<0.0097	<0 00019	0 055	0.069	<0.0097	<0.019	<0.0097	<0.019	0.0056	<0 0097	0.00017 J	<0 0097
	ROST4PZE-ROX-101821	10/18/2021	<0.0093	0.00076 J	<0.0093	<0.0093	<0.0093	<0 00019	0 0023	0.0041 J	<0 00019	0.11	0.13	<0.0093	<0.019	<0.0093	<0.019	0.0088	<0 0093	0 00029	<0.0093
	ROST4PZE-ROX-011222	1/12/2022	0.00039 J	<0 0096	<0.0096 UJ	<0.0096	<0.0096	<0 00019	0.001 J	0.0023 J	<0 00019	0 038	0.035	<0 0096 UJ	<0.019 UJ	<0.0096	<0 019 UJ	0.0024	<0.0096 UJ	<0.00019	<0.0096
	ROST4PZE-ROX-011222-DUP	1/12/2022	0.00089 J	<0 0098	<0.0098	<0.0098	<0.0098	<0.0002	0.0013 J	0.0031 J	<0.0002	0 041	0 04	<0.0098	<0 02	<0.0098	<0.02	0.0023	<0 0098	0.00012 J	<0 0098 UJ
ROST-4-PZ(G)	ROST4PZG-ROX-041521	4/15/2021	<0.0097	0.00028 J	<0.0097	<0.0097	<0.0097	<0 00019 U	<0.00019	<0.0097	<0 00019	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.019	0.00007 J	<0 0097	<0.00019 U	<0.0097
	ROST4PZG-ROX-041521-DUP	4/15/2021	<0.0095	0.00058 J	<0.0095	<0.0095	<0.0095	<0 00019	<0.00019	<0.0095	<0 00019	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.019	<0 00019	<0 0095	<0.00019	<0.0095
	ROST4PZG-ROX-071321	7/13/2021	<0.0094	<0 0094	<0.0094	<0.0094	<0.0094	<0 00019	<0.00019	<0.0094	<0 00019	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.019	<0 00019	<0 0094	<0.00019	<0.0094
	ROST4PZG-ROX-101421	10/14/2021	<0.0093	0.00046 J	<0.0093	<0.0093	<0.0093	<0 00019	<0.00019	<0.0093	<0 00019	<0.00019	<0.00019	<0.0093	<0.019	<0.0093	<0.019	<0 00019	<0 0093	<0.00019	<0.0093
	ROST4PZG-ROX-011022	1/10/2022	<0.0099	<0 0099	<0.0099	<0.0099	<0.0099	<0.0002	<0 0002	<0.0099	<0.0002	<0 0002	<0.0002	<0.0099	<0 02	<0.0099	<0.02	<0.0002	<0 0099	<0.0002	<0 0099 UJ
T-12	T12-ROX-041321	4/13/2021	<0.011	<0.011	<0 011	<0.011	<0 011	0 000076 J	<0.00022	<0 011	<0 00022	<0.00022	<0.00022	<0.011	<0.022	<0 011	<0.022	<0 00022	0.09	0.000094 J	<0.011
	T12-ROX-071521	7/15/2021	<0.011	<0.011	0.0075 J	<0.011	<0 011	<0 00021	<0.00021	0.0035 J	<0 00021	0.0017	0 00026	<0.011	0.0018 J	<0 011	<0.021	<0 00021	0.23	<0.00021	<0.011
	T12-ROX-102021	10/20/2021	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	0.0023 J	<0.0002	0.0058	0.0027	<0.01	0.0013 J	<0.01	<0.02	<0.0002	0.14	<0.0002	<0.01
	T12-ROX-011422	1/14/2022	<0 01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0 0002	<0.01	<0.0002	<0 0002	<0.0002	<0.01	<0 02	<0.01	<0.02	<0.0002	0 036	<0.0002	<0.01 UJ

Notes

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

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

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

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.

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

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

LABORATORY QUALIFIERS

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

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

H = Analyzed or extracted out of holding time criteria.

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

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

*1 = LCS/LCSD RPD is outside contol limit

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

AECOM QUALIFIERS

J = The result is estimated.

UJ = Estimated non-detect.

U = Result is non-detect.

Figures

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

MVS Descriptions and Assumptions:

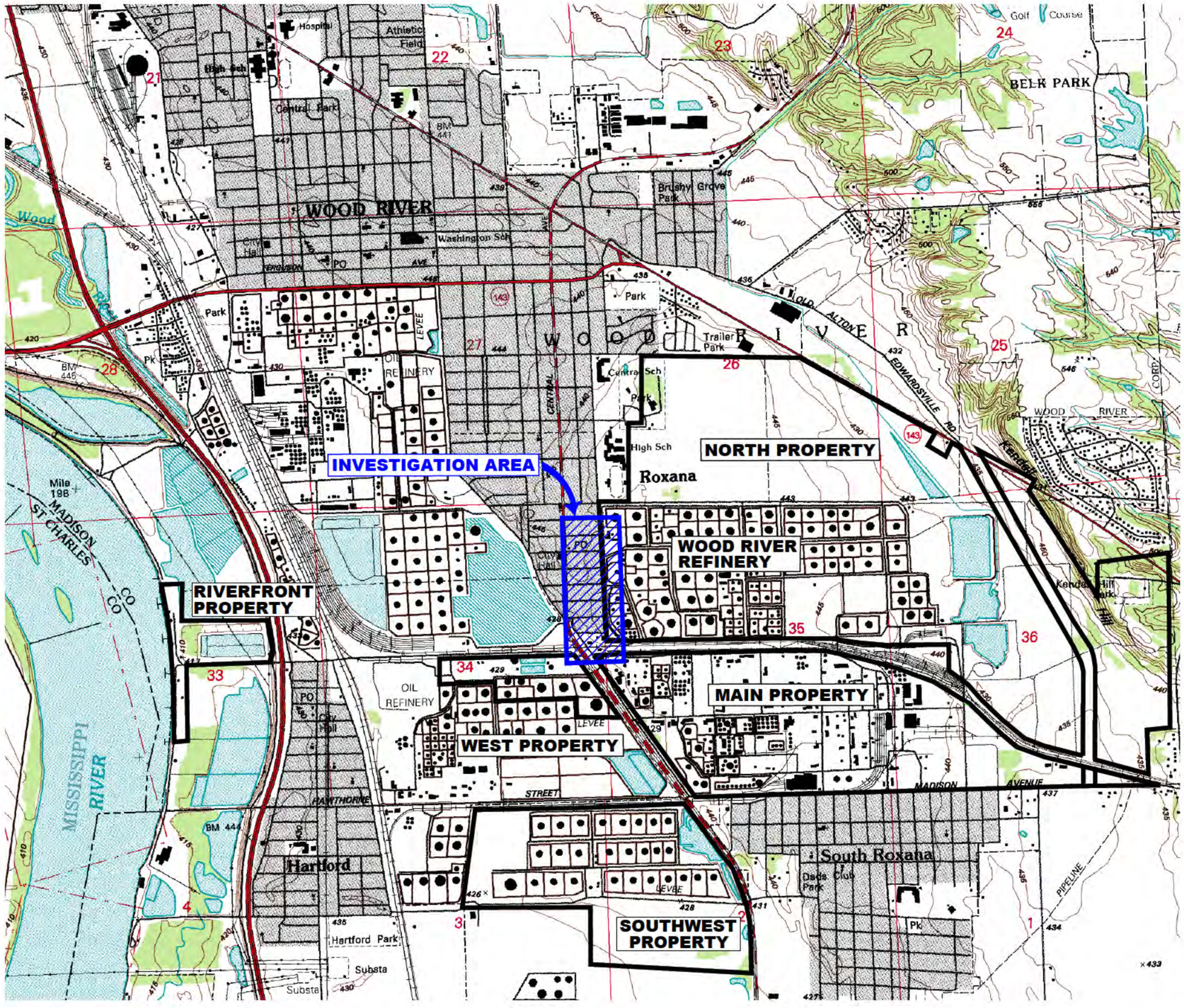
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

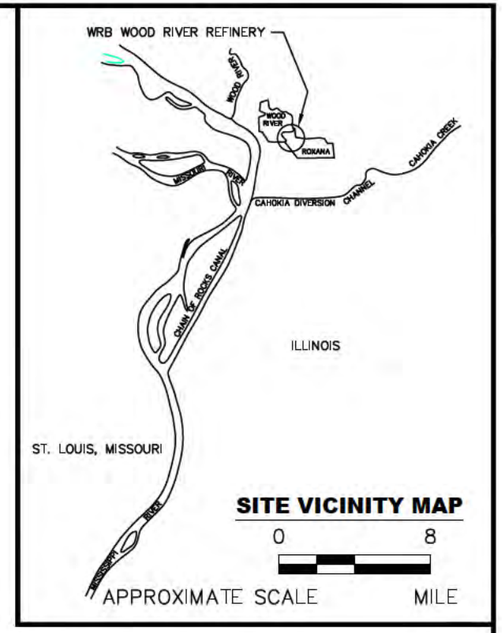
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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

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

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





LEGEND

WOOD RIVER REFINERY PROPERTY BOUNDARY

INVESTIGATION AREA

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

0 2000

APPROXIMATE SCALE FEET

N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60674381

AECOM

DRN. BY:gds April 2022 DSGN. BY:mar CHKD. BY:wmp	Investigation Area Location Map	FIG. NO. 1

File: C:\USERS\LORENTE\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\USF00686-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\07.01.2022\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: Mar. 07, 22 @ 11:13 AM by: lorenle

LEGEND

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

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

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

0 200
SCALE FEET
N

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

PROJECT NO. 60674381

AECOM

DRN. BY:gds April 2022
DSGN. BY:mr
CHKD. BY:wmp

Roxana Interim Groundwater Monitoring Well Locations

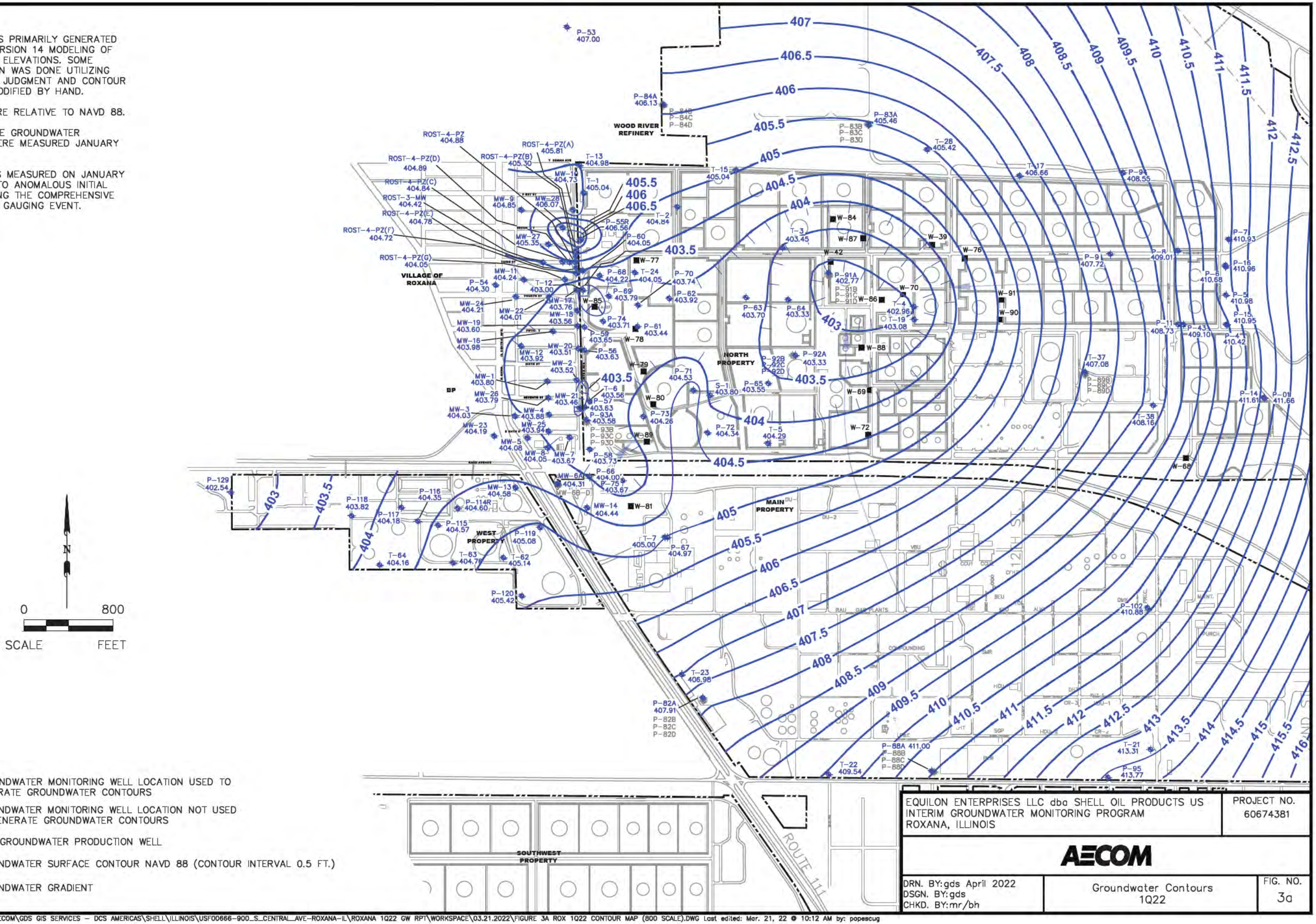
FIG. NO. 2

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

2. ELEVATIONS ARE RELATIVE TO NAVD 88.

3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JANUARY 3-5, 2022.

4. WELL T-7 WAS MEASURED ON JANUARY 6, 2022 DUE TO ANOMALOUS INITIAL RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.



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

PROJECT NO. 60674381

AECOM

DRN. BY:gds April 2022
DSGN. BY:gds
CHKD. BY:mr/bh

Groundwater Contours 1Q22

FIG. NO. 3a

File: C:\USERS\POPESCUG\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\03.21.2022\FIGURE 3A ROX 1Q22 CONTOUR MAP (800 SCALE).DWG Last edited: Mar. 21, 22 @ 10:12 AM by: popescug

File: C:\USERS\POPESCUG\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\03.21.2022\FIGURE 3B GW CONTOURS 1Q22 WF.DWG Last edited: Mar. 21, 22 @ 4:02 PM by: popescug

LEGEND

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

NOTES:
1. CONTOUR LINES PRIMARILY GENERATED BY SURFER VERSION 14 MODELING OF GROUNDWATER ELEVATIONS. SOME INTERPRETATION WAS DONE UTILIZING PROFESSIONAL JUDGMENT AND CONTOUR LINES WERE MODIFIED BY HAND.
2. ELEVATIONS ARE RELATIVE TO NAVD 88.
3. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED JANUARY 3-5, 2022.
4. WELL T-7 WAS MEASURED ON JANUARY 6, 2022 DUE TO ANOMALOUS INITIAL RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.

406 405 405.5 406 406.5 404.5 404 403.5 404 403.5 404 404.5 405 405.5

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

T-13 404.98
T-1 405.04
T-2 404.84
MW-10 404.73
MW-9 404.85
MW-28 406.07
ROST-4-PZ(A) 405.81
ROST-4-PZ(B) 405.30
MW-27 405.35
ROST-4-PZ(D) 404.89
ROST-4-PZ(C) 404.84
P-55R 406.56
ROST-4-PZ 404.88
ROST-3-MW 404.42
P-60 404.05
MW-11 404.24
ROST-4-PZ(E) 404.78
P-68 404.22
T-24 404.05
ROST-4-PZ(G) 404.05
ROST-4-PZ(F) 404.72
MW-17 403.76
T-12 403.00
P-69 403.79
P-62 403.92
MW-24 404.21
MW-22 404.01
W-85
P-70 403.74
MW-18 403.56
P-74 403.71
MW-19 403.60
P-59 403.65
P-61 403.44
W-78
MW-16 403.98
MW-12 403.92
MW-20 403.51
P-56 403.63
MW-2 403.52
MW-1 403.80
W-79
T-6 403.56
MW-26 403.79
MW-21 403.46
P-57 403.63
W-80
P-71 404.53
S-1 403.80
MW-4 403.88
MW-3 404.03
P-93A 403.58
P-93B
P-93C
P-93D
P-73 404.26
MW-25 403.94
MW-7 403.67
P-72 404.34
MW-23 404.19
MW-5 404.08
MW-8 404.05
P-58 403.73
W-89
P-54 404.30
MW-13 404.58
MW-6B
MW-6C
MW-6D
MW-6A 404.31
P-66 404.00
P-75 403.67
MW-14 404.44
W-81
P-117 404.18
P-114R 404.60
P-116 404.35
P-115 404.57
P-119 405.08
P-67 404.97
T-7 405.00
T-62 405.14
T-63 404.76
T-64 404.16

A-32 A-31 A-58 A-57 A-28 A-27 A-35 A-16 A-30 A-29 A-147 F-50 F-78 F-73 F-75 37 33

0 300
SCALE FEET
N

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

PROJECT NO. 60674381

AECOM

DRN. BY: gds April 2022
DSGN. BY: gds
CHKD. BY: mr/bh

Groundwater Contours 1Q22- West Fenceline

FIG. NO. 3b

File: C:\USERS\POPESCUG\AECOM\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\US700888-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\03.21.2022\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE) 1Q22.DWG Last edited: Mar. 9, 22 @ 3:34 PM by: lorenz

LEGEND

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

NOTE:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WEST FENCELINE AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 3-5, 2022.
3. WELL T-7 WAS MEASURED ON JANUARY 6, 2022 DUE TO ANOMALOUS INITIAL RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.
4. WELL ROST-4-PZ(E) DID NOT CONTAIN LNAPL DURING SUBSEQUENT GAUGING ON JANUARY 11, 2022.

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

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

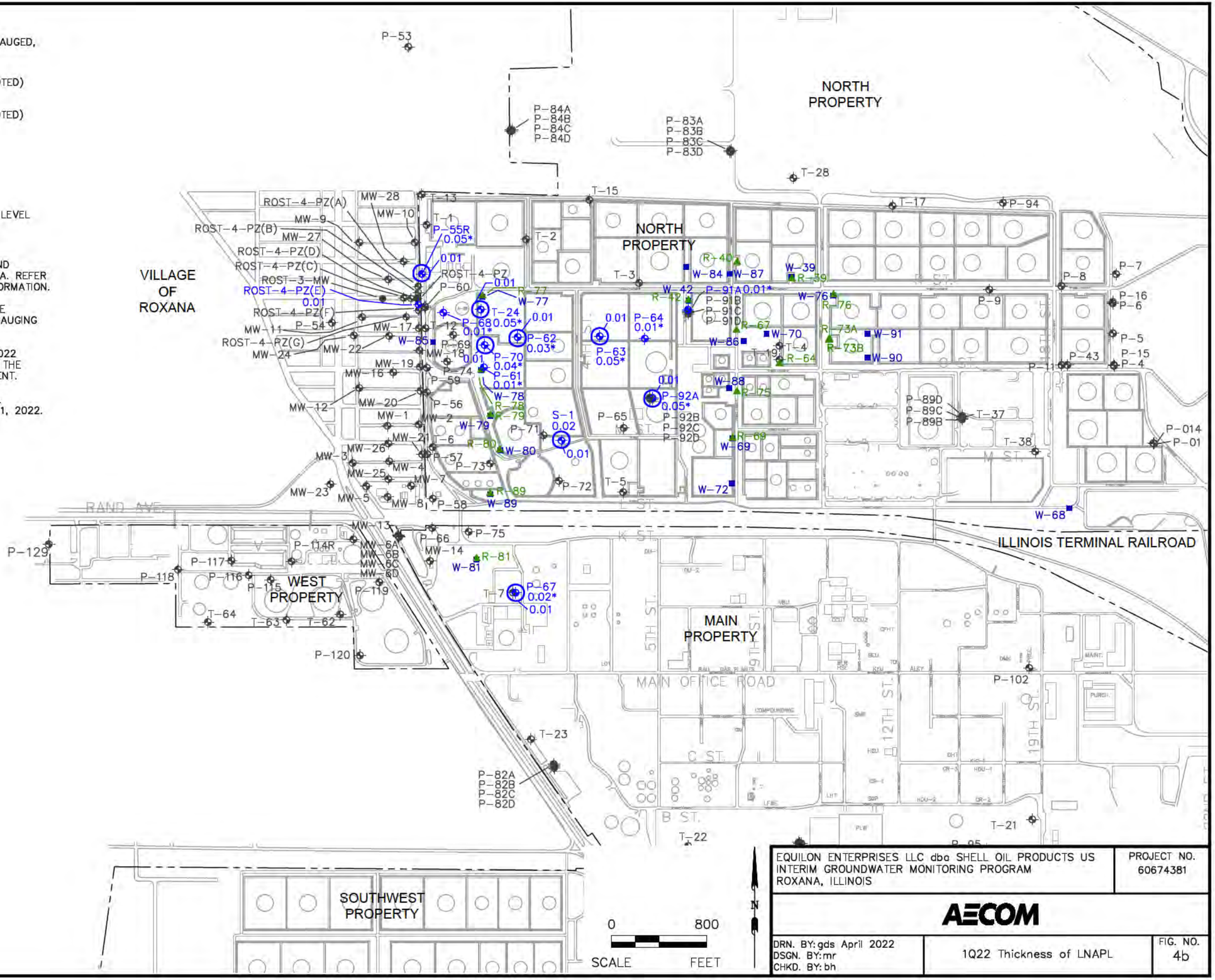
0 300
SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60674381
AECOM		
DRN. BY:gds April 2022 DSGN. BY:mr CHKD. BY:bh	1Q22 Thickness of LNAPL – West Fenceline	FIG. NO. 4a

LEGEND

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

NOTES:
1. THIS MAP DEPICTS THE ESTIMATED EXTENT AND THICKNESS OF LNAPL BENEATH THE WRR AREA. REFER TO TABLE 1 FOR GROUNDWATER GAUGING INFORMATION.
2. LNAPL THICKNESS WAS MEASURED DURING THE COMPREHENSIVE GROUNDWATER MONITORING GAUGING EVENT ON JANUARY 3-5, 2022.
3. WELL T-7 WAS MEASURED ON JANUARY 6, 2022 DUE TO ANOMALOUS INITIAL RESULTS DURING THE COMPREHENSIVE GROUNDWATER GAUGING EVENT.
4. WELL ROST-4-PZ(E) DID NOT CONTAIN LNAPL DURING SUBSEQUENT GAUGING ON JANUARY 11, 2022.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60674381
AECOM	
DRN. BY: gds April 2022 DSGN. BY: mr CHKD. BY: bh	1Q22 Thickness of LNAPL — FIG. NO. 4b

File: G:\USERS\PROFESSIONAL\ROXANA\GIS SERVICES - DOC AMERICAS\SHELL\ILLINOIS\60674381_600 S. CENTRAL AVE - ROXANA\MXD\WORK\2022 4Q GW MONITORING\03-21-2022\FIGURE 4B THICKNESS OF LNAPL (REFINERY) 1Q22.DWG Last edited: Mar. 22, 22 @ 9:38 AM by: pdeasug

File: C:\USERS\LORENTF\AECOM\GDS GIS SERVICES - GIS CAD PROJECTS\DCS AMERICAS\SHELL\ILLINOIS\US00666-900 S CENTRAL AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\04.03.2022\FIGURE 5 1Q22 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Mar. 09, 22 @ 12:17 AM by: lorente

LEGEND

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

NOTES:

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

Analyte	Screening Criteria (mg/L)
Benzene	0.005
Naphthalene	0.14
1,2,4-Trimethylbenzene	0.07
Benzo(a)anthracene	0.00013
2-Methylnaphthalene	0.028
Phenol	0.1

J = THE RESULT IS ESTIMATED.

3. MULTIPLE RESULTS (e.g., 850 / 740) 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 AND P-68 WERE NOT SAMPLED DURING 1Q22 DUE TO THE PRESENCE OF LNAPL.

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) THIRD ST ROST-3-MW ROST-4-PZ(D) ROST-4-PZ ROST-4-PZ(E) P-60 ROST-4-PZ(F) MW-11 ROST-4-PZ(G) P-54 A-33 MW-17 T-12 MW-24 FOURTH ST MW-22 P-69 WOOD RIVER REFINERY P-70 A-27 MW-18 MW-19 P-59 P-74 P-61 FIFTH ST MW-16 MW-12 VILLAGE OF ROXANA MW-20 P-56 SIXTH ST HIGHWAY 111 (S. CENTRAL AVE) CHAFFER AVE MW-2 MW-1 BP SEVENTH ST MW-26 MW-21 P-57 T-6 MW-4 P-93A P-93B P-93C P-93D T-78 A-22 P-73 MW-3 MW-25 EIGHTH ST MW-5 MW-7 MW-23 MW-8 1986 APPROXIMATE BENZENE RELEASE SITE RAND AVENUE P-58 2020 APPROXIMATE BUCKEYE PIPELINE GASOLINE RELEASE SITE P-66 P-75 MW-13 WEST PROPERTY MW-6A MW-6B MW-6C MW-6D P-114R MW-14

Sample Location	ROST-4-PZ(E)
Sampled 1/11/2022	Result (mg/L)
Benzene	0.044 / 0.037
1,2,4-Trimethylbenzene	0.17 / 0.18
2-Methylnaphthalene	0.035 / 0.04

Sample Location	T-12
Sampled 1/14/2022	Result (mg/L)
Benzene	1.1

Sample Location	P-74
Sampled 1/13/2022	Result (mg/L)
Benzene	0.18 / 0.15

Sample Location	P-59
Sampled 1/13/2022	Result (mg/L)
Benzene	4.1
Naphthalene	0.18

Sample Location	MW-1
Sampled 1/12/2022	Result (mg/L)
Benzo(a)anthracene	0.00019

Sample Location	P-57
Sampled 1/14/2022	Result (mg/L)
Benzene	0.011

Sample Location	P-93B
Sampled 1/13/2022	Result (mg/L)
Benzene	870
Phenol	0.37

Sample Location	MW-25
Sampled 1/11/2022	Result (mg/L)
Benzene	0.02

Sample Location	MW-7
Sampled 1/11/2022	Result (mg/L)
Benzene	850 / 740
Phenol	0.14 / 0.12

Sample Location	P-58
Sampled 1/13/2022	Result (mg/L)
Benzene	180 / 170
Phenol	0.57 / 0.45

Sample Location	P-66
Sampled 1/13/2022	Result (mg/L)
Benzene	0.6
2-Methylnaphthalene	0.029

Sample Location	MW-8
Sampled 1/11/2022	Result (mg/L)
Benzene	260
Phenol	0.39

0 200 SCALE FEET N

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

PROJECT NO. 60674381

AECOM

DRN. BY:gds April 2022
DSGN. BY:mr
CHKD. BY:bh

1Q22 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

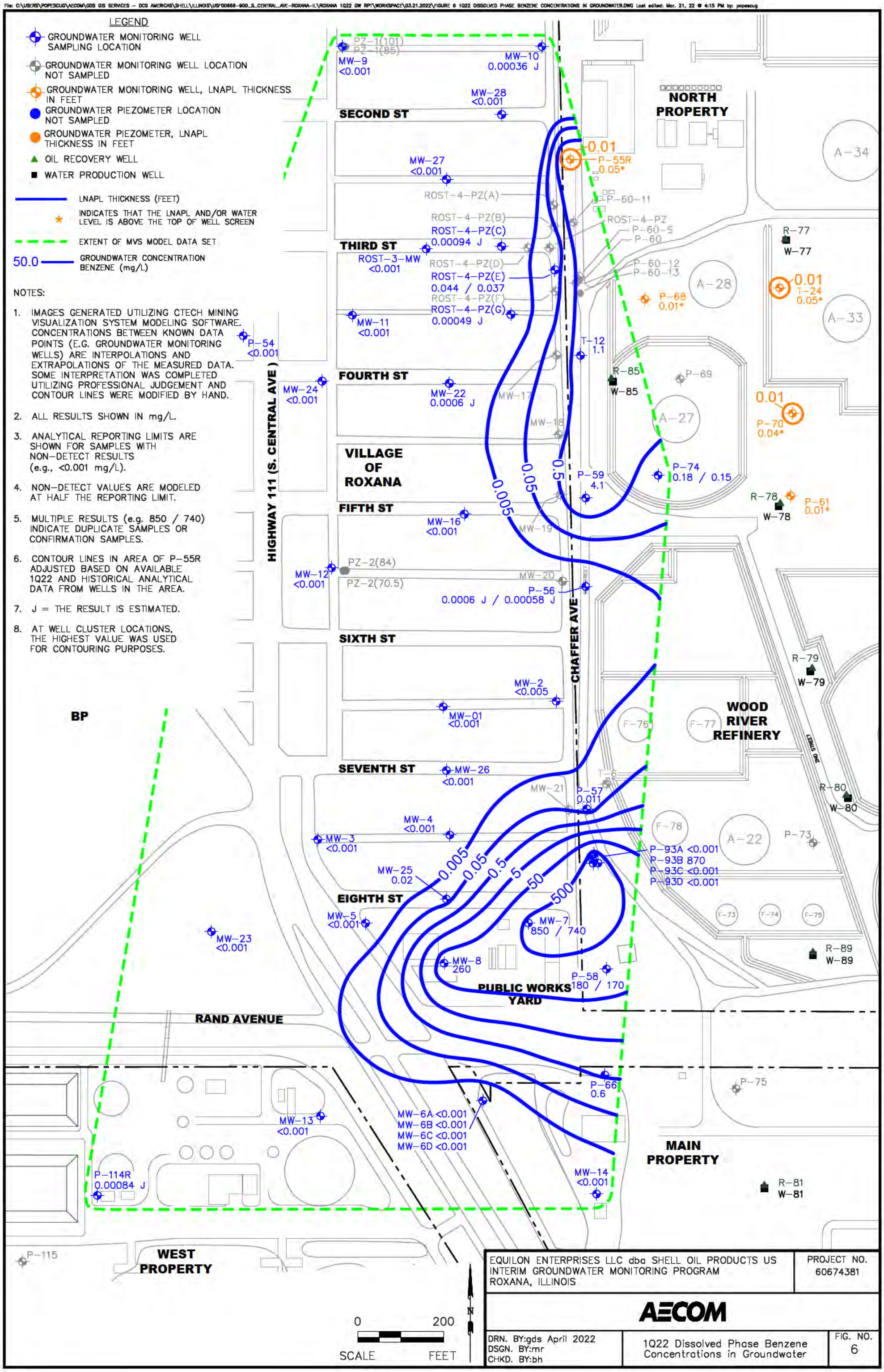
File: C:\USERS\POPESCUG\AECOM\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00668-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 1Q22 GW RPT\WORKSPACE\03.21.2022\FIGURE 6 1Q22 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last edited: Mar. 21, 22 @ 4:15 PM by: popescug

LEGEND

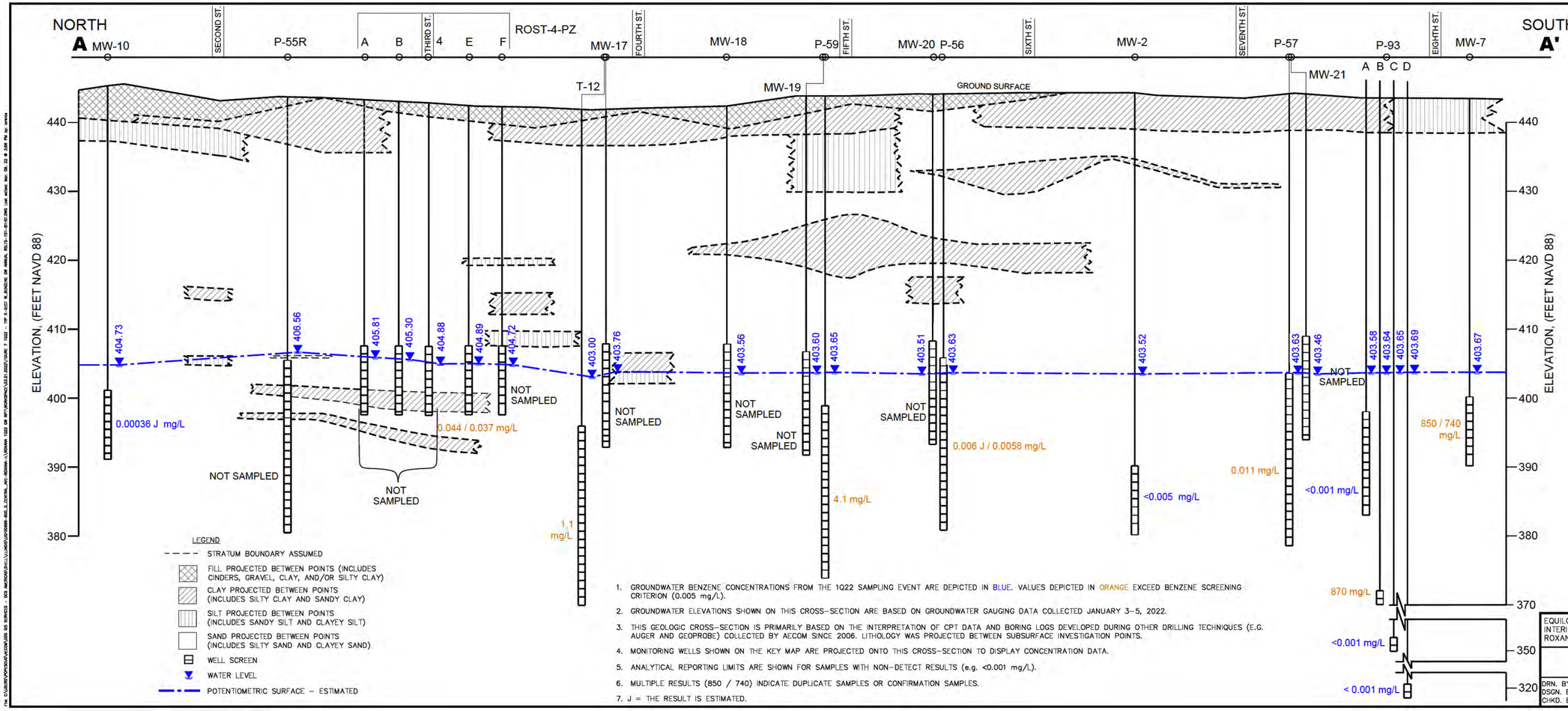
- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER MONITORING WELL, LNAPL THICKNESS IN FEET
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER, LNAPL THICKNESS IN FEET
- OIL RECOVERY WELL
- WATER PRODUCTION WELL
- LNAPL 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:

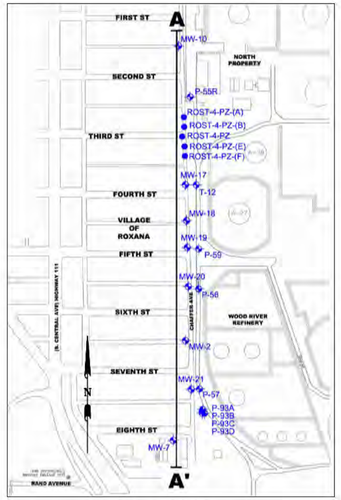
1. IMAGES GENERATED UTILIZING CTECH MINING VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS COMPLETED UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES 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. 850 / 740) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55R ADJUSTED BASED ON AVAILABLE 1Q22 AND HISTORICAL ANALYTICAL DATA FROM WELLS IN THE AREA.
7. J = THE RESULT IS ESTIMATED.
8. AT WELL CLUSTER LOCATIONS, THE HIGHEST VALUE WAS USED FOR CONTOURING PURPOSES.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60674381
AECOM		
DRN. BY:gds April 2022 DSGN. BY:mr CHKD. BY:bh	1Q22 Dissolved Phase Benzene Concentrations in Groundwater	FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 1Q22 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JANUARY 3–5, 2022.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA AND BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) COLLECTED BY AECOM SINCE 2006. LITHOLOGY WAS PROJECTED BETWEEN SUBSURFACE INVESTIGATION POINTS.
4. MONITORING WELLS SHOWN ON THE KEY MAP ARE PROJECTED ONTO THIS CROSS-SECTION TO DISPLAY CONCENTRATION DATA.
5. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g. <0.001 mg/L).
6. MULTIPLE RESULTS (850 / 740) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.



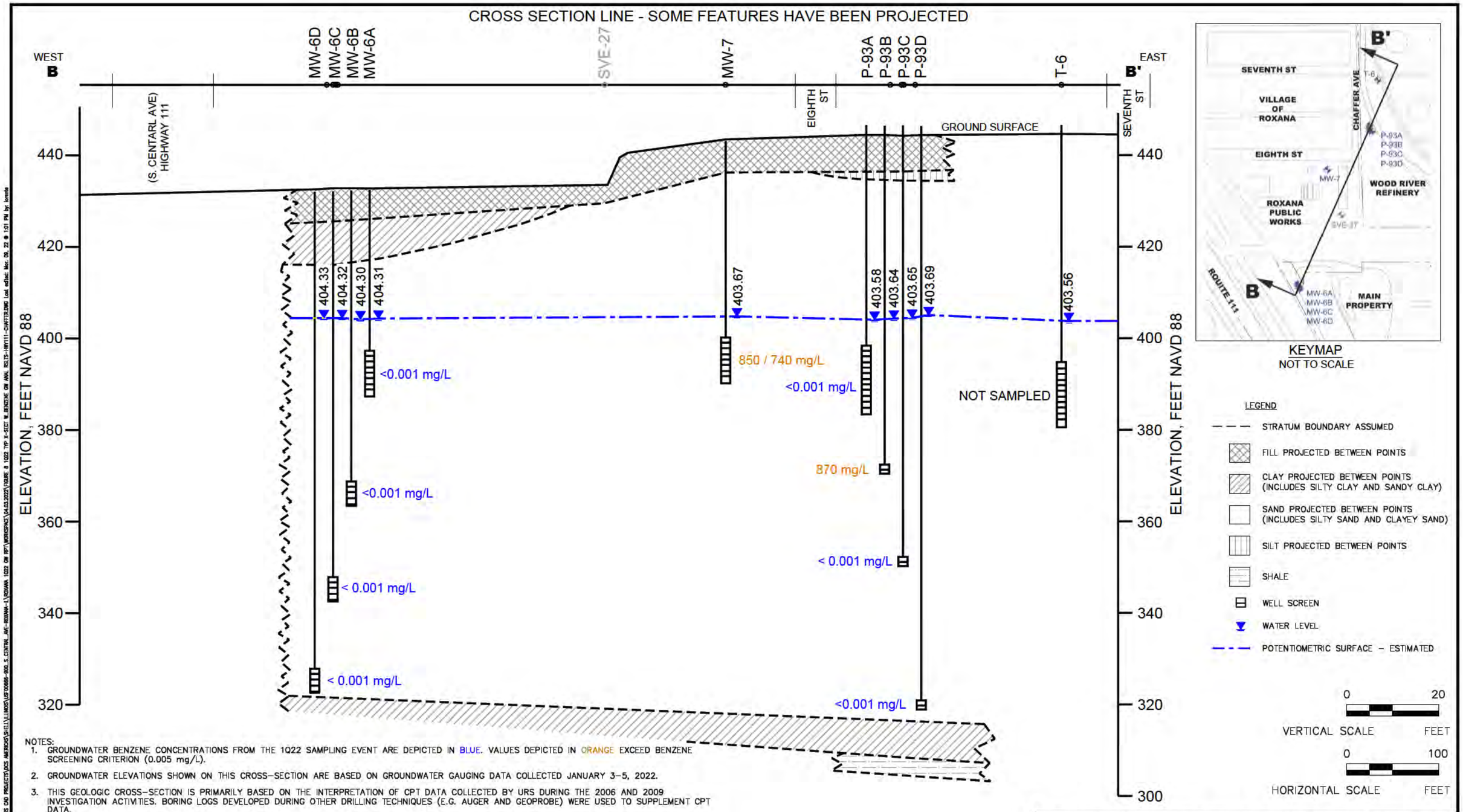
KEYMAP
NOT TO SCALE

0 10
VERTICAL SCALE FEET

0 100
APPROXIMATE HORIZONTAL SCALE FEET

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60674381
AECOM	
DRN. BY: gds April 2022 DSGN. BY: mr CHKD. BY: bh	1Q22 Cross-Section of Benzene Groundwater Analytical Results– Chaffer Avenue
	FIG. NO. 7

CROSS SECTION LINE - SOME FEATURES HAVE BEEN PROJECTED



KEYMAP
NOT TO SCALE

LEGEND

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

VERTICAL SCALE 0 20 FEET

HORIZONTAL SCALE 0 100 FEET

NOTES:

1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 1Q22 SAMPLING EVENT ARE DEPICTED IN BLUE. VALUES DEPICTED IN ORANGE EXCEED BENZENE SCREENING CRITERION (0.005 mg/L).
2. GROUNDWATER ELEVATIONS SHOWN ON THIS CROSS-SECTION ARE BASED ON GROUNDWATER GAUGING DATA COLLECTED JANUARY 3-5, 2022.
3. THIS GEOLOGIC CROSS-SECTION IS PRIMARILY BASED ON THE INTERPRETATION OF CPT DATA COLLECTED BY URS DURING THE 2006 AND 2009 INVESTIGATION ACTIVITIES. BORING LOGS DEVELOPED DURING OTHER DRILLING TECHNIQUES (E.G. AUGER AND GEOPROBE) WERE USED TO SUPPLEMENT CPT DATA.
4. THE DEPTH AND THICKNESS OF INDIVIDUAL STRATA DEPICTED MAY BE BASED ON CPT LOGS GENERATED AT NEARBY LOCATIONS. THEREFORE, WELL SCREENS MAY APPEAR TO BE PARTIALLY WITHIN CLAY LAYERS OR SHALLOWER/DEEPER WITHIN A PERMEABLE STRATUM THAN ACTUAL CONDITIONS DUE TO MAP PROJECTIONS.
5. LITHOLOGICAL INFORMATION FROM SVE-27 WAS OBTAINED FROM BORING LOG TO SUPPLEMENT SITE GEOLOGY ONLY.
6. HISTORIC BORING LOG IS NOT AVAILABLE FOR T-6.
7. ANALYTICAL REPORTING LIMITS ARE SHOWN FOR SAMPLES WITH NON-DETECT RESULTS (e.g. <0.001 mg/L).
8. MULTIPLE RESULTS (850 / 740) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60674381
AECOM	
DRN. BY:gds April 2022 DSGN. BY:mr CHKD. BY:bh	1Q22 Cross-Section of Benzene Groundwater Analytical Results-Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\LORIMEYE\DOWNLOADS\GIS SERVICES - OS GIS PROJECTS\OCS MICROCAS\SHELL\ILLINOIS\GF70888-ROX_S_CENTRAL_AVE-ROXANA-LY\ROXANA 1Q22 CM MPT\WORKSPACE\04.03.2022\FRAME 8 1Q22 TYP X-SECT W_BENZENE CM ANAL RSLTS-HWY111-CHAFFEE.DWG Last edited: Mar. 09, 22 @ 1:01 PM by: lorimeye

Appendix A

Regulatory History

Appendix A

Regulatory History

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

and IEPA representatives were held on April 5, 2018 and July 19, 2018 in order to provide additional information regarding the proposed GMZ. On September 26, 2018, AECOM, on behalf of SOPUS, submitted *Groundwater Management Zone – Additional Information* to present information requested via email dated September 5, 2018 (AECOM, 2018b).

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

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

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

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

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

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

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

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones J. Mayer

DATE: 1-12-22 WEATHER: 41°F Partly cloudy

MONITORING WELL ID: MW-1 SAMPLE ID: MW1-ROX-011222

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.80 ft btoc
Total Well Depth (btoc): 59.13 ft	
Depth to Water (btoc): 38.91 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 20.22 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0907	38.91	Clear	Slight	15.5	3.44	0.884 mS/cm uS/cm	6.49	199.45	17.43
1500	0912	38.90	↓	↓	15.6	1.13	0.944 mS/cm uS/cm	6.81	135.96	9.64
1800	0913	↓			15.2	1.08	0.947 mS/cm uS/cm	6.83	130.45	9.53
2100	0914				15.6	1.03	0.941 mS/cm uS/cm	6.84	126.28	9.55
2400	0915				16.2	0.96	0.942 mS/cm uS/cm	6.85	122.51	9.52
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

1-12-22

Start Time: 0907 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 4415I/432609

Stop Time: 0915 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/22

SAMPLING DATA

Sample Date: 1-12-22 Sample Time: 0920 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60679381 FIELD PERSONNEL: MD'Angelo LBadillis

DATE: 1/11/22 WEATHER: clear 28°

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX-011122

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
Total Well Depth (btoc): 60.20 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 40.31 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 49.87 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 19.89 ft	

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 103.4 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	1035	40.21	clear	Strong HC	14.3	0.93	0.949 mS/cm uS/cm	7.13	-55.66	17.01
300	1036	40.31	↓	↓	14.9	0.75	0.970 mS/cm uS/cm	7.11	-70.67	17.65
600	1037	40.21			15.4	0.63	0.980 mS/cm uS/cm	7.11	-82.59	16.99
900	1038	↓			15.4	0.58	1.000 mS/cm uS/cm	7.11	-93.15	16.92
1200	1039				15.4	0.54	1.003 mS/cm uS/cm	7.12	-103.12	16.21
1500	1040				15.5	0.51	1.003 mS/cm uS/cm	7.12	-110.88	12.99
1800	1041				15.7	0.49	1.002 mS/cm uS/cm	7.12	-117.41	14.86
2100	1042				15.8	0.48	1.004 mS/cm uS/cm	7.13	-123.11	11.47
2400	1043	↓	↓	↓	16.0	0.45	1.003 mS/cm uS/cm	7.13	-129.15	10.30
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/11/22

Start Time: 1035 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 50055/05i301

Stop Time: 1043 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/22

SAMPLING DATA

Sample Date: 1/11/22 Sample Time: 1045 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: MDLB

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadmus

DATE: 1/10/22 WEATHER: clear 30°

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX-011022

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
Total Well Depth (btoc): 45.00 ft	
Depth to Water (btoc): 26.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 18.65 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

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1028	26.35	clear	Moderate HC	14.2	0.91	1.318 mS/cm uS/cm	6.62	-60.06	4.40
300	1029	26.35			15.0	0.73	1.339 mS/cm uS/cm	6.66	-77.52	4.15
600	1030	26.35			15.5	0.64	1.345 mS/cm uS/cm	6.70	-90.55	3.44
900	1031				15.8	0.56	1.348 mS/cm uS/cm	6.74	-105.04	2.89
1200	1032				15.7	0.53	1.351 mS/cm uS/cm	6.77	-112.62	2.42
1500	1033				16.0	0.48	1.348 mS/cm uS/cm	6.79	-121.94	1.78
1800	1034				16.0	0.47	1.350 mS/cm uS/cm	6.81	-126.38	1.65
2100	1035				15.9	0.44	1.349 mS/cm uS/cm	6.82	-131.58	1.22
2400	1036				15.9	0.42	1.347 mS/cm uS/cm	6.84	-135.38	1.18
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/10/22

Start Time: 1028 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS 50055/051301

Stop Time: 1036 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/22

SAMPLING DATA

Sample Date: 1/10/22 Sample Time: 1040 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: MD LB

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1/11/22 WEATHER: 24°F Clear

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX-011122

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): 37.56 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): 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: 0.8 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 17.83 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1013	37.56	clear	slight	14.2	1.44	0.928 mS/cm uS/cm	6.40	92.60	26.65
900	1016				14.9	1.03	0.971 mS/cm uS/cm	6.59	53.59	26.12
1200	1017				15.0	0.96	0.970 mS/cm uS/cm	6.64	41.59	25.87
1500	1018				15.3	0.88	0.970 mS/cm uS/cm	6.68	28.99	25.39
1800	1019				15.2	0.84	0.970 mS/cm uS/cm	6.71	16.79	22.16
2100	1020				15.0	0.81	0.973 mS/cm uS/cm	6.73	2.76	21.19
2400	1021				15.2	0.79	0.967 mS/cm uS/cm	6.75	-10.29	20.32
2700	1022				15.8	0.75	0.967 mS/cm uS/cm	6.76	-23.34	18.92
3000	1023				15.7	0.73	0.967 mS/cm uS/cm	6.78	-34.77	17.23
3300	1024				15.9	0.72	0.964 mS/cm uS/cm	6.78	-40.31	17.95
3600	1025				16.0	0.70	0.965 mS/cm uS/cm	6.79	-47.96	20.52
3900	1026				16.1	0.70	0.961 mS/cm uS/cm	6.79	-53.9	17.93
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1013 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS - 44151 / 43269

Stop Time: 1026 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/2022

SAMPLING DATA

Sample Date: 1/11/2022 Sample Time: 1030 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: SM

COMMENTS:

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

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD Angelo MHeintz

DATE: 1/7/22 WEATHER: clear 18°

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-010722

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.97 ft btoc
Total Well Depth (btoc): 44.30 ft	
Depth to Water (btoc): 25.97 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 33.97 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 18.33 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1320	25.97	clear	Slight HC	15.3	0.57	1.195 mS/cm uS/cm	6.94	-135.19	6.11
300	1321	25.97			15.6	0.54	1.193 mS/cm uS/cm	6.94	-137.35	4.82
600	1322	25.97			15.9	0.53	1.189 mS/cm uS/cm	6.94	-138.68	4.96
900	1323				15.9	0.50	1.194 mS/cm uS/cm	6.94	-141.00	3.39
1200	1324				16.2	0.49	1.190 mS/cm uS/cm	6.94	-142.48	3.04
1500	1325				16.4	0.46	1.190 mS/cm uS/cm	6.94	-144.40	2.52
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD Angelo 1/7/22

Start Time: 1320 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 50055/051301

Stop Time: 1325 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/22

SAMPLING DATA

Sample Date: 1/7/22 Sample Time: 1350 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: MD MH

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo Mheintz

DATE: 1/7/22 WEATHER: cloudy 14°

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-010722

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): 28.16 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 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): 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

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1120	28.16	cloudy	none	17.6	0.58	1.186 mS/cm uS/cm	6.77	-98.64	158.10
2400	1128	28.16	clearer		18.3	0.45	1.196 mS/cm uS/cm	6.80	-116.47	47.99
2700	1129	28.16			18.3	0.45	1.193 mS/cm uS/cm	6.80	-118.10	42.32
3000	1130	↓	↓	↓	18.4	0.44	1.194 mS/cm uS/cm	6.80	-119.86	37.23
3300	1131				18.2	0.43	1.196 mS/cm uS/cm	6.80	-121.18	33.23
							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			

MD'Angelo 1/7/22

Start Time: 1120 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS 50055/051301

Stop Time: 1131 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/22

SAMPLING DATA

Sample Date: 1/7/22 Sample Time: 1135 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: MD MH

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDAngelo MHeintz

DATE: 1/7/22 WEATHER: cloudy 12°

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-BOX-010722

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 66.55 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 69.38 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 28.23 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 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): 41.15 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	1027	28.23	clear	none	15.7	0.62	0.795 mS/cm uS/cm	7.00	-87.34	4.87
300	1028	28.23	↓	↓	15.5	0.60	0.794 mS/cm uS/cm	7.02	-92.44	4.24
600	1029	28.23	↓	↓	15.7	0.57	0.794 mS/cm uS/cm	7.03	-97.69	3.97
900	1030	↓	↓	↓	15.8	0.55	0.794 mS/cm uS/cm	7.05	-102.33	3.09
1200	1031	↓	↓	↓	16.1	0.53	0.794 mS/cm uS/cm	7.06	-106.57	2.88
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo MHeintz 1/7/22

Start Time: 1027 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 50055/051301

Stop Time: 1031 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/22

SAMPLING DATA

Sample Date: 1/7/22 Sample Time: 1035 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: MD MH

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 1Q22 GW PROJECT NUMBER: 60674381-3.62.1.1 FIELD PERSONNEL: MDiAngelo MHeintz

DATE: 1/6/22 WEATHER: partly cloudy 18°

MONITORING WELL ID: MW-6C SAMPLE ID: MW6C-ROX-010622

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): 27.94 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): 62.34 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1320	27.94	clear	none	14.4	4.56	0.651 mS/cm uS/cm	7.22	87.64	55.7
300	1321	27.94			14.7	4.08	0.648 mS/cm uS/cm	7.22	86.90	50.8
600	1322	27.94			14.4	3.87	0.651 mS/cm uS/cm	7.22	86.71	29.5
900	1323				14.2	3.70	0.651 mS/cm uS/cm	7.23	86.65	24.5
1200	1324				14.5	3.53	0.648 mS/cm uS/cm	7.23	86.45	22.8
1500	1325				14.4	3.37	0.654 mS/cm uS/cm	7.23	86.00	19.1
1800	1326				14.7	3.22	0.652 mS/cm uS/cm	7.23	85.56	16.4
2100	1327				14.6	3.09	0.654 mS/cm uS/cm	7.23	85.13	14.3
2400	1328				14.5	2.99	0.655 mS/cm uS/cm	7.23	84.78	12.5
2700	1329				14.5	2.96	0.654 mS/cm uS/cm	7.24	84.67	11.4
3000	1330				14.3	2.91	0.655 mS/cm uS/cm	7.24	84.48	10.8
3200	1331				14.1	2.86	0.656 mS/cm uS/cm	7.24	84.28	9.4
3600	1332				14.3	2.79	0.655 mS/cm uS/cm	7.24	83.93	8.6
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDiA 1/6/22

Start Time: 1320 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS - 44CF6 / 20633

Stop Time: 1332 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/22

SAMPLING DATA

Sample Date: 1/6/22 Sample Time: 1335 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: MDiA

COMMENTS:

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

Estimated Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674581 -3.1.2 + 3.1.1 FIELD PERSONNEL: M. Heintz M. DAngelo

DATE: 1/6/2022 WEATHER: cloudy 16°

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-RX-010622-

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): 27.82 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 104.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft		
Water Column Height (not including NAPL): 82.23 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1202	27.82	cloudy	none	14.4	4.07	0.986 mS/cm uS/cm	7.02	116.03	82.84
MD ~~3600~~ 3600	1214	27.82	clearer		14.2	2.84	1.046 mS/cm uS/cm	7.07	105.58	46.72
MD ~~3900~~ 3900	1215	27.82			14.0	2.76	1.052 mS/cm uS/cm	7.08	104.47	44.35
MD ~~4200~~ 4200	1216				13.8	2.76	1.055 mS/cm uS/cm	7.08	104.29	39.76
MD ~~4500~~ 4500	1217				14.2	2.71	1.045 mS/cm uS/cm	7.08	103.53	39.46
4800	1218				14.4	2.67	1.051 mS/cm uS/cm	7.08	102.21	37.35
5100	1219				14.9	2.59	1.050 mS/cm uS/cm	7.08	101.68	37.53
5400	1220				14.6	2.56	1.052 mS/cm uS/cm	7.09	100.68	30.34
5700	1221				15.0	2.51	1.056 mS/cm uS/cm	7.09	99.78	31.85
6000	1222				15.5	2.46	1.050 mS/cm uS/cm	7.09	99.02	32.77
6300	1223				14.9	2.46	1.058 mS/cm uS/cm	7.09	98.46	29.90
6600	1224				15.0	2.42	1.056 mS/cm uS/cm	7.09	97.97	29.13
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD DAngelo 1/6/22

Start Time: 1202 Elapsed Time (min): 22 Water Quality Meter ID & SN: YSI ProDSS -- 17496/50633

Stop Time: 1224 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/22

SAMPLING DATA

Sample Date: 1/6/22 Sample Time: 1225 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: MD MH

COMMENTS:

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

DO results suspect

Estimated Total Purge Volume: 6600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1-11-2022 WEATHER: 43° F Clear

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX-01122

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 47.92 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 52.92 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.49 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 42.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 56.9 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.43 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1335	39.52	Clear	Slight	14.2	2.48	1.121 mS/cm uS/cm	7.12	390	12.65
900	1338	39.51	↓	↓	15.9	0.90	1.233 mS/cm uS/cm	6.75	-39.22	11.86
1200	1339				16.4	0.79	1.232 mS/cm uS/cm	6.72	-45.83	12.13
1500	1340				16.4	0.71	1.228 mS/cm uS/cm	6.72	-51.79	12.35
1800	1341				16.5	8.67	1.222 mS/cm uS/cm	6.71	-56.06	12.71
2100	1342	↓	↓	↓	16.5	8.64	1.216 mS/cm uS/cm	6.72	-59.61	12.14
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1335 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1342 Average Purge Rate (mL/min): 300 Date Calibrated: 1-11-2022

SAMPLING DATA

Sample Date: 1-11-2022 Sample Time: 1350 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayr T. Jones

DATE: 1-11-22 WEATHER: 37° F Clear

MONITORING WELL ID: MW-8 SAMPLE ID: MW8-ROX-01122

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.60 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 43.60 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 30.46 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): — ft		
Depth to Top of Screen (btoc): 33.60 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.14 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1229	30.47	Clear	Slight	15.6	2.87	1.121 mS/cm uS/cm	7.03	-105.01	15.20
600	1231	↓	↓	↓	14.7	1.07	1.258 mS/cm uS/cm	6.85	-123.92	10.30
900	1232				15.4	0.98	1.251 mS/cm uS/cm	6.84	-126.15	9.76
1200	1233				15.9	0.90	1.258 mS/cm uS/cm	6.83	-128.86	9.21
1500	1234				16.2	0.81	1.261 mS/cm uS/cm	6.83	-130.77	8.64
1800	1235				16.5	0.76	1.261 mS/cm uS/cm	6.83	-132.53	8.49
2100	1236				16.6	0.71	1.255 mS/cm uS/cm	6.83	-133.91	7.91
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1229 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 44151/ 43269

Stop Time: 1236 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/22

SAMPLING DATA

Sample Date: 1-11-22 Sample Time: 1240 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1/6/2022 WEATHER: 16° F Overcast

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-ROX-010622

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): 40.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 15.87 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1053	40.53	Clear	Slight	12.8	2.66	1.173 mS/cm uS/cm	6.76	21.05	15.59
2100	1100	40.50	↓	↓	14.5	0.81	1.146 mS/cm uS/cm	6.81	-59.20	14.59
2400	1101	40.50			14.4	0.77	1.145 mS/cm uS/cm	6.82	-62.32	14.98
2700	1102	40.50			14.7	0.74	1.142 mS/cm uS/cm	6.82	-65.26	15.75
3000	1103	40.50			14.6	0.72	1.142 mS/cm uS/cm	6.84	-67.71	16.63
							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			
							mS/cm uS/cm			

Start Time: 1053 Elapsed Time (min): 10 Water Quality Meter ID & SN: YSI ProDSS -- 4415 / 43269

Stop Time: 1103 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/2022

SAMPLING DATA

Sample Date: 1/6/2022 Sample Time: 1105 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones, J. Mayer

DATE: 1-12-22 WEATHER: 52°F Partly Cloudy

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-011222

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.43 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 54.76 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.15 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 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	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): 14.62 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) STABLE: (over 4 readings)	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	1313	40.15	Cloudy	None	16.9	6.41	1.403 mS/cm uS/cm	6.97	-26.20	162.51
1500	1318				17.4	0.91	1.392 mS/cm uS/cm	6.97	-78.11	150.86
3000	1323				17.3	0.88	1.371 mS/cm uS/cm	6.98	-84.35	122.77
4500	1328				17.4	0.86	1.367 mS/cm uS/cm	7.00	-78.78	108.63
5700	1332				17.6	0.89	1.360 mS/cm uS/cm	6.98	-90.94	94.22
6000	1333				17.8	0.81	1.356 mS/cm uS/cm	6.99	-93.61	92.34
6300	1334				18.3	0.76	1.358 mS/cm uS/cm	6.98	-95.13	83.81
6600	1335				18.4	0.74	1.358 mS/cm uS/cm	6.98	-96.62	82.34
6900	1336				18.3	0.72	1.359 mS/cm uS/cm	6.98	-98.57	79.71
7200	1337				18.3	0.71	1.364 mS/cm uS/cm	6.98	-100.30	68.62
7500	1338				18.2	0.69	1.367 mS/cm uS/cm	6.98	-101.80	61.70
7800	1339				18.0	0.64	1.366 mS/cm uS/cm	6.99	-102.84	57.78
8100	1340				18.0	0.68	1.367 mS/cm uS/cm	6.99	-104.26	55.18
8400	1341				18.0	0.68	1.366 mS/cm uS/cm	6.99	-105.26	50.20
8700	1342				18.0	0.67	1.365 mS/cm uS/cm	6.99	-105.64	47.48
							mS/cm uS/cm			

Start Time: 1313 Elapsed Time (min): 29 Water Quality Meter ID & SN: YSI ProDSS - 44151 / 43269

Stop Time: 1342 Average Purge Rate (mL/min): 300 Date Calibrated: 1-12-22

SAMPLING DATA

Sample Date: 1-12-2022 Sample Time: 1345 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 8700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Sones

DATE: 1/6/2022 WEATHER: 18°F Cloudy

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX-010622

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.66 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 51.99 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.14 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.85 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1310	38.13	Clear	Slight	12.4	2.33	1.367 mS/cm uS/cm	6.95	-17.35	160.89
1200	1314	38.14	↓	↓	14.3	1.01	1.437 mS/cm uS/cm	6.86	-40.01	107.41
1500	1315	38.14			14.3	0.91	1.437 mS/cm uS/cm	6.85	-42.61	97.01
1800	1316	38.14			14.6	0.83	1.437 mS/cm uS/cm	6.84	-45.96	82.96
2100	1317	38.14			14.6	0.81	1.438 mS/cm uS/cm	6.84	-47.01	79.92
2400	1318	38.14			14.8	0.78	1.438 mS/cm uS/cm	6.84	-49.43	68.61
2700	1319	38.14			14.6	0.72	1.437 mS/cm uS/cm	6.84	-53.38	48.34
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Joe Mayer

Start Time: 1310 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1319 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/2022

SAMPLING DATA

Sample Date: 1/6/2022 Sample Time: 1325 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1/12/2022 WEATHER: 41°F Partly Cloudy

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX-011222

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.92 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 52.25 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.80 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 41.92 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.45 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	0951	38.60	Clear	None	15.5	2.48	0.869 mS/cm uS/cm	7.25	190.78	26.03
900	0954	↓	↓	↓	16.5	1.11	0.858 mS/cm uS/cm	7.02	120.35	18.91
1200	0955				16.8	0.96	0.856 mS/cm uS/cm	6.99	114.53	18.81
1500	0956				16.9	0.92	0.857 mS/cm uS/cm	6.98	112.92	19.12
1800	0957				16.9	0.88	0.858 mS/cm uS/cm	6.98	111.28	18.41
2100	0958				17.1	0.84	0.859 mS/cm uS/cm	6.97	109.64	16.40
							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			

1-12-22

Start Time: 0951 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 44151/43269

Stop Time: 0958 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/2022

SAMPLING DATA

Sample Date: 1-12-2022 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2100 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mazer B. Howell

DATE: 1/10/2022 WEATHER: 34° F Clear

MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-011022

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): 35.05 ft	
Depth to Water (btoc): 26.21 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 30.63 ft btoc
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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.84 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 1.5 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	1202	26.22	Cloudy	None	17.5	2.61	1.210	mS/cm uS/cm	6.62	-25.29	139.57
1200	1206				17.3	0.92	1.198	mS/cm uS/cm	6.67	-102.28	117.73
1500	1207				17.4	0.82	1.193	mS/cm uS/cm	6.68	-107.49	110.32
1800	1208				17.4	0.79	1.190	mS/cm uS/cm	6.68	-108.99	108.33
2100	1209				17.4	0.76	1.191	mS/cm uS/cm	6.68	-110.69	111.93
2400	1210				17.5	0.73	1.191	mS/cm uS/cm	6.69	-112.59	112.94
2700	1211				17.5	0.69	1.191	mS/cm uS/cm	6.68	-114.42	106.00
3000	1212				17.6	0.68	1.189	mS/cm uS/cm	6.69	-115.18	97.73
3300	1213				17.7	0.66	1.190	mS/cm uS/cm	6.69	-116.42	95.00
3600	1214				17.5	0.63	1.195	mS/cm uS/cm	6.70	-118.90	86.76
3900	1215				17.5	0.63	1.196	mS/cm uS/cm	6.70	-119.11	86.08
4200	1216				17.5	0.62	1.200	mS/cm uS/cm	6.70	-120.26	78.67
4500	1217				17.5	0.61	1.199	mS/cm uS/cm	6.70	-120.36	78.89
4800	1218				17.6	0.61	1.200	mS/cm uS/cm	6.70	-120.83	75.13
5100	1219				17.5	0.60	1.199	mS/cm uS/cm	6.70	-121.94	68.35
5400	1220				17.7	0.59	1.203	mS/cm uS/cm	6.70	-122.68	66.81

Start Time: 1202 Elapsed Time (min): 22 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1224 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/2022

SAMPLING DATA

Sample Date: 1/10/2022 Sample Time: 1230 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 6600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana/WAR 1QZ26W PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer B. Howell

DATE: 1/10/2022 MONITORING WELL ID: MW-13 SAMPLE ID: MW13-ROX-011022

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)
5700	1221	26.22	cloudy	none	17.7	0.59	1.202 mS/cm uS/cm	6.70	-122.76	66.46
6000	1222	↓	↓	↓	17.6	0.53	1.203 mS/cm uS/cm	6.70	-123.31	59.10
6300	1223				17.8	0.58	1.201 mS/cm uS/cm	6.70	-123.81	55.15
6600	1224				17.9	0.57	1.206 mS/cm uS/cm	6.70	-124.52	49.63
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones J. Mayer

DATE: 1-13-2022 WEATHER: 41°F Overcast

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-01122

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.42 ft btoc	Volume of Flow Through Cell: 320* mL	
Total Well Depth (btoc): 44.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 30.10 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 33.42 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 10.2 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 13.90 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0952	30.11	Clear	Slight	15.7	1.29	1.186 mS/cm uS/cm	6.04	194.70	45.83
900	0955				16.8	1.02	1.195 mS/cm uS/cm	6.48	137.16	37.60
1200	0956				16.8	0.93	1.198 mS/cm uS/cm	6.53	120.99	34.05
1500	0957				16.9	0.89	1.199 mS/cm uS/cm	6.56	111.79	32.62
1800	0958				17.0	0.83	1.201 mS/cm uS/cm	6.61	96.07	28.31
2100	0959				17.0	0.81	1.202 mS/cm uS/cm	6.63	89.35	24.99
2400	1000				17.0	0.78	1.203 mS/cm uS/cm	6.65	79.76	20.97
2700	1001				17.2	0.76	1.202 mS/cm uS/cm	6.67	71.58	19.30
3000	1002				17.2	0.73	1.202 mS/cm uS/cm	6.69	62.09	17.80
3300	1003				17.1	0.72	1.202 mS/cm uS/cm	6.70	58.15	17.08
3600	1004				17.1	0.71	1.202 mS/cm uS/cm	6.71	52.35	17.96
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

1-13-21

Start Time: 0952 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1004 Average Purge Rate (mL/min): 300 Date Calibrated: 1/13/2022

SAMPLING DATA

Sample Date: 1-13-22 Sample Time: 1010 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones J. Mayer

DATE: 1/7/2022 WEATHER: 10° F overcast

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX-010722

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): 39.35 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): 37.50 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.90 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1043	39.82	Cloudy	Slight	15.5	2.54	0.813 mS/cm uS/cm	6.75	-12.64	203.27
2700	1052		Clear		15.1	0.92	0.803 mS/cm uS/cm	6.85	-51.53	62.35
3000	1053				15.2	0.89	0.803 mS/cm uS/cm	6.85	-52.05	49.38
3300	1054				15.1	0.87	0.803 mS/cm uS/cm	6.85	-55.82	41.73
3600	1055				15.3	0.85	0.803 mS/cm uS/cm	6.85	-57.39	34.63
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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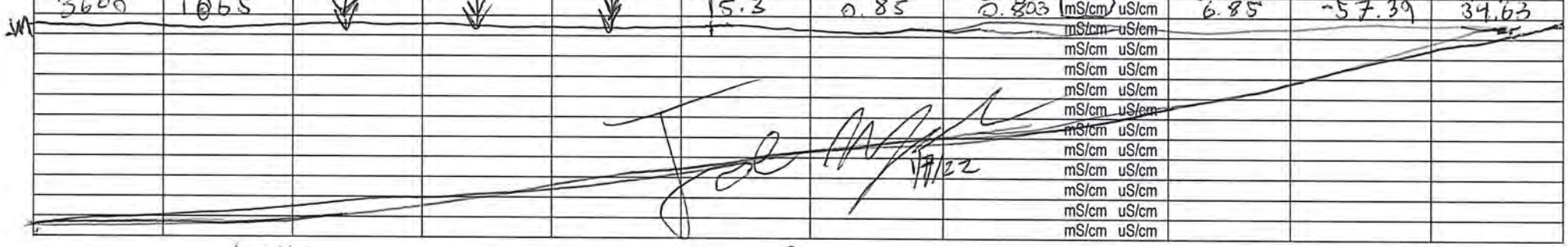

Start Time: 1043 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS -- 44151/43269

Stop Time: 1055 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/2022

SAMPLING DATA

Sample Date: 1/7/2022 Sample Time: 1100 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace: ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 3600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadmus

DATE: 1/10/22 WEATHER: clear 36°

MONITORING WELL ID: MW-22 SAMPLE ID: MW22-ROX-011022

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.43 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): 38.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft		Wellbore PID/FID Reading: 0.0 ppm	
Depth to Top of Screen (btoc): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc		
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.30 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 4 readings)	Odor	Temp (°C) (Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1237	38.40	clear	slight ho	15.2	0.77	1.327 mS/cm uS/cm	6.98	-21.38	13.22
300	1238	38.40			15.3	0.70	1.209 mS/cm uS/cm	6.98	-29.67	11.79
600	1239	38.40			15.4	0.65	1.301 mS/cm uS/cm	6.97	-36.10	10.50
900	1240				16.0	0.60	1.293 mS/cm uS/cm	6.97	-43.21	9.47
1200	1241				15.8	0.58	1.296 mS/cm uS/cm	6.98	-48.91	8.70
1500	1242				15.7	0.56	1.289 mS/cm uS/cm	6.98	-52.73	7.96
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

MD'Angelo 1/10/22

Start Time: 1237 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -50055/05130

Stop Time: 1242 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/22

SAMPLING DATA

Sample Date: 1/10/22 Sample Time: 1245 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD LB

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 1Q22 GW PROJECT NUMBER: 6067438 FIELD PERSONNEL: T. Jones J. Mayer

DATE: 1/7/2022 WEATHER: 18° F Clear

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX-01/0722

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 34.02 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): 27.52 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.75 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1309	27.52	Clear	Slight	14.8	3.07	0.991 mS/cm uS/cm	6.56	-59.60	79.71
1500	1314				15.9	2.06	0.985 mS/cm uS/cm	6.51	-64.81	65.70
1800	1315				15.5	1.19	0.986 mS/cm uS/cm	6.50	-67.66	52.96
2100	1316				15.8	0.98	0.980 mS/cm uS/cm	6.50	-69.58	46.96
2400	1317				16.1	0.88	0.982 mS/cm uS/cm	6.50	-71.28	44.96
2700	1318				15.9	0.81	0.985 mS/cm uS/cm	6.50	-73.42	39.81
3000	1319				15.9	0.77	0.984 mS/cm uS/cm	6.50	-75.11	36.76
3300	1320				16.0	0.74	0.985 mS/cm uS/cm	6.50	-76.25	32.59
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

1/7/22

Start Time: 1309 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 44151/43269

Stop Time: 1320 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/2022

SAMPLING DATA

Sample Date: 1/7/2022 Sample Time: 1330 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 3300 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones J. Mayer

DATE: 1/7/22 WEATHER: 16° F Clear

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX-010722

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.61 ft btoc	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): 39.50 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 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): 10.11 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

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1204	39.48	Clear	Slight	12.9	3.66	1.179 mS/cm uS/cm	6.97	-0.99	117.59
1200	1208	↓	↓	↓	15.2	1.26	1.208 mS/cm uS/cm	6.91	13.68	61.83
1500	1209				15.0	1.16	1.211 mS/cm uS/cm	6.92	13.75	48.63
1800	1210				15.5	1.09	1.214 mS/cm uS/cm	6.91	13.75	41.26
2100	1211				15.5	1.05	1.220 mS/cm uS/cm	6.92	13.87	33.05
2400	1212				15.8	1.01	1.221 mS/cm uS/cm	6.92	13.74	21.33
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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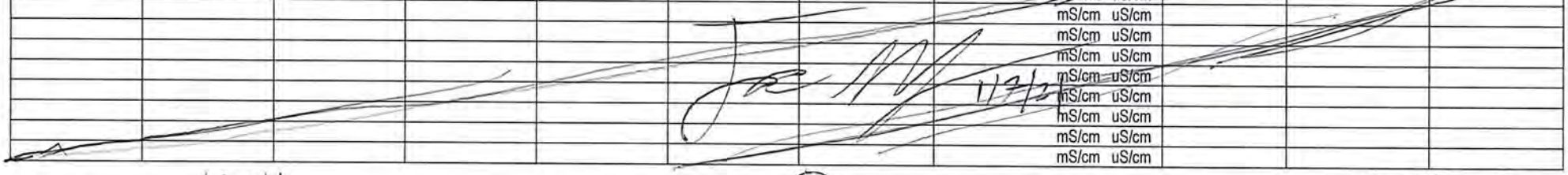

Start Time: 1204 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1212 Average Purge Rate (mL/min): 300 Date Calibrated: 1/7/2022

SAMPLING DATA

Sample Date: 1/7/2022 Sample Time: 1220 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: JM

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1/11/2022 WEATHER: 36°F Clear

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX-01122

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 40.59 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 45.84 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 34.69 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 35.59 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 157.6 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.15 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	1118	34.68	Clear	Moderate	14.5	2.00	0.907 mS/cm uS/cm	6.94	-32.72	27.92
900	1123	34.67			14.3	0.98	0.995 mS/cm uS/cm	6.91	-80.95	21.00
1200	1124				14.3	0.98	0.988 mS/cm uS/cm	6.91	-82.52	20.56
1200	1129				17.7	1.94	0.979 mS/cm uS/cm	6.89	-64.29	24.46
1800	1131				17.5	0.93	1.014 mS/cm uS/cm	6.89	-83.15	18.02
2100	1132				17.5	0.82	1.013 mS/cm uS/cm	6.89	-87.52	17.00
2400	1133				17.5	0.75	1.013 mS/cm uS/cm	6.90	-91.86	15.96
2700	1134				17.4	0.72	1.017 mS/cm uS/cm	6.90	-94.48	12.74
3000	1135				17.0	0.72	1.022 mS/cm uS/cm	6.90	-96.78	10.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

Start Time: 1118 Elapsed Time (min): 17 Water Quality Meter ID & SN: YSI ProDSS - 44151 / 43269

Stop Time: 1135 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/22

SAMPLING DATA

Sample Date: 1/11/22 Sample Time: 1140 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

* Flow through cell volume calculated as: Volume = cup (410 mL) - sonde (90 mL) = 320 mL ~~AA~~ Pump malfuction at 11:25, Purge restarted at 11:29

Estimated Total Purge Volume: 3000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadmus

DATE: 1/11/22 WEATHER: Clear 25°

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-011122

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 43.15 ft btoc	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): 37.45 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): 38.15 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 10.95 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0935	37.45	Clear	none	14.7	0.73	1.533 ~~mS/cm~~ uS/cm	6.67	132.98	20.59
300	0936	37.45	↓	↓	14.4	0.68	1.545 ~~mS/cm~~ uS/cm	6.69	131.86	19.29
600	0937	37.45	↓	↓	14.4	0.69	1.535 ~~mS/cm~~ uS/cm	6.68	130.66	16.94
900	0938	↓	↓	↓	14.6	0.60	1.533 ~~mS/cm~~ uS/cm	6.69	129.40	14.94
1200	0939	↓	↓	↓	15.0	0.58	1.528 ~~mS/cm~~ uS/cm	6.69	127.96	13.15
1500	0940	↓	↓	↓	15.1	0.57	1.527 ~~mS/cm~~ uS/cm	6.69	127.21	12.67
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

MD'Angelo 1/11/22

Start Time: 0935 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 50055/05C301

Stop Time: 0940 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/22

SAMPLING DATA

Sample Date: 1/11/22 Sample Time: 0945 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: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: T. Jones S. Mayer

DATE: 1-12-22 WEATHER: 50°F Partly Cloudy

MONITORING WELL ID: MW-27 SAMPLE ID: MW~~27~~-ROX-011222

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.79 ~~44.79~~ 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): 38.20 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): 39.79 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.1 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.84 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	1031	38.31	Clear	None	15.7	2.90	0.790 mS/cm uS/cm	7.10	124.91	112.66
1500	1036	38.41	↓	↓	16.8	2.15	0.812 mS/cm uS/cm	6.95	109.20	98.61
1800	1037	38.40			16.7	1.89	0.808 mS/cm uS/cm	6.93	107.81	74.61
2100	1038	38.40			16.8	1.79	0.806 mS/cm uS/cm	6.92	106.81	64.77
2400	1039	38.41			16.9	1.67	0.807 mS/cm uS/cm	6.91	105.29	46.33
2700	1040	38.42	↓	↓	17.0	1.61	0.810 mS/cm uS/cm	6.91	104.52	39.42
							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			

1-12-22

Start Time: 1031 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS - 44151/~~43~~69

Stop Time: 1040 Average Purge Rate (mL/min): 300 Date Calibrated: 1-12-22

SAMPLING DATA

Sample Date: 1-12-22 Sample Time: ~~1002~~ 1045 2nd 1/12 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 [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBachmus

DATE: 1/12/22 WEATHER: partly cloudy 54°

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX-011222

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): 37.23 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.545 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 33.61 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 6.63 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1244	37.29	cloudy	slight HC	17.2	0.76	1.162 mS/cm uS/cm	6.79	-45.61	46.44
300	1245	37.29	↓	↓	17.4	0.64	1.162 mS/cm uS/cm	6.76	-48.12	46.18
600	1246	37.29			17.6	0.57	1.157 mS/cm uS/cm	6.75	-50.25	45.08
900	1247	↓			17.7	0.54	1.153 mS/cm uS/cm	6.74	-51.89	38.13
1200	1248				17.9	0.51	1.150 mS/cm uS/cm	6.73	-53.21	36.79
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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MD'Angelo 1/12/22

Start Time: 1244 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS - 50055/051301

Stop Time: 1248 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/22

SAMPLING DATA

Sample Date: 1/12/22 Sample Time: 1250 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: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadmos

DATE: 1/10/22 WEATHER: clear 25°

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-011022

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): 38.26 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 38.00 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 43.26 ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 24.74 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0924	38.27	clear	none	13.0	2.99	1.367 mS/cm uS/cm	6.59	211.13	6.96
1800	0930	38.27	↓	↓	13.9	2.82	1.363 mS/cm uS/cm	6.79	197.57	3.43
2100	0931	38.27	↓	↓	13.7	2.83	1.367 mS/cm uS/cm	6.80	196.50	3.04
2400	0932	↓	↓	↓	14.0	2.84	1.361 mS/cm uS/cm	6.81	195.09	2.42
2700	0933	↓	↓	↓	13.9	2.86	1.367 mS/cm uS/cm	6.82	194.52	1.96
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/10/22

Start Time: 0924 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS - 50055/051301

Stop Time: 0933 Average Purge Rate (mL/min): 300 Date Calibrated: 1/9/22

SAMPLING DATA

Sample Date: 1/10/22 Sample Time: 0940 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace: ☒ Initials: MD LB

COMMENTS:

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

DO historically high at this well.

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo Imoyer

DATE: 1/14/22 WEATHER: overcast 39°

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): 38.87 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): 38.84 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: 141.9 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.81 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

MD'Angelo 1/14/22

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDAngelo LBadams

DATE: 1/12/22 WEATHER: clear 41°

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-011222

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): ~~42.58~~ 42.59 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 47.58 ft btoc	Wellbore PID/FID Reading: 7.4 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 23.24 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0955	42.59	clear	strong HC	17.2	0.58	1.089 mS/cm uS/cm	6.92	-108.7	8.29
300	0954	42.59			17.3	0.55	1.092 mS/cm uS/cm	6.95	-117.2	7.79
600	0955	42.59			17.5	0.50	1.087 mS/cm uS/cm	6.98	-127.8	6.89
900	0956				17.9	0.47	1.085 mS/cm uS/cm	6.99	-134.2	6.87
1200	0957				17.8	0.45	1.090 mS/cm uS/cm	7.01	-139.7	5.44
1500	0958	↓	↓	↓	17.7	0.43	1.092 mS/cm uS/cm	7.02	-144.6	5.85
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 1/12/22

Start Time: 0953 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 50055 / 051301

Stop Time: 0958 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/22

SAMPLING DATA

Sample Date: 1/12/22 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: MDLB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo JMayer

DATE: 1/14/22 WEATHER: partly cloudy 29°

MONITORING WELL ID: P-57 SAMPLE ID: P57-ROX-011422

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.19 ft btoc	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): 43.49 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): 44.19 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 68.8 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 10.70 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1056	43.84	clear	moderate HC	15.6	1.60	1.104 mS/cm uS/cm	7.04	23.91	6.14
2100	1103	43.81	↓	↓	16.0	0.85	1.106 mS/cm uS/cm	7.00	-34.89	6.31
2400	1104	43.81			16.0	0.83	1.108 mS/cm uS/cm	7.00	-39.43	6.89
2700	1105	43.81			16.0	0.80	1.106 mS/cm uS/cm	7.00	-46.23	7.05
3000	1106	↓			16.1	0.78	1.106 mS/cm uS/cm	7.01	-51.21	6.75
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

1/14/22 MD'Angelo

Start Time: 1056 Elapsed Time (min): 10 Water Quality Meter ID & SN: YSI ProDSS - 441151/43269

Stop Time: 1106 Average Purge Rate (mL/min): 300 Date Calibrated: 1/14/22

SAMPLING DATA

Sample Date: 1/14/22 Sample Time: 1110 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD JM

COMMENTS:

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

Estimated Total Purge Volume: 4000 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW **PROJECT NUMBER:** 60674381 **FIELD PERSONNEL:** MD'Angelo LBadmus

DATE: 1/13/22 **WEATHER:** partly cloudy 45°

MONITORING WELL ID: P-58 **SAMPLE ID:** P58-ROX-011322

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): 41.25 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 40.21 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 46.25 ft btoc	
Screen Length: 25 ft		Wellbore PID/FID Reading: 0.1 ppm
Water Column Height (not including NAPL): 23.964 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
					STABLE: (over 4 readings)	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1142	41.45	cloudy	~~moderate~~ Strong 1/13 HO	19.1	0.49	1.377 mS/cm uS/cm	6.82	-129.7	18.79
300	1143	41.45	↓	↓	19.0	0.47	1.383 mS/cm uS/cm	6.83	-134.4	17.62
600	1144	41.45	↓	↓	18.7	0.45	1.384 mS/cm uS/cm	6.83	-137.0	16.93
900	1145	↓	↓	↓	18.5	0.43	1.383 mS/cm uS/cm	6.83	-140.4	17.41
1200	1146	↓	↓	↓	18.7	0.41	1.382 mS/cm uS/cm	6.83	-141.3	17.01
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MD'Angelo 1/13/22

Start Time: 1142 **Elapsed Time (min):** 4 **Water Quality Meter ID & SN:** YSI ProDSS 50055/051301

Stop Time: 1146 **Average Purge Rate (mL/min):** 300 **Date Calibrated:** 1/13/22

SAMPLING DATA

Sample Date: 1/13/22 **Sample Time:** 1150 **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:** MDLB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadnus

DATE: 1/13/22 WEATHER: Mostly cloudy 43°

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-011322

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): 43.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 47.91 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 52.91 ft btoc	Wellbore PID/FID Reading: 228.8 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 29.61 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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	1054	43.32	clear	strong HC	18.7	0.67	1.369 mS/cm uS/cm	6.40	-87.1	2.57
300	1055	43.32			18.5	0.58	1.372 mS/cm uS/cm	6.45	-98.4	2.87
600	1056	43.32			18.9	0.53	1.375 mS/cm uS/cm	6.48	-104.8	2.92
900	1057				19.4	0.49	1.390 mS/cm uS/cm	6.50	-111.5	2.33
1200	1058				19.0	0.47	1.397 mS/cm uS/cm	6.52	-117.2	2.40
1500	1059				19.2	0.45	1.397 mS/cm uS/cm	6.53	-120.6	2.21
							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			

MD'Angelo 1/13/22

Start Time: 1054 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 50055/05I301

Stop Time: 1059 Average Purge Rate (mL/min): 300 Date Calibrated: 1/13/22

SAMPLING DATA

Sample Date: 1/13/22 Sample Time: 1105 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: MD LB

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 1Q22 GW PROJECT NUMBER: 606743291 FIELD PERSONNEL: T. Sones J. Mayer

DATE: 1-13-22 WEATHER: 45° Partly Cloudy

MONITORING WELL ID: P-66 SAMPLE ID: ~~X~~ P66-ROX-01322

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): 32.88 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.3 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 34.72 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 39.72 ft btoc	Wellbore PID/FID Reading: 29.4 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 26.84 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	1103	32.89	Clear	Slight	15.0	2.18	1.173 mS/cm uS/cm	6.57	59.31	5.81
1200	1107	32.90			16.8	0.99	1.315 mS/cm uS/cm	6.59	22.92	3.88
1500	1108				17.1	0.91	1.321 mS/cm uS/cm	6.60	13.96	3.58
1800	1109				17.3	0.85	1.325 mS/cm uS/cm	6.61	3.77	3.42
2100	1110				17.6	0.82	1.325 mS/cm uS/cm	6.62	-3.49	3.25
2400	1111				17.5	0.78	1.329 mS/cm uS/cm	6.63	-15.27	3.14
2700	1112				17.7	0.76	1.327 mS/cm uS/cm	6.63	-20.66	3.24
3000	1113				17.7	0.74	1.332 mS/cm uS/cm	6.64	-28.77	3.09
3300	1114				17.5	0.72	1.335 mS/cm uS/cm	6.65	-37.71	2.93
3600	1115				18.0	0.71	1.329 mS/cm uS/cm	6.65	-48.53	2.98
3900	1116				17.6	0.69	1.342 mS/cm uS/cm	6.65	-51.03	2.70
4200	1117				17.5	0.68	1.335 mS/cm uS/cm	6.66	-59.31	2.60
4500	1118				17.5	0.67	1.335 mS/cm uS/cm	6.66	-63.28	2.70
							mS/cm uS/cm			
							mS/cm uS/cm			
					JM 1-13-21		mS/cm uS/cm			

Start Time: 1103 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1118 Average Purge Rate (mL/min): 300 Date Calibrated: 1-13-22

SAMPLING DATA

Sample Date: 1-13-22 Sample Time: 1125 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDiAngelo TMayer

DATE: 1/14/22 WEATHER: overcast 39°

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): 41.35 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): 41.34 ft			
Depth to Top of Screen (btoc): 43.76 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 219.7 ppm	
Screen Length: 25 ft			
Water Column Height (not including NAPL): 27.41 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

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

1/14/22

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 1Q22 GW PROJECT NUMBER: 606743581 FIELD PERSONNEL: MD:Angelo ~~JA~~ MD 1/13 LBadmus

DATE: 1/13/22 WEATHER: Mostly cloudy 41°

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-011322

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): 39.28 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 43.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 48.83 ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 25 ft		
Water Column Height (not including NAPL): 29.55 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ___ ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ___ ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0959	39.46	Clear	moderate HC	16.2	0.83	0.221 mS/cm uS/cm	6.34	99.5	10.43
300	1000	39.46			16.4	0.74	0.214 mS/cm uS/cm	6.36	92.0	10.14
600	1001	39.46			16.4	0.68	0.210 mS/cm uS/cm	6.38	87.1	9.71
900	1002				16.5	0.64	0.208 mS/cm uS/cm	6.40	81.3	9.32
1200	1003				16.7	0.60	0.208 mS/cm uS/cm	6.42	75.3	9.05
1500	1004				16.7	0.57	0.207 mS/cm uS/cm	6.43	69.7	9.12
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

JA Angelo 1/13/22

Start Time: 0959 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS 50055/051301

Stop Time: 1004 Average Purge Rate (mL/min): 300 Date Calibrated: 1/13/22

SAMPLING DATA

Sample Date: 1/13/22 Sample Time: 1010 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDiAngelo LBadmus

DATE: 1/12/22 WEATHER: partly cloudy 48°

MONITORING WELL ID: P-93A SAMPLE ID: P93A-ROX-011222

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 48.07 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 53.07 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 41.59 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 43.07 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 11.48 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1101	41.65	clear	Slight HC	17.8	0.58	1.393 ~~mS/cm~~ uS/cm	6.46	-44.7	0.0
300	1102	41.65	↓	↓	18.3	0.52	1.398 ~~mS/cm~~ uS/cm	6.47	-47.2	0.0
600	1103	41.65			18.5	0.48	1.401 ~~mS/cm~~ uS/cm	6.47	-49.3	0.0
900	1104	↓			18.6	0.46	1.401 ~~mS/cm~~ uS/cm	6.47	-50.8	0.0
1200	1105				18.6	0.44	1.398 ~~mS/cm~~ uS/cm	6.47	-51.9	0.0
							mS/cm uS/cm			
							mS/cm ~~uS/cm~~			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDiAngelo 1/12/22

Start Time: 1101 Elapsed Time (min): 4 Water Quality Meter ID,& SN: YSI ProDSS -- 50055/051301

Stop Time: 1105 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/22

SAMPLING DATA

Sample Date: 1/12/22 Sample Time: 1110 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer L. Badmus

DATE: 1-13-2022 WEATHER: 48°F Clear

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX-011322

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): 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): 74.78 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 2 ft			
Water Column Height (not including NAPL): 33.89 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 75.78 ft btoc		

PURGE DATA

Pump Type: Dedicated Well Wizard

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1231	42.91	Clear	Moderate	17.1	0.66	1.356 mS/cm uS/cm	6.68	-106.76	6.28
300	1232	42.90	↓	↓	17.3	0.64	1.356 mS/cm uS/cm	6.68	-110.33	4.73
600	1233	↓			17.3	0.54	1.361 mS/cm uS/cm	6.68	-116.21	3.16
900	1234				17.3	0.51	1.362 mS/cm uS/cm	6.69	-119.35	3.14
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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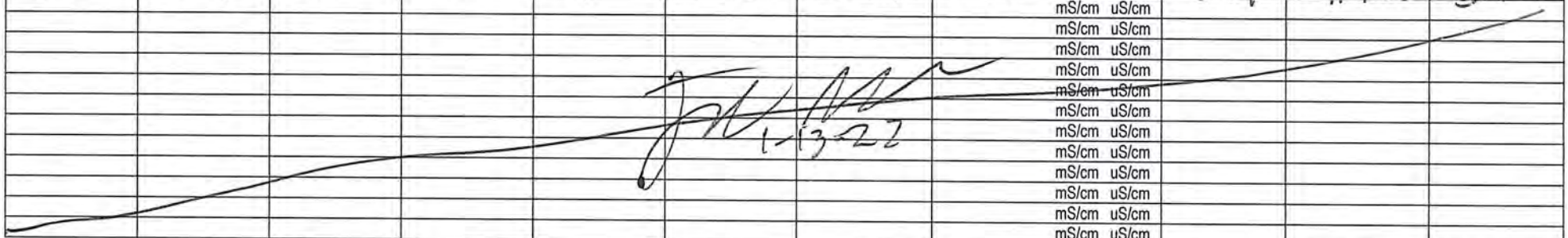

Start Time: 1231 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS 50055/513101

Stop Time: 1234 Average Purge Rate (mL/min): 300 Date Calibrated: 1-13-22

SAMPLING DATA

Sample Date: 1-13-22 Sample Time: 1240 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 1200 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer B. Howell

DATE: 1/10/2022 WEATHER: 28°F Clear

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-011022

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): 97.88 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 43.08 ft		Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Depth to Top of Screen (btoc): 92.88 ft			
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): 54.80 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 93.88 ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1020	43.10	Clear	none	14.9	2.43	0.978 mS/cm uS/cm	7.07	60.7	12.56
1500	1025	↓	↓	↓	15.6	0.89	1.069 mS/cm uS/cm	6.86	-15.4	7.68
1800	1026				15.6	0.84	1.069 mS/cm uS/cm	6.86	-25.7	6.94
2100	1027				15.4	0.82	1.069 mS/cm uS/cm	6.86	-34.0	6.22
2400	1028				15.5	0.78	1.070 mS/cm uS/cm	6.86	-39.4	5.51
2700	1029				15.5	0.75	1.067 mS/cm uS/cm	6.87	-43.7	4.93
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
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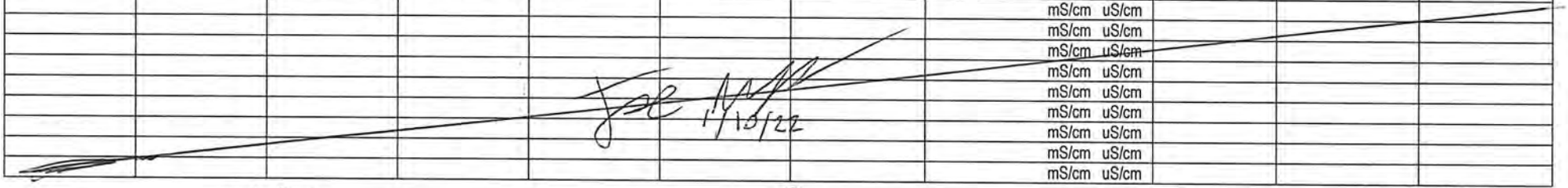

Start Time: 1020 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 44151/43269

Stop Time: 1029 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/2022

SAMPLING DATA

Sample Date: 1/10/2022 Sample Time: 1035 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace [X] Initials: JM

COMMENTS:

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

Estimated Total Purge Volume: 2700 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDAngelo JMayer

DATE: 1/14/22 WEATHER: partly cloudy ~~39°~~ 39° MD 1/14

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-011422

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): 43.22 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 125.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 2 ft		
Water Column Height (not including NAPL): 84.78 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: Dedicated Well Wizard

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
					STABLE: (over 4 readings)	Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	1140	43.22	clear	none	14.6	5.58	1.164 mS/cm uS/cm	7.76	29.17	12.44
1500	1145				14.1	2.03	1.195 mS/cm uS/cm	7.25	10.28	9.54
1800	1146				14.0	1.84	1.195 mS/cm uS/cm	7.23	7.41	10.36
2100	1147				14.1	1.59	1.194 mS/cm uS/cm	7.21	3.93	9.69
2400	1148				14.0	1.43	1.197 mS/cm uS/cm	7.20	1.17	9.05
2700	1149				13.9	1.31	1.198 mS/cm uS/cm	7.19	-1.78	9.16
3000	1150				13.8	1.23	1.196 mS/cm uS/cm	7.18	-4.05	8.19
3300	1151				13.8	1.15	1.197 mS/cm uS/cm	7.17	-6.55	9.24
3600	1152				13.7	1.10	1.198 mS/cm uS/cm	7.16	-8.83	8.54
3900	1153				13.4	1.05	1.199 mS/cm uS/cm	7.16	-11.51	6.66
							mS/cm uS/cm			
							mS/cm uS/cm			
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							mS/cm uS/cm			

MD Angelo 1/14/22

Start Time: 1140 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS 44151/43269

Stop Time: 1153 Average Purge Rate (mL/min): 300 Date Calibrated: 1/14/22

SAMPLING DATA

Sample Date: 1/14/22 Sample Time: 1155 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MDJM

COMMENTS:

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

Estimated Total Purge Volume: 3900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Meyer B. Howell

DATE: 1/10/2022 WEATHER: 36°F Clear

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX-011022

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 33.31 ft	
Depth to Water (btoc): 25.33 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 29.32 ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 23.01 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 7.98 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 4.7 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	1256	25.36	Clear	Slight	19.2	2.40	0.884 mS/cm uS/cm	6.79	-62.64	371.84
1500	1301	25.35			19.6	0.73	0.935 mS/cm uS/cm	6.73	-110.79	184.87
1800	1302				19.8	0.70	0.934 mS/cm uS/cm	6.74	-116.31	149.55
2100	1303				19.9	0.63	0.930 mS/cm uS/cm	6.75	-120.87	124.14
2400	1304				19.9	0.62	0.930 mS/cm uS/cm	6.76	-122.59	111.80
2700	1305				20.0	0.61	0.930 mS/cm uS/cm	6.76	-123.83	102.99
3000	1306				20.1	0.60	0.930 mS/cm uS/cm	6.76	-125.13	96.61
3300	1307				20.1	0.59	0.930 mS/cm uS/cm	6.77	-126.71	87.76
3600	1308				20.2	0.58	0.931 mS/cm uS/cm	6.77	-128.43	71.83
3900	1309				20.0	0.57	0.935 mS/cm uS/cm	6.77	-130.26	60.37
4200	1310				20.1	0.56	0.935 mS/cm uS/cm	6.78	-131.86	52.83
4500	1311				19.9	0.55	0.934 mS/cm uS/cm	6.78	-133.05	45.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1256 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 4415I/43269

Stop Time: 1311 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/2022

SAMPLING DATA

Sample Date: 1/10/2022 Sample Time: 1315 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: JM

COMMENTS:

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

Estimated Total Purge Volume: 4500 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: J. Mayer T. Jones

DATE: 1/6/2022 WEATHER: 18°F Overcast

MONITORING WELL ID: ROST-3-MW SAMPLE ID: ROST3MW-ROX-010622

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 48.06 ft	
Depth to Water (btoc): 38.13 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 43.10 ft btoc
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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.93 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 0.2 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	1209	38.17	Clear	Slight	13.3	2.99	1.307 mS/cm uS/cm	6.79	-79.02	49.07
1200	1213	38.17			14.8	1.07	1.323 mS/cm uS/cm	6.77	-93.09	30.90
1500	1214	38.17			15.0	0.96	1.329 mS/cm uS/cm	6.77	-94.68	25.07
1800	1215	38.17			14.8	0.90	1.330 mS/cm uS/cm	6.77	-95.60	22.06
2100	1216	38.17			15.0	0.83	1.331 mS/cm uS/cm	6.76	-96.80	17.82
2400	1217	38.17			14.8	0.80	1.332 mS/cm uS/cm	6.76	-97.52	15.79
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1209 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS - 44151/43269

Stop Time: 1217 Average Purge Rate (mL/min): 300 Date Calibrated: 1/6/2022

SAMPLING DATA

Sample Date: 1/6/2022 Sample Time: 1220 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: JM

COMMENTS:

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

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBadmus

DATE: 1/11/22 WEATHER: Clear 36°

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-011122

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 45.20 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 38.38 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.64 ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NA 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: 63.4 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 7.12 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1143	38.30	cloudy black	Strong H2S	15.7	0.65	1.497 mS/cm uS/cm	6.81	-122.38	32.63
300	1144	38.30			16.2	0.56	1.503 mS/cm uS/cm	6.82	-133.82	34.87
600	1145	38.30			16.3	0.51	1.508 mS/cm uS/cm	6.84	-147.55	33.01
900	1146				16.5	0.47	1.508 mS/cm uS/cm	6.86	-161.30	30.35
1200	1147				16.6	0.44	1.511 mS/cm uS/cm	6.88	-176.02	28.25
1500	1148				16.7	0.41	1.511 mS/cm uS/cm	6.90	-192.04	25.39
1800	1149				16.8	0.40	1.510 mS/cm uS/cm	6.91	-203.13	21.68
2100	1150				16.8	0.39	1.511 mS/cm uS/cm	6.92	-214.20	18.90
2400	1151				16.8	0.38	1.510 mS/cm uS/cm	6.92	-223.42	16.82
2700	1152				16.9	0.37	1.507 mS/cm uS/cm	6.92	-231.73	14.23
3000	1153		clearer		17.0	0.36	1.508 mS/cm uS/cm	6.92	-238.39	12.85
3300	1154				16.9	0.36	1.510 mS/cm uS/cm	6.91	-245.44	11.13
3600	1155				16.7	0.35	1.510 mS/cm uS/cm	6.91	-254.76	10.14
3900	1156				16.7	0.35	1.504 mS/cm uS/cm	6.91	-262.60	8.79
4200	1157				16.9	0.34	1.506 mS/cm uS/cm	6.91	-269.16	7.58
4500	1158				16.8	0.34	1.503 mS/cm uS/cm	6.90	-273.00	6.73

Start Time: 1143 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 50065/051301

Stop Time: 1158 Average Purge Rate (mL/min): 300 Date Calibrated: 1/11/22

SAMPLING DATA

Sample Date: 1/11/22 Sample Time: 1205 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: MDLB

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 1Q22 GW PROJECT NUMBER: 60674581 FIELD PERSONNEL: MD:Angelo LBadmus

DATE: 1/12/22 WEATHER: partly cloudy 55°

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-011222

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): 37.06 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.03 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): 7.99 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

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	1324	37.12	clear	strong HC	17.2	0.80	1.720 mS/cm uS/cm	6.80	-94.58	26.42
300	1325	37.12			17.4	0.68	1.726 mS/cm uS/cm	6.80	-100.18	19.84
600	1326	37.12			17.7	0.61	1.727 mS/cm uS/cm	6.81	-104.22	14.68
900	1327	↓	↓	↓	18.1	0.55	1.726 mS/cm uS/cm	6.81	-107.53	11.58
1200	1328				18.0	0.52	1.730 mS/cm uS/cm	6.82	-110.05	8.60
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Angelo 1/12/22

Start Time: 1324 Elapsed Time (min): 4 Water Quality Meter ID & SN: YSI ProDSS -- 50055/05130

Stop Time: 1328 Average Purge Rate (mL/min): 300 Date Calibrated: 1/12/22

SAMPLING DATA

Sample Date: 1/12/22 Sample Time: 1335 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: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo LBAdams

DATE: 1/10/22 WEATHER: clear, 36°

MONITORING WELL ID: ROST-4-PZ(G) SAMPLE ID: ROST4PZG - BOX - 011022

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): 38.13 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.33 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: 33.3 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 6.40 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 4 readings)	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	1337	38.13	clear	strong HC	16.3	0.61	1.216 mS/cm uS/cm	6.88	-154.20	5.96
300	1338	38.16	↓	↓	16.5	0.58	1.219 mS/cm uS/cm	6.89	-152.40	5.21
600	1339	38.16			16.7	0.54	1.228 mS/cm uS/cm	6.89	-150.75	4.82
900	1340	38.16			17.0	0.50	1.237 mS/cm uS/cm	6.90	-149.65	4.26
1200	1341	↓			17.2	0.49	1.242 mS/cm uS/cm	6.90	-149.31	3.96
1500	1342				17.1	0.46	1.252 mS/cm uS/cm	6.90	-149.28	3.65
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

MDAngelo 1/10/22

Start Time: 1337 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS - 50055/051301

Stop Time: 1342 Average Purge Rate (mL/min): 300 Date Calibrated: 1/10/22

SAMPLING DATA

Sample Date: 1/10/22 Sample Time: 1345 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: MD LB

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 1Q22 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MD'Angelo JMayer

DATE: 1/14/22 WEATHER: partly cloudy 34°

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-011422

INITIAL DATA

Well Diameter: 6 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 72.83 ft	
Depth to Water (btoc): 41.21 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 46.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 51.83 ft btoc
Screen Length: 26 ft	
Water Column Height (not including NAPL): 31.26 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

Volume of Flow Through Cell: 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 128.3 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
			STABLE: (over 4 readings)		Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
0	0945	41.23	clear	moderate HC	17.1	1.14	1.470 mS/cm uS/cm	6.91	121.68	5.92
300	0946	41.25			17.4	1.04	1.470 mS/cm uS/cm	6.82	105.12	5.76
600	0947	41.23			17.6	0.95	1.4671 mS/cm uS/cm	6.80	87.55	6.18
900	0948				17.8	0.90	1.4689 mS/cm uS/cm	6.89	75.53	6.10
1200	0949				17.8	0.86	1.468 mS/cm uS/cm	6.92	61.05	6.26
1500	0950				18.1	0.82	1.4671 mS/cm uS/cm	6.95	45.54	5.71
1800	0951				18.1	0.80	1.467 mS/cm uS/cm	6.96	36.84	5.57
2100	0952				18.0	0.78	1.470 mS/cm uS/cm	6.98	27.11	5.28
2400	0953				17.9	0.76	1.467 mS/cm uS/cm	7.00	17.13	5.68
2700	0954				17.8	0.75	1.464 mS/cm uS/cm	7.01	9.85	5.43
3000	0955				18.0	0.73	1.462 mS/cm uS/cm	7.02	1.77	5.12
3300	0956				18.0	0.72	1.464 mS/cm uS/cm	7.03	-6.85	5.27
3600	0957				18.1	0.71	1.462 mS/cm uS/cm	7.04	-15.95	4.96
3900	0958				18.1	0.70	1.460 mS/cm uS/cm	7.05	-27.11	5.00
4200	0959				18.2	0.69	1.455 mS/cm uS/cm	7.06	-37.07	5.02
4500	1000				18.0	0.68	1.460 mS/cm uS/cm	7.07	-47.94	5.12

Start Time: 0945 Elapsed Time (min): 22 Water Quality Meter ID & SN: YSI ProDSS 94151 / 43369

Stop Time: 1007 Average Purge Rate (mL/min): 300 Date Calibrated: 1/14/22

SAMPLING DATA

Sample Date: 1/14/22 Sample Time: 1010 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: MDJM

COMMENTS:

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

Estimated Total Purge Volume: 6600 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 1022 GW PROJECT NUMBER: 60674381 FIELD PERSONNEL: MDAngelo JMayer

DATE: 1/14/22 MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-011422

				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)
4800	1001	41.23	clear	moderate HS	18.0	0.67	1.460 mS/cm uS/cm	7.07	-57.76	5.02
5100	1002	↓	↓	↓	18.2	0.66	1.455 mS/cm uS/cm	7.08	-66.41	5.12
5400	1003				18.2	0.66	1.460 mS/cm uS/cm	7.08	-73.91	5.21
5700	1004				18.2	0.65	1.458 mS/cm uS/cm	7.09	-81.85	5.50
6000	1005				18.0	0.64	1.462 mS/cm uS/cm	7.09	-88.68	4.97
6300	1006				17.9	0.64	1.454 mS/cm uS/cm	7.10	-95.58	5.95
6600	1007				18.1	0.63	1.453 mS/cm uS/cm	7.10	-99.34	5.07
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

Appendix C

Data Review/Validation Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-213748-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/10/2022

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

Sample Identification	Sample Identification
TB-ROX-010622-8011-B	TB-ROX-010622-8260-B
MW6D-ROX-010622-EB	MW6D-ROX-010622
MW6C-ROX-010622	TB-ROX-010622-8260-A
TB-ROX-010622-8011-A	MW9-ROX-010622-EB
MW9-ROX-010622	ROST3MW-ROX-010622
MW11-ROX-010622	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl)phthalate was re-extracted outside extraction time criteria in equipment blank MW6D-ROX-010622-EB. 2-Methylnaphthalene was detected in the method blank, and bis(2-ethylhexyl)phthalate was detected in the equipment blanks. The SVOC LCS and/or LCSD recoveries for benzenethiol and 2-chlorophenol were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several investigative and quality control samples. The continuing calibration verification for quinoline was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl)phthalate was re-extracted 5 days outside analysis extraction time criteria (7 days) in equipment blank MW6D-ROX-010622-EB, for confirmation. Equipment blanks are quality control samples and do not require qualification. No qualification of data was required.

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW6D-ROX-010622-EB	SVOCs	bis(2-Ethylhexyl)phthalate	11 µg/L
MW9-ROX-010622-EB	SVOCs	bis(2-Ethylhexyl)phthalate	5.2 µg/L
MB 400-562825/1-A	PAHs	2-Methylnaphthalene	0.2 µg/L

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

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-562825/2-A/3-A	SVOCs	Benzenethiol	**4/5**	22	10-120/30
LCS 400-562825/4-A	SVOCs	2-Chlorophenol	**36**	NA	40-120

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-562825/2-A/3-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-010622	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-010622	SVOCs	2-Chlorophenol	**UJ**
MW6C-ROX-010622	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-010622	SVOCs	2-Chlorophenol	**UJ**
MW9-ROX-010622	SVOCs	Benzenethiol	**UJ**
MW9-ROX-010622	SVOCs	2-Chlorophenol	**UJ**
ROST3MW-ROX-010622	SVOCs	Benzenethiol	**UJ**
ROST3MW-ROX-010622	SVOCs	2-Chlorophenol	**UJ**
MW11-ROX-010622	SVOCs	Benzenethiol	**UJ**
MW11-ROX-010622	SVOCs	2-Chlorophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6D-ROX-010622-EB	PAHs	Terphenyl-d_{14}	**142**	33-138
MW6D-ROX-010622	PAHs	Terphenyl-d_{14}	**149**	33-138
MW6C-ROX-010622	PAHs	Terphenyl-d_{14}	**141**	33-138
MW6C-ROX-010622	SVOCs	2-Fluorophenol	**7**	13-113
MW9-ROX-010622-EB	PAHs	Terphenyl-d_{14}	**139**	33-138
ROST3MW-ROX-010622	PAHs	Terphenyl-d_{14}	**147**	33-138
MB 400-562825/1-A	SVOCs	2-Fluorophenol	**11**	13-113
MB 400-562825/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for quinoline was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW6D-ROX-010622	SVOCs	Quinoline	**UJ**
MW6C-ROX-010622	SVOCs	Quinoline	**UJ**
MW9-ROX-010622	SVOCs	Quinoline	**UJ**
ROST3MW-ROX-010622	SVOCs	Quinoline	**UJ**
MW11-ROX-010622	SVOCs	Quinoline	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-213748-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Authorized for release by:
1/21/2022 2:52:38 PM

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

Reviewed 2/10/22 MR

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

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

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

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Job ID: 400-213748-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-213748-1

Comments
No additional comments.

Receipt
The samples were received on 1/7/2022 12:07 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 0.0° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-562705 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-010622-8260-B (400-213748-2), MW6D-ROX-010622-EB (400-213748-3), MW6D-ROX-010622 (400-213748-4), MW6C-ROX-010622 (400-213748-5), TB-ROX-010622-8260-A (400-213758-1), MW9-ROX-010622-EB (400-213758-3), MW9-ROX-010622 (400-213758-4), ROST3MW-ROX-010622 (400-213758-5) and MW11-ROX-010622 (400-213758-6). 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 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-562825 and analytical batch 400-563190 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-562825 and analytical batch 400-563190: 2-Chlorophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered above the upper control limit for N-Nitrosodimethylamine, 2,4-Dinitrophenol, 4-Nitrophenol, Di-n-butyl phthalate and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered outside acceptance criteria, low biased, for Quinoline. 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 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-563528 and analytical batch 400-563808 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: Sample MW6D-ROX-010622-EB (400-213748-3) was re-analyzed to confirm a detection of Bis(2-ethylhexyl) phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside

Job ID: 400-213748-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW6D-ROX-010622-EB (400-213748-3), MW6D-ROX-010622 (400-213748-4), MW6C-ROX-010622 (400-213748-5), MW9-ROX-010622-EB (400-213758-3), ROST3MW-ROX-010622 (400-213758-5) and (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-562825 and 400-562825 contained 2-Methylnaphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

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

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

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

Sample Summary

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

Job ID: 400-213748-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-213748-1	TB-ROX-010622-8011-B	Water	01/06/22 00:00	01/07/22 12:07
400-213748-2	TB-ROX-010622-8260-B	Water	01/06/22 00:00	01/07/22 12:07
400-213748-3	MW6D-ROX-010622-EB	Water	01/06/22 08:30	01/07/22 12:07
400-213748-4	MW6D-ROX-010622	Water	01/06/22 12:25	01/07/22 12:07
400-213748-5	MW6C-ROX-010622	Water	01/06/22 13:35	01/07/22 12:07
400-213758-1	TB-ROX-010622-8260-A	Water	01/06/22 00:00	01/07/22 12:07
400-213758-2	TB-ROX-010622-8011-A	Water	01/06/22 00:00	01/07/22 12:07
400-213758-3	MW9-ROX-010622-EB	Water	01/06/22 08:15	01/07/22 12:07
400-213758-4	MW9-ROX-010622	Water	01/06/22 11:05	01/07/22 12:07
400-213758-5	ROST3MW-ROX-010622	Water	01/06/22 12:20	01/07/22 12:07
400-213758-6	MW11-ROX-010622	Water	01/06/22 13:25	01/07/22 12:07

Detection Summary

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

Job ID: 400-213748-1

Client Sample ID: TB-ROX-010622-8011-B — Lab Sample ID: 400-213748-1

No Detections.

Client Sample ID: TB-ROX-010622-8260-B — Lab Sample ID: 400-213748-2

No Detections.

Client Sample ID: MW6D-ROX-010622-EB — Lab Sample ID: 400-213748-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	11		9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW6D-ROX-010622 — Lab Sample ID: 400-213748-4

No Detections.

Client Sample ID: MW6C-ROX-010622 — Lab Sample ID: 400-213748-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.31	J	1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-010622-8260-A — Lab Sample ID: 400-213758-1

No Detections.

Client Sample ID: TB-ROX-010622-8011-A — Lab Sample ID: 400-213758-2

No Detections.

Client Sample ID: MW9-ROX-010622-EB — Lab Sample ID: 400-213758-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	5.2	J	9.5	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW9-ROX-010622 — Lab Sample ID: 400-213758-4

No Detections.

Client Sample ID: ROST3MW-ROX-010622 — Lab Sample ID: 400-213758-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.19		0.19	0.070	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW11-ROX-010622 — Lab Sample ID: 400-213758-6

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-213748-1

Client Sample ID: TB-ROX-010622-8011-B
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 20:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*01/11/22 10:45*	*01/11/22 20:44*	*1*

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

Job ID: 400-213748-1

Client Sample ID: TB-ROX-010622-8260-B
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 17:16	1
Acrolein	ND		20	3.3	ug/L			01/10/22 17:16	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 17:16	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 17:16	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 17:16	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 17:16	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 17:16	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 17:16	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 17:16	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 17:16	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 17:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 17:16	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 17:16	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 17:16	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 17:16	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 17:16	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 17:16	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 17:16	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 17:16	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 17:16	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 17:16	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 17:16	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 17:16	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 17:16	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 17:16	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 17:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 17:16	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 17:16	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 17:16	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 17:16	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 17:16	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 17:16	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 17:16	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 17:16	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 17:16	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 17:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 17:16	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 17:16	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 17:16	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 17:16	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 17:16	1

Client Sample ID: TB-ROX-010622-8260-B
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 17:16	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 17:16	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 17:16	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 17:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 17:16	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 17:16	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 17:16	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 17:16	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 17:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 17:16	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 17:16	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 17:16	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 17:16	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 17:16	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 17:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 17:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 17:16	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 17:16	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 17:16	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/10/22 17:16*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/10/22 17:16*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/10/22 17:16*	*1*

Client Sample ID: MW6D-ROX-010622-EB
Date Collected: 01/06/22 08:30
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 17:42	1
Acrolein	ND		20	3.3	ug/L			01/10/22 17:42	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 17:42	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 17:42	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 17:42	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 17:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 17:42	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 17:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 17:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 17:42	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 17:42	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 17:42	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 17:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 17:42	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 17:42	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 17:42	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 17:42	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 17:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 17:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 17:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 17:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 17:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 17:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 17:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 17:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 17:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 17:42	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 17:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 17:42	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 17:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 17:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 17:42	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 17:42	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 17:42	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 17:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 17:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 17:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 17:42	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 17:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 17:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 17:42	1

Client Sample ID: MW6D-ROX-010622-EB
Date Collected: 01/06/22 08:30
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 17:42	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 17:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 17:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 17:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 17:42	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 17:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 17:42	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 17:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 17:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 17:42	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 17:42	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 17:42	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 17:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 17:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 17:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 17:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 17:42	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 17:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 17:42	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/10/22 17:42*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/10/22 17:42*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 17:42*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 12:22	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 12:22	1
Anthracene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 12:22	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 12:22	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 12:22	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/11/22 09:14	01/14/22 12:22	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/11/22 09:14	01/14/22 12:22	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/11/22 09:14	01/14/22 12:22	1
Chrysene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 12:22	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/11/22 09:14	01/14/22 12:22	1
Fluoranthene	ND		0.19	0.066	ug/L		01/11/22 09:14	01/14/22 12:22	1
Fluorene	ND		0.19	0.11	ug/L		01/11/22 09:14	01/14/22 12:22	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 12:22	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 12:22	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/11/22 09:14	01/14/22 12:22	1
Phenanthrene	ND		0.19	0.035	ug/L		01/11/22 09:14	01/14/22 12:22	1
Pyrene	ND		0.19	0.039	ug/L		01/11/22 09:14	01/14/22 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*15 - 122*	*01/11/22 09:14*	*01/14/22 12:22*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*01/11/22 09:14*	*01/14/22 12:22*	*1*

Client Sample ID: MW6D-ROX-010622-EB
Date Collected: 01/06/22 08:30
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*142*	*S1+*	*33 - 138*	*01/11/22 09:14*	*01/14/22 12:22*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/11/22 09:14	01/14/22 13:20	1
Benzenethiol	ND	*-	9.6	1.6	ug/L		01/11/22 09:14	01/14/22 13:20	1
Benzoic acid	ND		29	7.0	ug/L		01/11/22 09:14	01/14/22 13:20	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 13:20	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 13:20	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 13:20	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 13:20	1
Bis(2-ethylhexyl) phthalate	**11**		9.6	4.8	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/11/22 09:14	01/14/22 13:20	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/11/22 09:14	01/14/22 13:20	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 13:20	1
2-Chlorophenol	ND	*-	9.6	2.1	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 13:20	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 13:20	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 13:20	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/11/22 09:14	01/14/22 13:20	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 13:20	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 13:20	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 13:20	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 13:20	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 13:20	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 13:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 13:20	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 13:20	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 13:20	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/11/22 09:14	01/14/22 13:20	1
Indene	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 13:20	1
Isophorone	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 13:20	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 13:20	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/11/22 09:14	01/14/22 13:20	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/11/22 09:14	01/14/22 13:20	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/11/22 09:14	01/14/22 13:20	1
Nitrobenzene	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 13:20	1
2-Nitrophenol	ND		9.6	5.0	ug/L		01/11/22 09:14	01/14/22 13:20	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/11/22 09:14	01/14/22 13:20	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 13:20	1

Client Sample ID: MW6D-ROX-010622-EB
Date Collected: 01/06/22 08:30
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/11/22 09:14	01/14/22 13:20	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/11/22 09:14	01/14/22 13:20	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 13:20	1
Phenol	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 13:20	1
Pyridine	ND		9.6	3.1	ug/L		01/11/22 09:14	01/14/22 13:20	1
Quinoline	ND		9.6	4.3	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/11/22 09:14	01/14/22 13:20	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 13:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*46 - 124*	*01/11/22 09:14*	*01/14/22 13:20*	*1*
2-Fluorophenol	*16*		*13 - 113*	*01/11/22 09:14*	*01/14/22 13:20*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/11/22 09:14*	*01/14/22 13:20*	*1*
Phenol-d5	*47*		*17 - 127*	*01/11/22 09:14*	*01/14/22 13:20*	*1*
Terphenyl-d14	*87*		*44 - 149*	*01/11/22 09:14*	*01/14/22 13:20*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*01/11/22 09:14*	*01/14/22 13:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	9.6	4.8	ug/L		01/18/22 10:55	01/21/22 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*01/18/22 10:55*	*01/21/22 13:23*	*1*
2-Fluorophenol	*18*		*13 - 113*	*01/18/22 10:55*	*01/21/22 13:23*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/18/22 10:55*	*01/21/22 13:23*	*1*
Phenol-d5	*44*		*17 - 127*	*01/18/22 10:55*	*01/21/22 13:23*	*1*
Terphenyl-d14	*105*		*44 - 149*	*01/18/22 10:55*	*01/21/22 13:23*	*1*
2,4,6-Tribromophenol	*104*		*26 - 150*	*01/18/22 10:55*	*01/21/22 13:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/11/22 10:45	01/11/22 21:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*51 - 149*	*01/11/22 10:45*	*01/11/22 21:04*	*1*

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

Job ID: 400-213748-1

Client Sample ID: MW6D-ROX-010622
Date Collected: 01/06/22 12:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 18:08	1
Acrolein	ND		20	3.3	ug/L			01/10/22 18:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 18:08	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 18:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 18:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 18:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 18:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 18:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 18:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 18:08	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 18:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 18:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 18:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 18:08	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 18:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 18:08	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 18:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 18:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 18:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 18:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 18:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 18:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 18:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 18:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 18:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 18:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 18:08	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 18:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 18:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 18:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 18:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 18:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 18:08	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 18:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 18:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 18:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 18:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 18:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 18:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 18:08	1

Client Sample ID: MW6D-ROX-010622
Date Collected: 01/06/22 12:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 18:08	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 18:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 18:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 18:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 18:08	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 18:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 18:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 18:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 18:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 18:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 18:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 18:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 18:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 18:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 18:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 18:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 18:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 18:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 18:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/10/22 18:08*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/10/22 18:08*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 18:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.031	ug/L		01/11/22 09:14	01/14/22 12:39	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/22 09:14	01/14/22 12:39	1
Anthracene	ND		0.20	0.031	ug/L		01/11/22 09:14	01/14/22 12:39	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 12:39	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/11/22 09:14	01/14/22 12:39	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/11/22 09:14	01/14/22 12:39	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:14	01/14/22 12:39	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/11/22 09:14	01/14/22 12:39	1
Chrysene	ND		0.20	0.072	ug/L		01/11/22 09:14	01/14/22 12:39	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/22 09:14	01/14/22 12:39	1
Fluoranthene	ND		0.20	0.067	ug/L		01/11/22 09:14	01/14/22 12:39	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:14	01/14/22 12:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 12:39	1
1-Methylnaphthalene	ND		0.20	0.072	ug/L		01/11/22 09:14	01/14/22 12:39	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/11/22 09:14	01/14/22 12:39	1
Phenanthrene	ND		0.20	0.035	ug/L		01/11/22 09:14	01/14/22 12:39	1
Pyrene	ND		0.20	0.039	ug/L		01/11/22 09:14	01/14/22 12:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*15 - 122*	*01/11/22 09:14*	*01/14/22 12:39*	*1*
Nitrobenzene-d5	*97*		*19 - 130*	*01/11/22 09:14*	*01/14/22 12:39*	*1*

Client Sample ID: MW6D-ROX-010622
Date Collected: 01/06/22 12:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	149	S1+	33 - 138	01/11/22 09:14	01/14/22 12:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/11/22 09:14	01/14/22 13:41	1
Benzenethiol	ND	*- UJ	9.8	1.7	ug/L		01/11/22 09:14	01/14/22 13:41	1
Benzoic acid	ND		29	7.2	ug/L		01/11/22 09:14	01/14/22 13:41	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/11/22 09:14	01/14/22 13:41	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		01/11/22 09:14	01/14/22 13:41	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		01/11/22 09:14	01/14/22 13:41	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/11/22 09:14	01/14/22 13:41	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/11/22 09:14	01/14/22 13:41	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/11/22 09:14	01/14/22 13:41	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/11/22 09:14	01/14/22 13:41	1
2-Chlorophenol	ND	*- UJ	9.8	2.2	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/11/22 09:14	01/14/22 13:41	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 13:41	1
Dibenzofuran	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 13:41	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/11/22 09:14	01/14/22 13:41	1
Diethyl phthalate	ND		9.8	0.24	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 13:41	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 13:41	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/11/22 09:14	01/14/22 13:41	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/11/22 09:14	01/14/22 13:41	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 13:41	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 13:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 13:41	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 13:41	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		01/11/22 09:14	01/14/22 13:41	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/11/22 09:14	01/14/22 13:41	1
Indene	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 13:41	1
Isophorone	ND		9.8	0.14	ug/L		01/11/22 09:14	01/14/22 13:41	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/11/22 09:14	01/14/22 13:41	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		01/11/22 09:14	01/14/22 13:41	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/11/22 09:14	01/14/22 13:41	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/11/22 09:14	01/14/22 13:41	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/11/22 09:14	01/14/22 13:41	1
2-Nitrophenol	ND		9.8	5.1	ug/L		01/11/22 09:14	01/14/22 13:41	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/11/22 09:14	01/14/22 13:41	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 13:41	1

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

Job ID: 400-213748-1

Client Sample ID: MW6D-ROX-010622
Date Collected: 01/06/22 12:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/11/22 09:14	01/14/22 13:41	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/11/22 09:14	01/14/22 13:41	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:14	01/14/22 13:41	1
Phenol	ND		9.8	2.5	ug/L		01/11/22 09:14	01/14/22 13:41	1
Pyridine	ND		9.8	3.1	ug/L		01/11/22 09:14	01/14/22 13:41	1
Quinoline	ND		9.8	4.4	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/11/22 09:14	01/14/22 13:41	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*01/11/22 09:14*	*01/14/22 13:41*	*1*
2-Fluorophenol	*33*		*13 - 113*	*01/11/22 09:14*	*01/14/22 13:41*	*1*
Nitrobenzene-d5	*72*		*36 - 126*	*01/11/22 09:14*	*01/14/22 13:41*	*1*
Phenol-d5	*60*		*17 - 127*	*01/11/22 09:14*	*01/14/22 13:41*	*1*
Terphenyl-d14	*107*		*44 - 149*	*01/11/22 09:14*	*01/14/22 13:41*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*01/11/22 09:14*	*01/14/22 13:41*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		01/11/22 10:45	01/11/22 21:24	1
1,2-Dibromoethane	ND		0.021	0.016	ug/L		01/11/22 10:45	01/11/22 21:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*01/11/22 10:45*	*01/11/22 21:24*	*1*

Client Sample ID: MW6C-ROX-010622
Date Collected: 01/06/22 13:35
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 18:34	1
Acrolein	ND		20	3.3	ug/L			01/10/22 18:34	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 18:34	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 18:34	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 18:34	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 18:34	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 18:34	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 18:34	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 18:34	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 18:34	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 18:34	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 18:34	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 18:34	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 18:34	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 18:34	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 18:34	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 18:34	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 18:34	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 18:34	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 18:34	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 18:34	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 18:34	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 18:34	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 18:34	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 18:34	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 18:34	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 18:34	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 18:34	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 18:34	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 18:34	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 18:34	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 18:34	1
Methyl tert-butyl ether	0.31	J	1.0	0.22	ug/L			01/10/22 18:34	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 18:34	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 18:34	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 18:34	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 18:34	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 18:34	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 18:34	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 18:34	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 18:34	1

Client Sample ID: MW6C-ROX-010622
Date Collected: 01/06/22 13:35
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 18:34	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 18:34	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 18:34	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 18:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 18:34	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 18:34	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 18:34	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 18:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 18:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 18:34	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 18:34	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 18:34	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 18:34	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 18:34	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 18:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 18:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 18:34	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 18:34	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 18:34	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/10/22 18:34*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/10/22 18:34*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 18:34*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.031	ug/L		01/11/22 09:14	01/14/22 12:56	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/22 09:14	01/14/22 12:56	1
Anthracene	ND		0.20	0.031	ug/L		01/11/22 09:14	01/14/22 12:56	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 12:56	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/11/22 09:14	01/14/22 12:56	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/11/22 09:14	01/14/22 12:56	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:14	01/14/22 12:56	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/11/22 09:14	01/14/22 12:56	1
Chrysene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 12:56	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/22 09:14	01/14/22 12:56	1
Fluoranthene	ND		0.20	0.067	ug/L		01/11/22 09:14	01/14/22 12:56	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:14	01/14/22 12:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 12:56	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 12:56	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/11/22 09:14	01/14/22 12:56	1
Phenanthrene	ND		0.20	0.035	ug/L		01/11/22 09:14	01/14/22 12:56	1
Pyrene	ND		0.20	0.039	ug/L		01/11/22 09:14	01/14/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*15 - 122*	*01/11/22 09:14*	*01/14/22 12:56*	*1*
Nitrobenzene-d5	*89*		*19 - 130*	*01/11/22 09:14*	*01/14/22 12:56*	*1*

Client Sample ID: MW6C-ROX-010622
Date Collected: 01/06/22 13:35
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	141	S1+	33 - 138	01/11/22 09:14	01/14/22 12:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/11/22 09:14	01/14/22 14:02	1
Benzenethiol	ND	*- UJ	9.8	1.7	ug/L		01/11/22 09:14	01/14/22 14:02	1
Benzoic acid	ND		29	7.2	ug/L		01/11/22 09:14	01/14/22 14:02	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/11/22 09:14	01/14/22 14:02	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		01/11/22 09:14	01/14/22 14:02	1
Bis(2-chloroethyl)ether	ND		9.8	2.7	ug/L		01/11/22 09:14	01/14/22 14:02	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/11/22 09:14	01/14/22 14:02	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/11/22 09:14	01/14/22 14:02	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/11/22 09:14	01/14/22 14:02	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/11/22 09:14	01/14/22 14:02	1
2-Chlorophenol	ND	*- UJ	9.8	2.2	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/11/22 09:14	01/14/22 14:02	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 14:02	1
Dibenzofuran	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 14:02	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/11/22 09:14	01/14/22 14:02	1
Diethyl phthalate	ND		9.8	0.24	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 14:02	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 14:02	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		01/11/22 09:14	01/14/22 14:02	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/11/22 09:14	01/14/22 14:02	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 14:02	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 14:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 14:02	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/11/22 09:14	01/14/22 14:02	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:14	01/14/22 14:02	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/11/22 09:14	01/14/22 14:02	1
Indene	ND		9.8	0.98	ug/L		01/11/22 09:14	01/14/22 14:02	1
Isophorone	ND		9.8	0.14	ug/L		01/11/22 09:14	01/14/22 14:02	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/11/22 09:14	01/14/22 14:02	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		01/11/22 09:14	01/14/22 14:02	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/11/22 09:14	01/14/22 14:02	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/11/22 09:14	01/14/22 14:02	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/11/22 09:14	01/14/22 14:02	1
2-Nitrophenol	ND		9.8	5.1	ug/L		01/11/22 09:14	01/14/22 14:02	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/11/22 09:14	01/14/22 14:02	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 14:02	1

Client Sample ID: MW6C-ROX-010622
Date Collected: 01/06/22 13:35
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/11/22 09:14	01/14/22 14:02	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/11/22 09:14	01/14/22 14:02	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:14	01/14/22 14:02	1
Phenol	ND		9.8	2.6	ug/L		01/11/22 09:14	01/14/22 14:02	1
Pyridine	ND		9.8	3.1	ug/L		01/11/22 09:14	01/14/22 14:02	1
Quinoline	ND	U	9.8	4.4	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/11/22 09:14	01/14/22 14:02	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/11/22 09:14	01/14/22 14:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/11/22 09:14*	*01/14/22 14:02*	*1*
2-Fluorophenol	*7*	*S1-*	*13 - 113*	*01/11/22 09:14*	*01/14/22 14:02*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*01/11/22 09:14*	*01/14/22 14:02*	*1*
Phenol-d5	*30*		*17 - 127*	*01/11/22 09:14*	*01/14/22 14:02*	*1*
Terphenyl-d14	*101*		*44 - 149*	*01/11/22 09:14*	*01/14/22 14:02*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*01/11/22 09:14*	*01/14/22 14:02*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 21:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*51 - 149*	*01/11/22 10:45*	*01/11/22 21:44*	*1*

Client Sample ID: TB-ROX-010622-8260-A
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 15:06	1
Acrolein	ND		20	3.3	ug/L			01/10/22 15:06	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 15:06	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 15:06	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 15:06	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 15:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 15:06	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 15:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 15:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 15:06	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 15:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 15:06	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 15:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 15:06	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 15:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 15:06	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 15:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 15:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 15:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 15:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 15:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 15:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 15:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 15:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 15:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 15:06	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 15:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 15:06	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 15:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 15:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 15:06	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 15:06	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 15:06	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 15:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 15:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 15:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 15:06	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 15:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 15:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 15:06	1

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

Job ID: 400-213748-1

Client Sample ID: TB-ROX-010622-8260-A
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 15:06	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 15:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 15:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 15:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 15:06	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 15:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 15:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 15:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 15:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 15:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 15:06	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 15:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 15:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 15:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 15:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 15:06	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 15:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 15:06	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/10/22 15:06*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/10/22 15:06*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/10/22 15:06*	*1*

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

Job ID: 400-213748-1

Client Sample ID: TB-ROX-010622-8011-A
Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/11/22 10:45	01/11/22 18:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*01/11/22 10:45*	*01/11/22 18:04*	*1*

Client Sample ID: MW9-ROX-010622-EB
Date Collected: 01/06/22 08:15
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 15:32	1
Acrolein	ND		20	3.3	ug/L			01/10/22 15:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 15:32	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 15:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 15:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 15:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 15:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 15:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 15:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 15:32	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 15:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 15:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 15:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 15:32	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 15:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 15:32	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 15:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 15:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 15:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 15:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 15:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 15:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 15:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 15:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 15:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 15:32	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 15:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 15:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 15:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 15:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 15:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 15:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 15:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 15:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 15:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 15:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 15:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 15:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 15:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 15:32	1

Client Sample ID: MW9-ROX-010622-EB
Date Collected: 01/06/22 08:15
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 15:32	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 15:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 15:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 15:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 15:32	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 15:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 15:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 15:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 15:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 15:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 15:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 15:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 15:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 15:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 15:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 15:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 15:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 15:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/10/22 15:32*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/10/22 15:32*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 15:32*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:13	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 13:13	1
Anthracene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:13	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 13:13	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 13:13	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/11/22 09:14	01/14/22 13:13	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 13:13	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/11/22 09:14	01/14/22 13:13	1
Chrysene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 13:13	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/11/22 09:14	01/14/22 13:13	1
Fluoranthene	ND		0.19	0.065	ug/L		01/11/22 09:14	01/14/22 13:13	1
Fluorene	ND		0.19	0.10	ug/L		01/11/22 09:14	01/14/22 13:13	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 13:13	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 13:13	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 13:13	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 13:13	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*15 - 122*	*01/11/22 09:14*	*01/14/22 13:13*	*1*
Nitrobenzene-d5	*90*		*19 - 130*	*01/11/22 09:14*	*01/14/22 13:13*	*1*

Client Sample ID: MW9-ROX-010622-EB
Date Collected: 01/06/22 08:15
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*139*	*S1+*	*33 - 138*	*01/11/22 09:14*	*01/14/22 13:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 14:23	1
Benzenethiol	ND	*-	9.5	1.6	ug/L		01/11/22 09:14	01/14/22 14:23	1
Benzoic acid	ND		29	7.0	ug/L		01/11/22 09:14	01/14/22 14:23	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 14:23	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 14:23	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 14:23	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 14:23	1
Bis(2-ethylhexyl) phthalate	5.2	J	9.5	4.8	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/11/22 09:14	01/14/22 14:23	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 14:23	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 14:23	1
2-Chlorophenol	ND	*-	9.5	2.1	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 14:23	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:23	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:23	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/11/22 09:14	01/14/22 14:23	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:23	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:23	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 14:23	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 14:23	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:23	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:23	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:23	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 14:23	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/11/22 09:14	01/14/22 14:23	1
Indene	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:23	1
Isophorone	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 14:23	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 14:23	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 14:23	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/11/22 09:14	01/14/22 14:23	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/11/22 09:14	01/14/22 14:23	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/11/22 09:14	01/14/22 14:23	1
2-Nitrophenol	ND		9.5	5.0	ug/L		01/11/22 09:14	01/14/22 14:23	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/11/22 09:14	01/14/22 14:23	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:23	1

Client Sample ID: MW9-ROX-010622-EB
Date Collected: 01/06/22 08:15
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/11/22 09:14	01/14/22 14:23	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/11/22 09:14	01/14/22 14:23	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 14:23	1
Phenol	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 14:23	1
Pyridine	ND		9.5	3.0	ug/L		01/11/22 09:14	01/14/22 14:23	1
Quinoline	ND		9.5	4.3	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/11/22 09:14	01/14/22 14:23	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/11/22 09:14*	*01/14/22 14:23*	*1*
2-Fluorophenol	*29*		*13 - 113*	*01/11/22 09:14*	*01/14/22 14:23*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/11/22 09:14*	*01/14/22 14:23*	*1*
Phenol-d5	*49*		*17 - 127*	*01/11/22 09:14*	*01/14/22 14:23*	*1*
Terphenyl-d14	*101*		*44 - 149*	*01/11/22 09:14*	*01/14/22 14:23*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*01/11/22 09:14*	*01/14/22 14:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/11/22 10:45	01/11/22 18:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/11/22 10:45*	*01/11/22 18:24*	*1*

Client Sample ID: MW9-ROX-010622
Date Collected: 01/06/22 11:05
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 15:58	1
Acrolein	ND		20	3.3	ug/L			01/10/22 15:58	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 15:58	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 15:58	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 15:58	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 15:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 15:58	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 15:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 15:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 15:58	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 15:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 15:58	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 15:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 15:58	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 15:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 15:58	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 15:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 15:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 15:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 15:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 15:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 15:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 15:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 15:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 15:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 15:58	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 15:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 15:58	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 15:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 15:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 15:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 15:58	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 15:58	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 15:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 15:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 15:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 15:58	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 15:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 15:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 15:58	1

Client Sample ID: MW9-ROX-010622
Date Collected: 01/06/22 11:05
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 15:58	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 15:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 15:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 15:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 15:58	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 15:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 15:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 15:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 15:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 15:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 15:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 15:58	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 15:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 15:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 15:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 15:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 15:58	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 15:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 15:58	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/10/22 15:58*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/10/22 15:58*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 15:58*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:30	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 13:30	1
Anthracene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:30	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 13:30	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 13:30	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/11/22 09:14	01/14/22 13:30	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 13:30	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/11/22 09:14	01/14/22 13:30	1
Chrysene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 13:30	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/11/22 09:14	01/14/22 13:30	1
Fluoranthene	ND		0.19	0.064	ug/L		01/11/22 09:14	01/14/22 13:30	1
Fluorene	ND		0.19	0.10	ug/L		01/11/22 09:14	01/14/22 13:30	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 13:30	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 13:30	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 13:30	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 13:30	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 13:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*105*		*15 - 122*	*01/11/22 09:14*	*01/14/22 13:30*	*1*
Nitrobenzene-d5	*104*		*19 - 130*	*01/11/22 09:14*	*01/14/22 13:30*	*1*

Client Sample ID: MW9-ROX-010622
Date Collected: 01/06/22 11:05
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*33 - 138*	*01/11/22 09:14*	*01/14/22 13:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 14:43	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		01/11/22 09:14	01/14/22 14:43	1
Benzoic acid	ND		28	6.9	ug/L		01/11/22 09:14	01/14/22 14:43	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 14:43	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 14:43	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 14:43	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 14:43	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/11/22 09:14	01/14/22 14:43	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 14:43	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 14:43	1
2-Chlorophenol	ND	*- UJ	9.5	2.1	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 14:43	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:43	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:43	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/11/22 09:14	01/14/22 14:43	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:43	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:43	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 14:43	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 14:43	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:43	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:43	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 14:43	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 14:43	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/11/22 09:14	01/14/22 14:43	1
Indene	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 14:43	1
Isophorone	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 14:43	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 14:43	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 14:43	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/11/22 09:14	01/14/22 14:43	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/11/22 09:14	01/14/22 14:43	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/11/22 09:14	01/14/22 14:43	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/11/22 09:14	01/14/22 14:43	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/11/22 09:14	01/14/22 14:43	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:43	1

Client Sample ID: MW9-ROX-010622
Date Collected: 01/06/22 11:05
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/11/22 09:14	01/14/22 14:43	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/11/22 09:14	01/14/22 14:43	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 14:43	1
Phenol	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 14:43	1
Pyridine	ND		9.5	3.0	ug/L		01/11/22 09:14	01/14/22 14:43	1
Quinoline	ND	UCL	9.5	4.3	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/11/22 09:14	01/14/22 14:43	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/11/22 09:14*	*01/14/22 14:43*	*1*
2-Fluorophenol	*18*		*13 - 113*	*01/11/22 09:14*	*01/14/22 14:43*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*01/11/22 09:14*	*01/14/22 14:43*	*1*
Phenol-d5	*47*		*17 - 127*	*01/11/22 09:14*	*01/14/22 14:43*	*1*
Terphenyl-d14	*100*		*44 - 149*	*01/11/22 09:14*	*01/14/22 14:43*	*1*
2,4,6-Tribromophenol	*77*		*26 - 150*	*01/11/22 09:14*	*01/14/22 14:43*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/11/22 10:45	01/11/22 18:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/11/22 10:45*	*01/11/22 18:44*	*1*

Client Sample ID: ROST3MW-ROX-010622
Date Collected: 01/06/22 12:20
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 16:24	1
Acrolein	ND		20	3.3	ug/L			01/10/22 16:24	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 16:24	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 16:24	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 16:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 16:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 16:24	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 16:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 16:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 16:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 16:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 16:24	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 16:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 16:24	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 16:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 16:24	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 16:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 16:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 16:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 16:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 16:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 16:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 16:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 16:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 16:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 16:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 16:24	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 16:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 16:24	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 16:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 16:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 16:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 16:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 16:24	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 16:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 16:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 16:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 16:24	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 16:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 16:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 16:24	1

Client Sample ID: ROST3MW-ROX-010622

Date Collected: 01/06/22 12:20
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 16:24	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 16:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 16:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 16:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 16:24	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 16:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 16:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 16:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 16:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 16:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 16:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 16:24	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 16:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 16:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 16:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 16:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 16:24	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 16:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 16:24	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*01/10/22 16:24*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/10/22 16:24*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/10/22 16:24*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:47	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/11/22 09:14	01/14/22 13:47	1
Anthracene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 13:47	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 13:47	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 13:47	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/11/22 09:14	01/14/22 13:47	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 13:47	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/11/22 09:14	01/14/22 13:47	1
Chrysene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 13:47	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/11/22 09:14	01/14/22 13:47	1
Fluoranthene	ND		0.19	0.064	ug/L		01/11/22 09:14	01/14/22 13:47	1
Fluorene	ND		0.19	0.10	ug/L		01/11/22 09:14	01/14/22 13:47	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 13:47	1
1-Methylnaphthalene	0.19		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 13:47	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 13:47	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 13:47	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*15 - 122*	*01/11/22 09:14*	*01/14/22 13:47*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*01/11/22 09:14*	*01/14/22 13:47*	*1*

Client Sample ID: ROST3MW-ROX-010622
Date Collected: 01/06/22 12:20
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*147*	*S1+*	*33 - 138*	*01/11/22 09:14*	*01/14/22 13:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		01/11/22 09:14	01/14/22 15:04	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		01/11/22 09:14	01/14/22 15:04	1
Benzoic acid	ND		28	6.9	ug/L		01/11/22 09:14	01/14/22 15:04	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/11/22 09:14	01/14/22 15:04	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		01/11/22 09:14	01/14/22 15:04	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		01/11/22 09:14	01/14/22 15:04	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/11/22 09:14	01/14/22 15:04	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/11/22 09:14	01/14/22 15:04	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/11/22 09:14	01/14/22 15:04	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/11/22 09:14	01/14/22 15:04	1
2-Chlorophenol	ND	*-	9.4	2.1	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/11/22 09:14	01/14/22 15:04	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/11/22 09:14	01/14/22 15:04	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/11/22 09:14	01/14/22 15:04	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/11/22 09:14	01/14/22 15:04	1
Diethyl phthalate	ND		9.4	0.23	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/11/22 09:14	01/14/22 15:04	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/11/22 09:14	01/14/22 15:04	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		01/11/22 09:14	01/14/22 15:04	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		01/11/22 09:14	01/14/22 15:04	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/11/22 09:14	01/14/22 15:04	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/11/22 09:14	01/14/22 15:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/11/22 09:14	01/14/22 15:04	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/11/22 09:14	01/14/22 15:04	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		01/11/22 09:14	01/14/22 15:04	1
Hexachloroethane	ND		9.4	4.0	ug/L		01/11/22 09:14	01/14/22 15:04	1
Indene	ND		9.4	0.94	ug/L		01/11/22 09:14	01/14/22 15:04	1
Isophorone	ND		9.4	0.13	ug/L		01/11/22 09:14	01/14/22 15:04	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/11/22 09:14	01/14/22 15:04	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 15:04	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/11/22 09:14	01/14/22 15:04	1
3-Nitroaniline	ND		9.4	1.7	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/11/22 09:14	01/14/22 15:04	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/11/22 09:14	01/14/22 15:04	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/11/22 09:14	01/14/22 15:04	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/11/22 09:14	01/14/22 15:04	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/11/22 09:14	01/14/22 15:04	1

Client Sample ID: ROST3MW-ROX-010622
Date Collected: 01/06/22 12:20
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/11/22 09:14	01/14/22 15:04	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/11/22 09:14	01/14/22 15:04	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 15:04	1
Phenol	ND		9.4	2.4	ug/L		01/11/22 09:14	01/14/22 15:04	1
Pyridine	ND		9.4	3.0	ug/L		01/11/22 09:14	01/14/22 15:04	1
Quinoline	ND	UJ	9.4	4.2	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/11/22 09:14	01/14/22 15:04	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/11/22 09:14	01/14/22 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*46 - 124*	*01/11/22 09:14*	*01/14/22 15:04*	*1*
2-Fluorophenol	*28*		*13 - 113*	*01/11/22 09:14*	*01/14/22 15:04*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/11/22 09:14*	*01/14/22 15:04*	*1*
Phenol-d5	*52*		*17 - 127*	*01/11/22 09:14*	*01/14/22 15:04*	*1*
Terphenyl-d14	*104*		*44 - 149*	*01/11/22 09:14*	*01/14/22 15:04*	*1*
2,4,6-Tribromophenol	*81*		*26 - 150*	*01/11/22 09:14*	*01/14/22 15:04*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 19:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*01/11/22 10:45*	*01/11/22 19:04*	*1*

Client Sample ID: MW11-ROX-010622
Date Collected: 01/06/22 13:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 16:50	1
Acrolein	ND		20	3.3	ug/L			01/10/22 16:50	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 16:50	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 16:50	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 16:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 16:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 16:50	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 16:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 16:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 16:50	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 16:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 16:50	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 16:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 16:50	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 16:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 16:50	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 16:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 16:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 16:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 16:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 16:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 16:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 16:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 16:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 16:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 16:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 16:50	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 16:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 16:50	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 16:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 16:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 16:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 16:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 16:50	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 16:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 16:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 16:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 16:50	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 16:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 16:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 16:50	1

Client Sample ID: MW11-ROX-010622

Date Collected: 01/06/22 13:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 16:50	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 16:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 16:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 16:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 16:50	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 16:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 16:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 16:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 16:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 16:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 16:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 16:50	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 16:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 16:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 16:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 16:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 16:50	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 16:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 16:50	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/10/22 16:50*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/10/22 16:50*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 16:50*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 14:04	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 14:04	1
Anthracene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 14:04	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 14:04	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 14:04	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/11/22 09:14	01/14/22 14:04	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 14:04	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/11/22 09:14	01/14/22 14:04	1
Chrysene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 14:04	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/11/22 09:14	01/14/22 14:04	1
Fluoranthene	ND		0.19	0.065	ug/L		01/11/22 09:14	01/14/22 14:04	1
Fluorene	ND		0.19	0.10	ug/L		01/11/22 09:14	01/14/22 14:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 14:04	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 14:04	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 14:04	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 14:04	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*15 - 122*	*01/11/22 09:14*	*01/14/22 14:04*	*1*
Nitrobenzene-d5	*104*		*19 - 130*	*01/11/22 09:14*	*01/14/22 14:04*	*1*

Client Sample ID: MW11-ROX-010622
Date Collected: 01/06/22 13:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*134*		*33 - 138*	*01/11/22 09:14*	*01/14/22 14:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 15:25	1
Benzenethiol	ND	*- LCS	9.5	1.6	ug/L		01/11/22 09:14	01/14/22 15:25	1
Benzoic acid	ND		28	6.9	ug/L		01/11/22 09:14	01/14/22 15:25	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 15:25	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 15:25	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 15:25	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 15:25	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/11/22 09:14	01/14/22 15:25	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 15:25	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 15:25	1
2-Chlorophenol	ND	*- LCS	9.5	2.1	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 15:25	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:25	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:25	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/11/22 09:14	01/14/22 15:25	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:25	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:25	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 15:25	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 15:25	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:25	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:25	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:25	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 15:25	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/11/22 09:14	01/14/22 15:25	1
Indene	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:25	1
Isophorone	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 15:25	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 15:25	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 15:25	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/11/22 09:14	01/14/22 15:25	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/11/22 09:14	01/14/22 15:25	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/11/22 09:14	01/14/22 15:25	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/11/22 09:14	01/14/22 15:25	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/11/22 09:14	01/14/22 15:25	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:25	1

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

Job ID: 400-213748-1

Client Sample ID: MW11-ROX-010622
Date Collected: 01/06/22 13:25
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/11/22 09:14	01/14/22 15:25	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/11/22 09:14	01/14/22 15:25	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 15:25	1
Phenol	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 15:25	1
Pyridine	ND		9.5	3.0	ug/L		01/11/22 09:14	01/14/22 15:25	1
Quinoline	ND	U	9.5	4.3	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/11/22 09:14	01/14/22 15:25	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*46 - 124*	*01/11/22 09:14*	*01/14/22 15:25*	*1*
2-Fluorophenol	*29*		*13 - 113*	*01/11/22 09:14*	*01/14/22 15:25*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/11/22 09:14*	*01/14/22 15:25*	*1*
Phenol-d5	*51*		*17 - 127*	*01/11/22 09:14*	*01/14/22 15:25*	*1*
Terphenyl-d14	*103*		*44 - 149*	*01/11/22 09:14*	*01/14/22 15:25*	*1*
2,4,6-Tribromophenol	*79*		*26 - 150*	*01/11/22 09:14*	*01/14/22 15:25*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/11/22 10:45	01/11/22 19:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*01/11/22 10:45*	*01/11/22 19:24*	*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.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-213748-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-213748-2	TB-ROX-010622-8260-B	92	104	99
400-213748-3	MW6D-ROX-010622-EB	93	104	98
400-213748-4	MW6D-ROX-010622	94	102	98
400-213748-5	MW6C-ROX-010622	94	104	98
400-213758-1	TB-ROX-010622-8260-A	93	102	97
400-213758-3	MW9-ROX-010622-EB	94	103	98
400-213758-4	MW9-ROX-010622	91	102	98
400-213758-5	ROST3MW-ROX-010622	96	102	99
400-213758-6	MW11-ROX-010622	94	106	98
LCS 400-562705/1002	Lab Control Sample	95	104	98
MB 400-562705/5	Method Blank	95	102	98

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-213748-3	MW6D-ROX-010622-EB	59	16	67	47	87	73
400-213748-3 - RE	MW6D-ROX-010622-EB	86	18	66	44	105	104
400-213748-4	MW6D-ROX-010622	63	33	72	60	107	80
400-213748-5	MW6C-ROX-010622	58	7 S1-	69	30	101	77
400-213758-3	MW9-ROX-010622-EB	55	29	65	49	101	69
400-213758-4	MW9-ROX-010622	58	18	68	47	100	77
400-213758-5	ROST3MW-ROX-010622	59	28	67	52	104	81
400-213758-6	MW11-ROX-010622	60	29	65	51	103	79
LCS 400-562825/2-A	Lab Control Sample	54	26	64	49	77	66
LCS 400-562825/4-A	Lab Control Sample	63	16	60	41	80	71
LCS 400-563528/2-A - RE	Lab Control Sample	75	25	63	54	99	82
LCSD 400-562825/3-A	Lab Control Sample Dup	60	37	65	56	100	60
LCSD 400-563528/3-A - RE	Lab Control Sample Dup	67	21	60	54	91	89
MB 400-562825/1-A	Method Blank	58	11 S1-	67	34	104	60
MB 400-563528/1-A - RE	Method Blank	53	13	61	42	118	58

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-213748-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-213748-3	MW6D-ROX-010622-EB	99	99	142 S1+
400-213748-4	MW6D-ROX-010622	105	97	149 S1+
400-213748-5	MW6C-ROX-010622	98	89	141 S1+
400-213758-3	MW9-ROX-010622-EB	92	90	139 S1+
400-213758-4	MW9-ROX-010622	105	104	121
400-213758-5	ROST3MW-ROX-010622	91	95	147 S1+
400-213758-6	MW11-ROX-010622	97	104	134
LCS 400-562825/4-A	Lab Control Sample	90	96	105
MB 400-562825/1-A	Method Blank	100	94	140 S1+

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-213748-1	TB-ROX-010622-8011-B	78
400-213748-3	MW6D-ROX-010622-EB	83
400-213748-4	MW6D-ROX-010622	90
400-213748-5	MW6C-ROX-010622	90
400-213758-2	TB-ROX-010622-8011-A	85
400-213758-3	MW9-ROX-010622-EB	79
400-213758-4	MW9-ROX-010622	84
400-213758-5	ROST3MW-ROX-010622	77
400-213758-6	MW11-ROX-010622	82
LCS 400-562844/2-A	Lab Control Sample	92
MB 400-562844/1-A	Method Blank	84

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-213748-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-010622-8011-B

Lab Sample ID: 400-213748-1

Date Collected: 01/06/22 00:00
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.1 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 20:44	DS	TAL PEN

Client Sample ID: TB-ROX-010622-8260-B

Lab Sample ID: 400-213748-2

Date Collected: 01/06/22 00:00
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 17:16	CAR	TAL PEN

Client Sample ID: MW6D-ROX-010622-EB

Lab Sample ID: 400-213748-3

Date Collected: 01/06/22 08:30
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 17:42	CAR	TAL PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 13:20	S1B	TAL PEN
Total/NA	Prep	3520C	RE		261 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563911	01/21/22 13:23	VC1	TAL PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 12:22	VC1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 21:04	DS	TAL PEN

Client Sample ID: MW6D-ROX-010622

Lab Sample ID: 400-213748-4

Date Collected: 01/06/22 12:25
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 18:08	CAR	TAL PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 13:41	S1B	TAL PEN
Total/NA	Prep	3520C			255.2 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 12:39	VC1	TAL PEN
Total/NA	Prep	8011			33.8 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 21:24	DS	TAL PEN

Client Sample ID: MW6C-ROX-010622

Lab Sample ID: 400-213748-5

Date Collected: 01/06/22 13:35
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 18:34	CAR	TAL PEN

Lab Chronicle

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

Job ID: 400-213748-1

Client Sample ID: MW6C-ROX-010622

Date Collected: 01/06/22 13:35
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213748-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			254.6 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 14:02	S1B	TAL PEN
Total/NA	Prep	3520C			254.6 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 12:56	VC1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 21:44	DS	TAL PEN

Client Sample ID: TB-ROX-010622-8260-A

Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 15:06	CAR	TAL PEN

Client Sample ID: TB-ROX-010622-8011-A

Date Collected: 01/06/22 00:00
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.4 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 18:04	DS	TAL PEN

Client Sample ID: MW9-ROX-010622-EB

Date Collected: 01/06/22 08:15
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 15:32	CAR	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 14:23	S1B	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 13:13	VC1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 18:24	DS	TAL PEN

Client Sample ID: MW9-ROX-010622

Date Collected: 01/06/22 11:05
Date Received: 01/07/22 12:07

Lab Sample ID: 400-213758-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 15:58	CAR	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 14:43	S1B	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 13:30	VC1	TAL PEN

Client Sample ID: MW9-ROX-010622

Lab Sample ID: 400-213758-4

Date Collected: 01/06/22 11:05
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.4 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 18:44	DS	TAL PEN

Client Sample ID: ROST3MW-ROX-010622

Lab Sample ID: 400-213758-5

Date Collected: 01/06/22 12:20
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 16:24	CAR	TAL PEN
Total/NA	Prep	3520C			265.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 15:04	S1B	TAL PEN
Total/NA	Prep	3520C			265.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 13:47	VC1	TAL PEN
Total/NA	Prep	8011			34.6 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 19:04	DS	TAL PEN

Client Sample ID: MW11-ROX-010622

Lab Sample ID: 400-213758-6

Date Collected: 01/06/22 13:25
Matrix: Water
Date Received: 01/07/22 12:07

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 16:50	CAR	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 15:25	S1B	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 14:04	VC1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 19:24	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562705/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 11:10	CAR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562825/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 11:58	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 10:40	VC1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-562844/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:24	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563528/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563808	01/20/22 12:29	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562705/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562705	01/10/22 09:40	CAR	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562825/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:18	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 13:00	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563194	01/14/22 12:05	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562844/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:44	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-213748-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-563528/2-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563808	01/20/22 12:50	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-562825/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:39	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563528/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563808	01/20/22 13:10	S1B	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 562705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-2	TB-ROX-010622-8260-B	Total/NA	Water	8260B	
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	8260B	
400-213748-4	MW6D-ROX-010622	Total/NA	Water	8260B	
400-213748-5	MW6C-ROX-010622	Total/NA	Water	8260B	
400-213758-1	TB-ROX-010622-8260-A	Total/NA	Water	8260B	
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	8260B	
400-213758-4	MW9-ROX-010622	Total/NA	Water	8260B	
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	8260B	
400-213758-6	MW11-ROX-010622	Total/NA	Water	8260B	
MB 400-562705/5	Method Blank	Total/NA	Water	8260B	
LCS 400-562705/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 562825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	3520C	
400-213748-4	MW6D-ROX-010622	Total/NA	Water	3520C	
400-213748-5	MW6C-ROX-010622	Total/NA	Water	3520C	
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	3520C	
400-213758-4	MW9-ROX-010622	Total/NA	Water	3520C	
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	3520C	
400-213758-6	MW11-ROX-010622	Total/NA	Water	3520C	
MB 400-562825/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	8270D	562825
400-213748-4	MW6D-ROX-010622	Total/NA	Water	8270D	562825
400-213748-5	MW6C-ROX-010622	Total/NA	Water	8270D	562825
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	8270D	562825
400-213758-4	MW9-ROX-010622	Total/NA	Water	8270D	562825
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	8270D	562825
400-213758-6	MW11-ROX-010622	Total/NA	Water	8270D	562825
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D	562825
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	562825

Analysis Batch: 563194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	8270D LL	562825
400-213748-4	MW6D-ROX-010622	Total/NA	Water	8270D LL	562825
400-213748-5	MW6C-ROX-010622	Total/NA	Water	8270D LL	562825
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	8270D LL	562825
400-213758-4	MW9-ROX-010622	Total/NA	Water	8270D LL	562825
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	8270D LL	562825
400-213758-6	MW11-ROX-010622	Total/NA	Water	8270D LL	562825

GC/MS Semi VOA (Continued)

Analysis Batch: 563194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D LL	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D LL	562825

Prep Batch: 563528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-3 - RE	MW6D-ROX-010622-EB	Total/NA	Water	3520C	
MB 400-563528/1-A - RE	Method Blank	Total/NA	Water	3520C	
LCS 400-563528/2-A - RE	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563528/3-A - RE	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-563528/1-A - RE	Method Blank	Total/NA	Water	8270D	563528
LCS 400-563528/2-A - RE	Lab Control Sample	Total/NA	Water	8270D	563528
LCSD 400-563528/3-A - RE	Lab Control Sample Dup	Total/NA	Water	8270D	563528

Analysis Batch: 563911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-3 - RE	MW6D-ROX-010622-EB	Total/NA	Water	8270D	563528

GC Semi VOA

Prep Batch: 562844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-1	TB-ROX-010622-8011-B	Total/NA	Water	8011	
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	8011	
400-213748-4	MW6D-ROX-010622	Total/NA	Water	8011	
400-213748-5	MW6C-ROX-010622	Total/NA	Water	8011	
400-213758-2	TB-ROX-010622-8011-A	Total/NA	Water	8011	
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	8011	
400-213758-4	MW9-ROX-010622	Total/NA	Water	8011	
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	8011	
400-213758-6	MW11-ROX-010622	Total/NA	Water	8011	
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 562891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213748-1	TB-ROX-010622-8011-B	Total/NA	Water	8011	562844
400-213748-3	MW6D-ROX-010622-EB	Total/NA	Water	8011	562844
400-213748-4	MW6D-ROX-010622	Total/NA	Water	8011	562844
400-213748-5	MW6C-ROX-010622	Total/NA	Water	8011	562844
400-213758-2	TB-ROX-010622-8011-A	Total/NA	Water	8011	562844
400-213758-3	MW9-ROX-010622-EB	Total/NA	Water	8011	562844
400-213758-4	MW9-ROX-010622	Total/NA	Water	8011	562844
400-213758-5	ROST3MW-ROX-010622	Total/NA	Water	8011	562844
400-213758-6	MW11-ROX-010622	Total/NA	Water	8011	562844
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	562844
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	562844

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-562705/5
Matrix: Water
Analysis Batch: 562705

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/10/22 11:10	1
Acrolein	ND		20	3.3	ug/L			01/10/22 11:10	1
Acrylonitrile	ND		10	2.8	ug/L			01/10/22 11:10	1
Benzene	ND		1.0	0.13	ug/L			01/10/22 11:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/10/22 11:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/10/22 11:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Bromoform	ND		5.0	0.25	ug/L			01/10/22 11:10	1
Bromomethane	ND		1.0	0.98	ug/L			01/10/22 11:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/10/22 11:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/10/22 11:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/10/22 11:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/10/22 11:10	1
Chloroethane	ND		1.0	0.76	ug/L			01/10/22 11:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/10/22 11:10	1
Chloroform	ND		1.0	0.60	ug/L			01/10/22 11:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/10/22 11:10	1
Chloromethane	ND		1.0	0.32	ug/L			01/10/22 11:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/10/22 11:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/10/22 11:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/10/22 11:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/10/22 11:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/10/22 11:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/10/22 11:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/10/22 11:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 11:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/10/22 11:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/10/22 11:10	1
2-Hexanone	ND		25	1.4	ug/L			01/10/22 11:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/10/22 11:10	1
Methylene bromide	ND		5.0	0.22	ug/L			01/10/22 11:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/10/22 11:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/10/22 11:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/10/22 11:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/10/22 11:10	1
Naphthalene	ND		1.0	1.0	ug/L			01/10/22 11:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/10/22 11:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/10/22 11:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/10/22 11:10	1
o-Xylene	ND		5.0	0.60	ug/L			01/10/22 11:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/10/22 11:10	1

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

Lab Sample ID: MB 400-562705/5
Matrix: Water
Analysis Batch: 562705

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/10/22 11:10	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/10/22 11:10	1
Styrene	ND		1.0	1.0	ug/L			01/10/22 11:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/10/22 11:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/10/22 11:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/10/22 11:10	1
Toluene	ND		1.0	0.41	ug/L			01/10/22 11:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/10/22 11:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/10/22 11:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/10/22 11:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/10/22 11:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/10/22 11:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/10/22 11:10	1
Trichloroethene	ND		1.0	0.15	ug/L			01/10/22 11:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/10/22 11:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/10/22 11:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/10/22 11:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/10/22 11:10	1
Vinyl acetate	ND		25	0.93	ug/L			01/10/22 11:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/10/22 11:10	1
Xylenes, Total	ND		10	1.6	ug/L			01/10/22 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*01/10/22 11:10*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/10/22 11:10*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/10/22 11:10*	*1*

Lab Sample ID: LCS 400-562705/1002
Matrix: Water
Analysis Batch: 562705

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	203		ug/L		102	43 - 160
Acrolein	500	512		ug/L		102	38 - 160
Acrylonitrile	500	499		ug/L		100	64 - 142
Benzene	50.0	53.5		ug/L		107	70 - 130
Bromobenzene	50.0	55.1		ug/L		110	70 - 132
Bromochloromethane	50.0	56.4		ug/L		113	70 - 130
Bromodichloromethane	50.0	53.8		ug/L		108	67 - 133
Bromoform	50.0	52.9		ug/L		106	57 - 140
Bromomethane	50.0	76.5		ug/L		153	10 - 160
2-Butanone (MEK)	200	210		ug/L		105	61 - 145
Carbon disulfide	50.0	53.5		ug/L		107	61 - 137
Carbon tetrachloride	50.0	55.1		ug/L		110	61 - 137
Chlorobenzene	50.0	55.6		ug/L		111	70 - 130
Dibromochloromethane	50.0	54.0		ug/L		108	67 - 135
Chloroethane	50.0	55.2		ug/L		110	55 - 141

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

Lab Sample ID: LCS 400-562705/1002
Matrix: Water
Analysis Batch: 562705

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	57.0		ug/L		114	10 - 160
Chloroform	50.0	53.4		ug/L		107	69 - 130
1-Chlorohexane	50.0	54.9		ug/L		110	69 - 130
Chloromethane	50.0	53.8		ug/L		108	58 - 137
cis-1,2-Dichloroethene	50.0	52.5		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	52.8		ug/L		106	69 - 132
1,2-Dichlorobenzene	50.0	55.4		ug/L		111	67 - 130
1,3-Dichlorobenzene	50.0	56.6		ug/L		113	70 - 130
1,4-Dichlorobenzene	50.0	56.1		ug/L		112	70 - 130
Dichlorodifluoromethane	50.0	54.0		ug/L		108	41 - 146
1,1-Dichloroethane	50.0	52.2		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	52.8		ug/L		106	69 - 130
1,1-Dichloroethene	50.0	52.6		ug/L		105	63 - 134
1,2-Dichloropropane	50.0	52.5		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	52.6		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	51.8		ug/L		104	52 - 135
1,1-Dichloropropene	50.0	54.8		ug/L		110	70 - 130
Ethylbenzene	50.0	54.9		ug/L		110	70 - 130
Ethyl methacrylate	50.0	50.2		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	65.3		ug/L		131	53 - 140
2-Hexanone	200	196		ug/L		98	65 - 137
Isopropylbenzene	50.0	57.4		ug/L		115	70 - 130
Methylene bromide	50.0	55.1		ug/L		110	70 - 130
Methylene Chloride	50.0	50.8		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	202		ug/L		101	69 - 138
Methyl tert-butyl ether	50.0	52.1		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	53.2		ug/L		106	70 - 130
Naphthalene	50.0	52.7		ug/L		105	47 - 149
n-Butylbenzene	50.0	59.4		ug/L		119	67 - 130
N-Propylbenzene	50.0	57.3		ug/L		115	70 - 130
o-Chlorotoluene	50.0	54.2		ug/L		108	70 - 130
o-Xylene	50.0	54.3		ug/L		109	70 - 130
p-Chlorotoluene	50.0	53.7		ug/L		107	70 - 130
p-Isopropyltoluene	50.0	55.9		ug/L		112	65 - 130
sec-Butylbenzene	50.0	57.9		ug/L		116	66 - 130
Styrene	50.0	55.1		ug/L		110	70 - 130
tert-Butylbenzene	50.0	55.3		ug/L		111	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.2		ug/L		108	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.3		ug/L		103	70 - 131
Tetrachloroethene	50.0	59.2		ug/L		118	65 - 130
Toluene	50.0	51.7		ug/L		103	70 - 130
trans-1,2-Dichloroethene	50.0	53.7		ug/L		107	70 - 130
trans-1,3-Dichloropropene	50.0	51.6		ug/L		103	63 - 130
1,2,3-Trichlorobenzene	50.0	57.7		ug/L		115	60 - 138
1,2,4-Trichlorobenzene	50.0	59.5		ug/L		119	60 - 140
1,1,1-Trichloroethane	50.0	55.7		ug/L		111	68 - 130
1,1,2-Trichloroethane	50.0	52.4		ug/L		105	70 - 130
Trichloroethene	50.0	57.6		ug/L		115	70 - 130
Trichlorofluoromethane	50.0	57.1		ug/L		114	65 - 138

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

Lab Sample ID: LCS 400-562705/1002
Matrix: Water
Analysis Batch: 562705

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	51.4		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	55.8		ug/L		112	70 - 130
1,3,5-Trimethylbenzene	50.0	54.9		ug/L		110	69 - 130
Vinyl acetate	100	107		ug/L		107	26 - 160
Vinyl chloride	50.0	54.9		ug/L		110	59 - 136
Xylenes, Total	100	107		ug/L		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzenethiol	ND		10	1.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzoic acid	ND		30	7.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzyl alcohol	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/11/22 09:13	01/14/22 11:58	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloroaniline	ND		10	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chlorophenol	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenzofuran	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Diethyl phthalate	ND		10	0.24	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
1,4-Dioxane	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachloroethane	ND		10	4.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Indene	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Isophorone	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Methylphenol	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitroaniline	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
3-Nitroaniline	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitroaniline	ND		10	1.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Nitrobenzene	ND		10	0.13	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitrophenol	ND		10	5.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitrophenol	ND		10	2.1	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
Phenol	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pyridine	ND		10	3.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Quinoline	ND		10	4.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Phenol-d5	*34*		*17 - 127*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Terphenyl-d14	*104*		*44 - 149*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*01/11/22 09:13*	*01/14/22 11:58*	*1*

Lab Sample ID: LCS 400-562825/2-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec.	%Rec. Limits
Benzenethiol	120	4.36	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*77*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

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

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.2		ug/L		51	21 - 120
Benzoic acid	498	281		ug/L		56	10 - 144
Benzyl alcohol	120	86.8		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	64.0		ug/L		53	47 - 120
Bis(2-chloroethyl)ether	120	71.8		ug/L		60	44 - 120
bis (2-chloroisopropyl) ether	120	83.7		ug/L		70	33 - 121
Bis(2-ethylhexyl) phthalate	120	104		ug/L		86	52 - 147
4-Bromophenyl phenyl ether	120	90.6		ug/L		75	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	55.2		ug/L		46	26 - 120
4-Chloro-3-methylphenol	120	74.5		ug/L		62	48 - 131
2-Chloronaphthalene	120	76.3		ug/L		64	52 - 121
2-Chlorophenol	120	43.1	*-	ug/L		36	40 - 120
4-Chlorophenyl phenyl ether	120	81.7		ug/L		68	56 - 125
Dibenz[a,h]acridine	120	117		ug/L		98	31 - 150
Dibenzofuran	120	79.6		ug/L		66	56 - 122
3,3'-Dichlorobenzidine	160	125		ug/L		78	36 - 132
2,4-Dichlorophenol	120	60.2		ug/L		50	49 - 120
Diethyl phthalate	120	105		ug/L		88	50 - 137
2,4-Dimethylphenol	120	85.9		ug/L		72	48 - 120
Dimethyl phthalate	120	85.8		ug/L		71	57 - 124
Di-n-butyl phthalate	120	95.7		ug/L		80	58 - 126
4,6-Dinitro-ortho-cresol	240	287		ug/L		120	23 - 148
2,4-Dinitrophenol	240	290		ug/L		121	10 - 150
2,4-Dinitrotoluene	120	82.9		ug/L		69	54 - 142
2,6-Dinitrotoluene	120	73.8		ug/L		61	55 - 130
Di-n-octyl phthalate	120	99.9		ug/L		83	57 - 138
1,4-Dioxane	120	51.5		ug/L		43	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	85.2		ug/L		71	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	37.9		ug/L		32	10 - 134
Hexachloroethane	120	55.8		ug/L		46	20 - 120
Indene	120	77.1		ug/L		64	49 - 120
Isophorone	120	71.0		ug/L		59	48 - 120
2-Methylphenol	120	78.9		ug/L		66	46 - 124
3 & 4 Methylphenol	120	80.7		ug/L		67	45 - 120
2-Nitroaniline	120	91.0		ug/L		76	51 - 145
3-Nitroaniline	120	69.0		ug/L		58	37 - 127
4-Nitroaniline	120	80.7		ug/L		67	36 - 137
Nitrobenzene	120	71.7		ug/L		60	45 - 120
2-Nitrophenol	120	59.6		ug/L		50	40 - 124
4-Nitrophenol	240	221		ug/L		92	23 - 146
N-Nitrosodimethylamine	120	108		ug/L		90	29 - 137
N-Nitrosodi-n-propylamine	120	97.1		ug/L		81	45 - 120
N-Nitrosodiphenylamine	119	77.6		ug/L		65	54 - 120
Pentachlorophenol	240	221		ug/L		92	31 - 130
Phenol	120	47.3		ug/L		39	11 - 120
Pyridine	240	101		ug/L		42	16 - 120

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

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	76.7		ug/L		64	49 - 130
2,4,5-Trichlorophenol	120	76.6		ug/L		64	51 - 136
2,4,6-Trichlorophenol	120	70.1		ug/L		58	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*46 - 124*
2-Fluorophenol	*16*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*41*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*71*		*26 - 150*

Lab Sample ID: LCSD 400-562825/3-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	5.46	J *-	ug/L		5	10 - 120	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*60*		*26 - 150*

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

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate - RE	ND		10	5.0	ug/L		01/18/22 10:55	01/20/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl - RE	*53*		*46 - 124*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2-Fluorophenol - RE	*13*		*13 - 113*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Nitrobenzene-d5 - RE	*61*		*36 - 126*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Phenol-d5 - RE	*42*		*17 - 127*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Terphenyl-d14 - RE	*118*		*44 - 149*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2,4,6-Tribromophenol - RE	*58*		*26 - 150*	*01/18/22 10:55*	*01/20/22 12:29*	*1*

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

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate - RE	120	114		ug/L		95	52 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl - RE	*75*		*46 - 124*
2-Fluorophenol - RE	*25*		*13 - 113*
Nitrobenzene-d5 - RE	*63*		*36 - 126*
Phenol-d5 - RE	*54*		*17 - 127*
Terphenyl-d14 - RE	*99*		*44 - 149*
2,4,6-Tribromophenol - RE	*82*		*26 - 150*

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-ethylhexyl) phthalate - RE	120	108		ug/L		90	52 - 147	6	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl - RE	*67*		*46 - 124*
2-Fluorophenol - RE	*21*		*13 - 113*
Nitrobenzene-d5 - RE	*60*		*36 - 126*
Phenol-d5 - RE	*54*		*17 - 127*
Terphenyl-d14 - RE	*91*		*44 - 149*
2,4,6-Tribromophenol - RE	*89*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/22 09:13	01/14/22 10:40	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/11/22 09:13	01/14/22 10:40	1
Chrysene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluoranthene	ND		0.20	0.068	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:13	01/14/22 10:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/11/22 09:13	01/14/22 10:40	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1
2-Methylnaphthalene	0.200		0.20	0.060	ug/L		01/11/22 09:13	01/14/22 10:40	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:13	01/14/22 10:40	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:13	01/14/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Nitrobenzene-d5	*94*		*19 - 130*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Terphenyl-d14	*140*	*S1+*	*33 - 138*	*01/11/22 09:13*	*01/14/22 10:40*	*1*

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	115		ug/L		96	41 - 120
Acenaphthylene	120	98.3		ug/L		82	44 - 120
Anthracene	120	120		ug/L		100	49 - 120
Benzo[a]anthracene	120	112		ug/L		93	61 - 135
Benzo[a]pyrene	120	93.3		ug/L		78	52 - 120
Benzo[b]fluoranthene	120	119		ug/L		99	53 - 134
Benzo[g,h,i]perylene	120	118		ug/L		98	47 - 133
Benzo[k]fluoranthene	120	106		ug/L		88	57 - 134
Chrysene	120	108		ug/L		90	55 - 122
Dibenz(a,h)anthracene	120	140		ug/L		117	48 - 146
Fluoranthene	120	128		ug/L		107	54 - 128
Fluorene	120	121		ug/L		101	45 - 125
Indeno[1,2,3-cd]pyrene	120	122		ug/L		102	43 - 142
1-Methylnaphthalene	120	96.9		ug/L		81	41 - 120
2-Methylnaphthalene	120	91.9		ug/L		77	32 - 124
Phenanthrene	120	119		ug/L		99	48 - 120
Pyrene	120	112		ug/L		93	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*15 - 122*
Nitrobenzene-d5	*96*		*19 - 130*
Terphenyl-d14	*105*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-562844/1-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 16:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 16:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/11/22 10:45*	*01/11/22 16:24*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCS 400-562844/2-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.102		ug/L		101	60 - 140
1,2-Dibromoethane	0.101	0.109		ug/L		108	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/6/2022
PO #	GSAP Project ID	PAGE: 2 of 2
60674381 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (hardcopy or PDF Report to): Melissa Remiger
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 60674381 – 3.1.2
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions
PHONE NO: 314-802-1207; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, bob.billman@aecom.com
AECOM Other ID
SAMPLER NAME(S) (Print): MD'Angelo MHeintz
LAB USE ONLY

2.0°C IR9

TURNAROUND TIME (CALENDAR DAYS)
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-010622-8011-B	1/6/2022	0000	Water	2					2		X		
	TB-ROX-010622-8260-B	1/6/2022	0000		2					2	X			
	MW6D-ROX-010622-EB	1/6/2022	0830		6			2		8	X	X	X	X
	MW6D-ROX-010622	1/6/2022	1225		6			2		8	X	X	X	X
	MW6C-ROX-010622	1/6/2022	1335		6			2		8	X	X	X	X

400-213748 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY D'ANGELO	FEDEX: See page 1	1/6/2022	1600
	1-7-22 1207		

CUSTODY SEALS: See page 1

Version: 2Apr21

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID
Melissa Remiger	25278
PO #	GSAP Project ID
60674381 – 3.1.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/6/2021

PAGE: 1 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

SAMPLER NAME(S) (Print): J. Mayer, T. Jones

0.6°C 1/29

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 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-010622-8260-A	1/6/2022	0000	Water	X					2	X			
	TB-ROX-010622-8011-A	1/6/2022	0000	Water	X					2		X		
	MW9-ROX-010622-EB	1/6/2022	0815	Water	X			X		8	X	X	X	X
	MW9-ROX-010622	1/6/2022	1105	Water	X			X		8	X	X	X	X
	ROST3MW-ROX-010622	1/6/2022	1220	Water	X			X		8	X	X	X	X
	MW11-ROX-010622	1/6/2022	1325	Water	X			X		8	X	X	X	X

400-213758 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Joe Mayer	FEDEX: 1482 3811 4966	1/6/2022	16:00
Relinquished by: (Signature)	Received by: (Signature) 1-7-22 1207.	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: 1599665, 1599664

Version: 3Apr21

1/21/2022

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213748-1

Login Number: 213748
List Number: 1
Creator: Johnson, Avery D

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 IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213748-1

Login Number: 213758
List Number: 1
Creator: Johnson, Avery D

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 Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-213748-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-213804-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/10/2022

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

Sample Identification	Sample Identification
TB-ROX-010722-8260-BP	TB-ROX-010722-8011-BP
MW23-ROX-010722	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated 2-methylnaphthalene was detected in the method blank. The SVOC LCS and/or LCSD recoveries for bromomethane, benzenethiol, and 2-chlorophenol were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several method blanks. The continuing calibration verification for quinoline was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MB 400-562825/1-A	PAHs	2-Methylnaphthalene	0.2 µg/L

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

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-562958/1002	VOCs	Bromomethane	**179**	NA	10-160
LCS/LCSD 400-562825/2-A/3-A	SVOCs	Benzenethiol	**4/5**	22	10-120/30
LCS 400-562825/4-A	SVOCs	2-Chlorophenol	**36**	NA	40-120

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-562825/2-A/3-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW23-ROX-010722	SVOCs	2-Chlorophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-562825/1-A	SVOCs	2-Fluorophenol	**11**	13-113
MB 400-562825/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

Method blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for quinoline was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-010722	SVOCs	Quinoline	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-213804-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Mark Swafford

Authorized for release by:
1/18/2022 3:45:51 PM
Mark Swafford, Project Manager II
(850)471-6207
Mark.Swafford@Eurofinset.com

Designee for

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

Reviewed 2/10/22 MR

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

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

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

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Job ID: 400-213804-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-213804-1

Comments
No additional comments.

Receipt
The samples were received on 1/8/2022 10:24 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 1.6° C.

GC/MS VOA
Methods 8260B: The laboratory control sample (LCS) for analytical batch 400-562958 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Methods 8260B: The continuing calibration verification (CCV) associated with batch 400-562958 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-010722-8260-BP (400-213804-1) and MW23-ROX-010722 (400-213804-3). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-562825 and analytical batch 400-563190 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-562825 and analytical batch 400-563190: 2-Chlorophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered above the upper control limit for N-Nitrosodimethylamine, 2,4-Dinitrophenol, 4-Nitrophenol, Di-n-butyl phthalate and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered outside acceptance criteria, low biased, for Quinoline. 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 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-562825 and 400-562825 contained 2-Methylnaphthalene 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.

Job ID: 400-213804-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

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

GC Semi VOA
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.

Sample Summary

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

Job ID: 400-213804-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-213804-1	TB-ROX-010722-8260-BP	Water	01/07/22 00:00	01/08/22 10:24
400-213804-2	TB-ROX-010722-8011-BP	Water	01/07/22 00:00	01/08/22 10:24
400-213804-3	MW23-ROX-010722	Water	01/07/22 13:30	01/08/22 10:24

Detection Summary

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

Job ID: 400-213804-1

Client Sample ID: TB-ROX-010722-8260-BP — Lab Sample ID: 400-213804-1

No Detections.

Client Sample ID: TB-ROX-010722-8011-BP — Lab Sample ID: 400-213804-2

No Detections.

Client Sample ID: MW23-ROX-010722 — Lab Sample ID: 400-213804-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.28	J	1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-213804-1

Client Sample ID: TB-ROX-010722-8260-BP
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/22 17:59	1
Acrolein	ND		20	3.3	ug/L			01/12/22 17:59	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/22 17:59	1
Benzene	ND		1.0	0.13	ug/L			01/12/22 17:59	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/22 17:59	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/22 17:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Bromoform	ND		5.0	0.25	ug/L			01/12/22 17:59	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/12/22 17:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/22 17:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/22 17:59	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/12/22 17:59	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/22 17:59	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/22 17:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/22 17:59	1
Chloroform	ND		1.0	0.60	ug/L			01/12/22 17:59	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/22 17:59	1
Chloromethane	ND		1.0	0.32	ug/L			01/12/22 17:59	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/22 17:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/22 17:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/22 17:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/22 17:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/22 17:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/22 17:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/22 17:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 17:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/22 17:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/22 17:59	1
2-Hexanone	ND		25	1.4	ug/L			01/12/22 17:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/22 17:59	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/22 17:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/22 17:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/22 17:59	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/22 17:59	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/22 17:59	1
Naphthalene	ND		1.0	1.0	ug/L			01/12/22 17:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/22 17:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/22 17:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/22 17:59	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/22 17:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/22 17:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/22 17:59	1

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

Job ID: 400-213804-1

Client Sample ID: TB-ROX-010722-8260-BP
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/22 17:59	1
Styrene	ND		1.0	1.0	ug/L			01/12/22 17:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/22 17:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/22 17:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/12/22 17:59	1
Toluene	ND		1.0	0.41	ug/L			01/12/22 17:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 17:59	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/22 17:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/12/22 17:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/22 17:59	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/22 17:59	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/22 17:59	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/22 17:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/22 17:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/22 17:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/22 17:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/22 17:59	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/22 17:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/22 17:59	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/22 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/12/22 17:59*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/12/22 17:59*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/12/22 17:59*	*1*

Client Sample Results

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

Job ID: 400-213804-1

Client Sample ID: TB-ROX-010722-8011-BP
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 20:04	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 20:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*51 - 149*	*01/11/22 10:45*	*01/11/22 20:04*	*1*

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

Job ID: 400-213804-1

Client Sample ID: MW23-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/22 18:25	1
Acrolein	ND		20	3.3	ug/L			01/12/22 18:25	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/22 18:25	1
Benzene	ND		1.0	0.13	ug/L			01/12/22 18:25	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/22 18:25	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/22 18:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Bromoform	ND		5.0	0.25	ug/L			01/12/22 18:25	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/12/22 18:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/22 18:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/22 18:25	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/12/22 18:25	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/22 18:25	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/22 18:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/22 18:25	1
Chloroform	ND		1.0	0.60	ug/L			01/12/22 18:25	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/22 18:25	1
Chloromethane	ND		1.0	0.32	ug/L			01/12/22 18:25	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/22 18:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/22 18:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/22 18:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/22 18:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/22 18:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/22 18:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/22 18:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 18:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/22 18:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/22 18:25	1
2-Hexanone	ND		25	1.4	ug/L			01/12/22 18:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/22 18:25	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/22 18:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/22 18:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/22 18:25	1
Methyl tert-butyl ether	0.28	J	1.0	0.22	ug/L			01/12/22 18:25	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/22 18:25	1
Naphthalene	ND		1.0	1.0	ug/L			01/12/22 18:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/22 18:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/22 18:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/22 18:25	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/22 18:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/22 18:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/22 18:25	1

Client Sample ID: MW23-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/22 18:25	1
Styrene	ND		1.0	1.0	ug/L			01/12/22 18:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/22 18:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/22 18:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/12/22 18:25	1
Toluene	ND		1.0	0.41	ug/L			01/12/22 18:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 18:25	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/22 18:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/12/22 18:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/22 18:25	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/22 18:25	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/22 18:25	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/22 18:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/22 18:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/22 18:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/22 18:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/22 18:25	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/22 18:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/22 18:25	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/12/22 18:25*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/12/22 18:25*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/12/22 18:25*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 14:21	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 14:21	1
Anthracene	ND		0.19	0.030	ug/L		01/11/22 09:14	01/14/22 14:21	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 14:21	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 14:21	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/11/22 09:14	01/14/22 14:21	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 14:21	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/11/22 09:14	01/14/22 14:21	1
Chrysene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 14:21	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/11/22 09:14	01/14/22 14:21	1
Fluoranthene	ND		0.19	0.064	ug/L		01/11/22 09:14	01/14/22 14:21	1
Fluorene	ND		0.19	0.10	ug/L		01/11/22 09:14	01/14/22 14:21	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 14:21	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/11/22 09:14	01/14/22 14:21	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 14:21	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 14:21	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*15 - 122*	*01/11/22 09:14*	*01/14/22 14:21*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*01/11/22 09:14*	*01/14/22 14:21*	*1*

Client Sample ID: MW23-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	63		33 - 138	01/11/22 09:14	01/14/22 14:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 15:45	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		01/11/22 09:14	01/14/22 15:45	1
Benzoic acid	ND		28	6.9	ug/L		01/11/22 09:14	01/14/22 15:45	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 15:45	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 15:45	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 15:45	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/11/22 09:14	01/14/22 15:45	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/11/22 09:14	01/14/22 15:45	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/11/22 09:14	01/14/22 15:45	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 15:45	1
2-Chlorophenol	ND	*- UJ	9.5	2.1	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/11/22 09:14	01/14/22 15:45	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:45	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:45	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/11/22 09:14	01/14/22 15:45	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:45	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:45	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/11/22 09:14	01/14/22 15:45	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/11/22 09:14	01/14/22 15:45	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:45	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:45	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/11/22 09:14	01/14/22 15:45	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 15:45	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/11/22 09:14	01/14/22 15:45	1
Indene	ND		9.5	0.95	ug/L		01/11/22 09:14	01/14/22 15:45	1
Isophorone	ND		9.5	0.13	ug/L		01/11/22 09:14	01/14/22 15:45	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 15:45	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 15:45	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/11/22 09:14	01/14/22 15:45	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/11/22 09:14	01/14/22 15:45	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/11/22 09:14	01/14/22 15:45	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/11/22 09:14	01/14/22 15:45	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/11/22 09:14	01/14/22 15:45	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:45	1

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

Job ID: 400-213804-1

Client Sample ID: MW23-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213804-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/11/22 09:14	01/14/22 15:45	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/11/22 09:14	01/14/22 15:45	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 15:45	1
Phenol	ND		9.5	2.5	ug/L		01/11/22 09:14	01/14/22 15:45	1
Pyridine	ND		9.5	3.0	ug/L		01/11/22 09:14	01/14/22 15:45	1
Quinoline	ND	U	9.5	4.3	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/11/22 09:14	01/14/22 15:45	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/11/22 09:14	01/14/22 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/11/22 09:14*	*01/14/22 15:45*	*1*
2-Fluorophenol	*31*		*13 - 113*	*01/11/22 09:14*	*01/14/22 15:45*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*01/11/22 09:14*	*01/14/22 15:45*	*1*
Phenol-d5	*54*		*17 - 127*	*01/11/22 09:14*	*01/14/22 15:45*	*1*
Terphenyl-d14	*47*		*44 - 149*	*01/11/22 09:14*	*01/14/22 15:45*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*01/11/22 09:14*	*01/14/22 15:45*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 20:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*01/11/22 10:45*	*01/11/22 20:24*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-213804-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-213804-1	TB-ROX-010722-8260-BP	92	101	97
400-213804-3	MW23-ROX-010722	92	102	98
LCS 400-562958/1002	Lab Control Sample	94	104	96
MB 400-562958/5	Method Blank	95	102	97

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-213804-3	MW23-ROX-010722	56	31	64	54	47	84
LCS 400-562825/2-A	Lab Control Sample	54	26	64	49	77	66
LCS 400-562825/4-A	Lab Control Sample	63	16	60	41	80	71
LCSD 400-562825/3-A	Lab Control Sample Dup	60	37	65	56	100	60
MB 400-562825/1-A	Method Blank	58	11 S1-	67	34	104	60

Surrogate Legend

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

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-213804-3	MW23-ROX-010722	95	92	63
LCS 400-562825/4-A	Lab Control Sample	90	96	105
MB 400-562825/1-A	Method Blank	100	94	140 S1+

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-213804-2	TB-ROX-010722-8011-BP	80

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-213804-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-213804-3	MW23-ROX-010722	87
LCS 400-562844/2-A	Lab Control Sample	92
MB 400-562844/1-A	Method Blank	84

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-213804-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-213804-1

Client Sample ID: TB-ROX-010722-8260-BP

Lab Sample ID: 400-213804-1
Matrix: Water
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562958	01/12/22 17:59	CAR	TAL PEN

Client Sample ID: TB-ROX-010722-8011-BP

Lab Sample ID: 400-213804-2
Matrix: Water
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.5 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 20:04	DS	TAL PEN

Client Sample ID: MW23-ROX-010722

Lab Sample ID: 400-213804-3
Matrix: Water
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562958	01/12/22 18:25	CAR	TAL PEN
Total/NA	Prep	3520C			264 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 15:45	S1B	TAL PEN
Total/NA	Prep	3520C			264 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 14:21	VC1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 20:24	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 11:58	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 10:40	VC1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562844/1-A
Matrix: Water
Date Collected: N/A
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:24	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-213804-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-562958/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562958	01/12/22 12:20	CAR	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562825/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:18	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 13:00	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563194	01/14/22 12:05	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562844/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:44	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-562958/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	562958	01/12/22 10:43	CAR	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-562825/3-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:39	S1B	TAL PEN

Laboratory References:
TAL PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

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

Job ID: 400-213804-1

GC/MS VOA

Analysis Batch: 562958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-1	TB-ROX-010722-8260-BP	Total/NA	Water	8260B	
400-213804-3	MW23-ROX-010722	Total/NA	Water	8260B	
MB 400-562958/5	Method Blank	Total/NA	Water	8260B	
LCS 400-562958/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 562825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-3	MW23-ROX-010722	Total/NA	Water	3520C	
MB 400-562825/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-3	MW23-ROX-010722	Total/NA	Water	8270D	562825
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D	562825
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	562825

Analysis Batch: 563194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-3	MW23-ROX-010722	Total/NA	Water	8270D LL	562825
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D LL	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D LL	562825

GC Semi VOA

Prep Batch: 562844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-2	TB-ROX-010722-8011-BP	Total/NA	Water	8011	
400-213804-3	MW23-ROX-010722	Total/NA	Water	8011	
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 562891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213804-2	TB-ROX-010722-8011-BP	Total/NA	Water	8011	562844
400-213804-3	MW23-ROX-010722	Total/NA	Water	8011	562844
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	562844
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	562844

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-562958/5
Matrix: Water
Analysis Batch: 562958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/12/22 12:20	1
Acrolein	ND		20	3.3	ug/L			01/12/22 12:20	1
Acrylonitrile	ND		10	2.8	ug/L			01/12/22 12:20	1
Benzene	ND		1.0	0.13	ug/L			01/12/22 12:20	1
Bromobenzene	ND		1.0	0.54	ug/L			01/12/22 12:20	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/12/22 12:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Bromoform	ND		5.0	0.25	ug/L			01/12/22 12:20	1
Bromomethane	ND		1.0	0.98	ug/L			01/12/22 12:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/12/22 12:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/12/22 12:20	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/12/22 12:20	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/12/22 12:20	1
Chloroethane	ND		1.0	0.76	ug/L			01/12/22 12:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/12/22 12:20	1
Chloroform	ND		1.0	0.60	ug/L			01/12/22 12:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/12/22 12:20	1
Chloromethane	ND		1.0	0.32	ug/L			01/12/22 12:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/12/22 12:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/12/22 12:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/12/22 12:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/12/22 12:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/12/22 12:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/12/22 12:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/12/22 12:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 12:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/12/22 12:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/12/22 12:20	1
2-Hexanone	ND		25	1.4	ug/L			01/12/22 12:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/12/22 12:20	1
Methylene bromide	ND		5.0	0.22	ug/L			01/12/22 12:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/12/22 12:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/12/22 12:20	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/12/22 12:20	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/12/22 12:20	1
Naphthalene	ND		1.0	1.0	ug/L			01/12/22 12:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/12/22 12:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/12/22 12:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/12/22 12:20	1
o-Xylene	ND		5.0	0.60	ug/L			01/12/22 12:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/12/22 12:20	1

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

Lab Sample ID: MB 400-562958/5
Matrix: Water
Analysis Batch: 562958

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/12/22 12:20	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/12/22 12:20	1
Styrene	ND		1.0	1.0	ug/L			01/12/22 12:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/12/22 12:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/12/22 12:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/12/22 12:20	1
Toluene	ND		1.0	0.41	ug/L			01/12/22 12:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/12/22 12:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/12/22 12:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/12/22 12:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/12/22 12:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/12/22 12:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/12/22 12:20	1
Trichloroethene	ND		1.0	0.15	ug/L			01/12/22 12:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/12/22 12:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/12/22 12:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/12/22 12:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/12/22 12:20	1
Vinyl acetate	ND		25	0.93	ug/L			01/12/22 12:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/12/22 12:20	1
Xylenes, Total	ND		10	1.6	ug/L			01/12/22 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*01/12/22 12:20*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/12/22 12:20*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/12/22 12:20*	*1*

Lab Sample ID: LCS 400-562958/1002
Matrix: Water
Analysis Batch: 562958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	189		ug/L		95	43 - 160
Acrolein	500	506		ug/L		101	38 - 160
Acrylonitrile	500	474		ug/L		95	64 - 142
Benzene	50.0	52.1		ug/L		104	70 - 130
Bromobenzene	50.0	50.8		ug/L		102	70 - 132
Bromochloromethane	50.0	53.9		ug/L		108	70 - 130
Bromodichloromethane	50.0	50.6		ug/L		101	67 - 133
Bromoform	50.0	46.2		ug/L		92	57 - 140
Bromomethane	50.0	89.5	*+	ug/L		179	10 - 160
2-Butanone (MEK)	200	188		ug/L		94	61 - 145
Carbon disulfide	50.0	52.6		ug/L		105	61 - 137
Carbon tetrachloride	50.0	51.4		ug/L		103	61 - 137
Chlorobenzene	50.0	51.5		ug/L		103	70 - 130
Dibromochloromethane	50.0	48.4		ug/L		97	67 - 135
Chloroethane	50.0	56.4		ug/L		113	55 - 141

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

Lab Sample ID: LCS 400-562958/1002
Matrix: Water
Analysis Batch: 562958

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	56.7		ug/L		113	10 - 160
Chloroform	50.0	51.1		ug/L		102	69 - 130
1-Chlorohexane	50.0	50.7		ug/L		101	69 - 130
Chloromethane	50.0	55.1		ug/L		110	58 - 137
cis-1,2-Dichloroethene	50.0	50.4		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	50.2		ug/L		100	69 - 132
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	51.4		ug/L		103	70 - 130
Dichlorodifluoromethane	50.0	56.5		ug/L		113	41 - 146
1,1-Dichloroethane	50.0	50.4		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	49.6		ug/L		99	69 - 130
1,1-Dichloroethene	50.0	50.9		ug/L		102	63 - 134
1,2-Dichloropropane	50.0	50.9		ug/L		102	70 - 130
1,3-Dichloropropane	50.0	48.6		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	48.4		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	52.3		ug/L		105	70 - 130
Ethylbenzene	50.0	51.0		ug/L		102	70 - 130
Ethyl methacrylate	50.0	45.2		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	58.0		ug/L		116	53 - 140
2-Hexanone	200	171		ug/L		85	65 - 137
Isopropylbenzene	50.0	52.3		ug/L		105	70 - 130
Methylene bromide	50.0	52.0		ug/L		104	70 - 130
Methylene Chloride	50.0	50.4		ug/L		101	66 - 135
4-Methyl-2-pentanone (MIBK)	200	181		ug/L		90	69 - 138
Methyl tert-butyl ether	50.0	47.7		ug/L		95	66 - 130
m-Xylene & p-Xylene	50.0	49.1		ug/L		98	70 - 130
Naphthalene	50.0	45.8		ug/L		92	47 - 149
n-Butylbenzene	50.0	54.8		ug/L		110	67 - 130
N-Propylbenzene	50.0	52.5		ug/L		105	70 - 130
o-Chlorotoluene	50.0	50.7		ug/L		101	70 - 130
o-Xylene	50.0	49.9		ug/L		100	70 - 130
p-Chlorotoluene	50.0	49.3		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	50.7		ug/L		101	65 - 130
sec-Butylbenzene	50.0	52.3		ug/L		105	66 - 130
Styrene	50.0	50.7		ug/L		101	70 - 130
tert-Butylbenzene	50.0	49.5		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.3		ug/L		99	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.3		ug/L		93	70 - 131
Tetrachloroethene	50.0	54.0		ug/L		108	65 - 130
Toluene	50.0	47.7		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	51.2		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	47.2		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	51.4		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	52.4		ug/L		105	60 - 140
1,1,1-Trichloroethane	50.0	52.1		ug/L		104	68 - 130
1,1,2-Trichloroethane	50.0	48.2		ug/L		96	70 - 130
Trichloroethene	50.0	53.8		ug/L		108	70 - 130
Trichlorofluoromethane	50.0	54.5		ug/L		109	65 - 138

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

Lab Sample ID: LCS 400-562958/1002
Matrix: Water
Analysis Batch: 562958

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	46.5		ug/L		93	70 - 130
1,2,4-Trimethylbenzene	50.0	50.8		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	50.2		ug/L		100	69 - 130
Vinyl acetate	100	102		ug/L		102	26 - 160
Vinyl chloride	50.0	55.3		ug/L		111	59 - 136
Xylenes, Total	100	99.1		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzenethiol	ND		10	1.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzoic acid	ND		30	7.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzyl alcohol	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/11/22 09:13	01/14/22 11:58	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloroaniline	ND		10	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chlorophenol	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenzofuran	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Diethyl phthalate	ND		10	0.24	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
1,4-Dioxane	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachloroethane	ND		10	4.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Indene	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Isophorone	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Methylphenol	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitroaniline	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
3-Nitroaniline	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitroaniline	ND		10	1.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Nitrobenzene	ND		10	0.13	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitrophenol	ND		10	5.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitrophenol	ND		10	2.1	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
Phenol	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pyridine	ND		10	3.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Quinoline	ND		10	4.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Phenol-d5	*34*		*17 - 127*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Terphenyl-d14	*104*		*44 - 149*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*01/11/22 09:13*	*01/14/22 11:58*	*1*

Lab Sample ID: LCS 400-562825/2-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	4.36	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*77*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

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

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.2		ug/L		51	21 - 120
Benzoic acid	498	281		ug/L		56	10 - 144
Benzyl alcohol	120	86.8		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	64.0		ug/L		53	47 - 120
Bis(2-chloroethyl)ether	120	71.8		ug/L		60	44 - 120
bis (2-chloroisopropyl) ether	120	83.7		ug/L		70	33 - 121
Bis(2-ethylhexyl) phthalate	120	104		ug/L		86	52 - 147
4-Bromophenyl phenyl ether	120	90.6		ug/L		75	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	55.2		ug/L		46	26 - 120
4-Chloro-3-methylphenol	120	74.5		ug/L		62	48 - 131
2-Chloronaphthalene	120	76.3		ug/L		64	52 - 121
2-Chlorophenol	120	43.1	*-	ug/L		36	40 - 120
4-Chlorophenyl phenyl ether	120	81.7		ug/L		68	56 - 125
Dibenz[a,h]acridine	120	117		ug/L		98	31 - 150
Dibenzofuran	120	79.6		ug/L		66	56 - 122
3,3'-Dichlorobenzidine	160	125		ug/L		78	36 - 132
2,4-Dichlorophenol	120	60.2		ug/L		50	49 - 120
Diethyl phthalate	120	105		ug/L		88	50 - 137
2,4-Dimethylphenol	120	85.9		ug/L		72	48 - 120
Dimethyl phthalate	120	85.8		ug/L		71	57 - 124
Di-n-butyl phthalate	120	95.7		ug/L		80	58 - 126
4,6-Dinitro-ortho-cresol	240	287		ug/L		120	23 - 148
2,4-Dinitrophenol	240	290		ug/L		121	10 - 150
2,4-Dinitrotoluene	120	82.9		ug/L		69	54 - 142
2,6-Dinitrotoluene	120	73.8		ug/L		61	55 - 130
Di-n-octyl phthalate	120	99.9		ug/L		83	57 - 138
1,4-Dioxane	120	51.5		ug/L		43	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	85.2		ug/L		71	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	37.9		ug/L		32	10 - 134
Hexachloroethane	120	55.8		ug/L		46	20 - 120
Indene	120	77.1		ug/L		64	49 - 120
Isophorone	120	71.0		ug/L		59	48 - 120
2-Methylphenol	120	78.9		ug/L		66	46 - 124
3 & 4 Methylphenol	120	80.7		ug/L		67	45 - 120
2-Nitroaniline	120	91.0		ug/L		76	51 - 145
3-Nitroaniline	120	69.0		ug/L		58	37 - 127
4-Nitroaniline	120	80.7		ug/L		67	36 - 137
Nitrobenzene	120	71.7		ug/L		60	45 - 120
2-Nitrophenol	120	59.6		ug/L		50	40 - 124
4-Nitrophenol	240	221		ug/L		92	23 - 146
N-Nitrosodimethylamine	120	108		ug/L		90	29 - 137
N-Nitrosodi-n-propylamine	120	97.1		ug/L		81	45 - 120
N-Nitrosodiphenylamine	119	77.6		ug/L		65	54 - 120
Pentachlorophenol	240	221		ug/L		92	31 - 130
Phenol	120	47.3		ug/L		39	11 - 120
Pyridine	240	101		ug/L		42	16 - 120

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

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	76.7		ug/L		64	49 - 130
2,4,5-Trichlorophenol	120	76.6		ug/L		64	51 - 136
2,4,6-Trichlorophenol	120	70.1		ug/L		58	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*46 - 124*
2-Fluorophenol	*16*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*41*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*71*		*26 - 150*

Lab Sample ID: LCSD 400-562825/3-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	5.46	J *-	ug/L		5	10 - 120	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*60*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/22 09:13	01/14/22 10:40	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/11/22 09:13	01/14/22 10:40	1
Chrysene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluoranthene	ND		0.20	0.068	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:13	01/14/22 10:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/11/22 09:13	01/14/22 10:40	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.200		0.20	0.060	ug/L		01/11/22 09:13	01/14/22 10:40	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:13	01/14/22 10:40	1
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:13	01/14/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Nitrobenzene-d5	*94*		*19 - 130*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Terphenyl-d14	*140*	*S1+*	*33 - 138*	*01/11/22 09:13*	*01/14/22 10:40*	*1*

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	115		ug/L		96	41 - 120
Acenaphthylene	120	98.3		ug/L		82	44 - 120
Anthracene	120	120		ug/L		100	49 - 120
Benzo[a]anthracene	120	112		ug/L		93	61 - 135
Benzo[a]pyrene	120	93.3		ug/L		78	52 - 120
Benzo[b]fluoranthene	120	119		ug/L		99	53 - 134
Benzo[g,h,i]perylene	120	118		ug/L		98	47 - 133
Benzo[k]fluoranthene	120	106		ug/L		88	57 - 134
Chrysene	120	108		ug/L		90	55 - 122
Dibenz(a,h)anthracene	120	140		ug/L		117	48 - 146
Fluoranthene	120	128		ug/L		107	54 - 128
Fluorene	120	121		ug/L		101	45 - 125
Indeno[1,2,3-cd]pyrene	120	122		ug/L		102	43 - 142
1-Methylnaphthalene	120	96.9		ug/L		81	41 - 120
2-Methylnaphthalene	120	91.9		ug/L		77	32 - 124
Phenanthrene	120	119		ug/L		99	48 - 120
Pyrene	120	112		ug/L		93	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*15 - 122*
Nitrobenzene-d5	*96*		*19 - 130*
Terphenyl-d14	*105*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-562844/1-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 16:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 16:24	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-562844/1-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562844

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	84		51 - 149	01/11/22 10:45	01/11/22 16:24	1

Lab Sample ID: LCS 400-562844/2-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.102		ug/L		101	60 - 140
1,2-Dibromoethane	0.101	0.109		ug/L		108	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	92		51 - 149

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW PDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/7/2021
PO #	GSAP Project ID	PAGE: 1 of 1
60674381 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project/Task Number: Roxana Quarterly GW 60674381 – 3.1.2

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): J. Mayer, T. Jones

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-010722-8260-BP	1/7/2021	0000	Water	X					2	X			
	TB-ROX-010722-8011-BP	1/7/2021	0000	Water	X					2		X		
	MW23-ROX-010722	1/7/2021	1330	Water	X			X		8	X	X	X	X

400-213804 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.0°C 1.6°C

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Joe Mayer	FEDEX: 1482 3811 4955, 1482 3811 4944	1/7/2022	16:00
Relinquished by: (Signature)	Received by: (Signature)	Date 1-8-21	Time 1024
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

CUSTODY SEALS: 1599666, 1599667, 1599668, 1599669

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213804-1

Login Number: 213804
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0, 1.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-213804-1
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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-213805-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/24/2022

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

Sample Identification	Sample Identification
TB-ROX-010722-8260-A	TB-ROX-010722-8011-A
MW16-ROX-010722	MW24-ROX-010722
TB-ROX-010722-8260-B	TB-ROX-010722-8011-B
MW6B-ROX-010722	MW6A-ROX-010722
MW5-ROX-010722-EB	MW5-ROX-010722

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated 2-methylnaphthalene was detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS and/or LCSD recoveries were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several investigative and quality control samples. Several VOC and SVOC MS/MSD recoveries were outside evaluation criteria in sample MW24-ROX-010722. The continuing calibration verification for quinoline was outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MB 400-562825/1-A	PAHs	2-Methylnaphthalene	0.2 µg/L

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

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-563062/1002	VOCs	Bromomethane	**200**	NA	10-160
LCS/LCSD 400-562825/2-A/3-A	SVOCs	Benzenethiol	**4/5**	22	10-120/30
LCS 400-562825/4-A	SVOCs	2-Chlorophenol	**36**	NA	40-120
LCS 400-563584/2-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**190**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-562825/2-A/3-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW16-ROX-010722	SVOCs	2-Chlorophenol	**UJ**
MW24-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW24-ROX-010722	SVOCs	2-Chlorophenol	**UJ**
MW6B-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-010722	SVOCs	2-Chlorophenol	**UJ**
MW6A-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-010722	SVOCs	2-Chlorophenol	**UJ**
MW5-ROX-010722	SVOCs	Benzenethiol	**UJ**
MW5-ROX-010722	SVOCs	2-Chlorophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW6A-ROX-010722	SVOCs	2-Fluorophenol	**8**	13-113
MW5-ROX-010722-EB	PAHs	Terphenyl-d_{14}	**147**	33-138
MW5-ROX-010722	SVOCs	2-Fluorophenol	**12**	13-113
MB 400-562825/1-A	SVOCs	2-Fluorophenol	**11**	13-113

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-562825/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW24-ROX-010722 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW24-ROX-010722	VOCs	Bromomethane	139/**154**	10	10-150/50
MW24-ROX-010722	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW24-ROX-010722	VOCs	Ethyl methacrylate	**61**/74	18	64-130/30
MW24-ROX-010722	VOCs	2-Hexanone	**56**/70	22	65-140/30
MW24-ROX-010722	VOCs	4-Methyl-2-pentanone (MIBK)	**62**/77	21	63-146/30
MW24-ROX-010722	VOCs	1,1,2,2-Tetrachloroethane	**62**/75	19	66-135/30
MW24-ROX-010722	VOCs	1,2,3-Trichloropropane	**63**/77	20	65-133/30
MW24-ROX-010722	SVOCs	4,6-Dinitro-ortho-cresol	**161/149**	7	25-120/42
MW24-ROX-010722	SVOCs	2,4-Dinitrophenol	**163/152**	6	15-140/36
MW24-ROX-010722	SVOCs	1,4-Dioxane	**42/45**	8	50-150/40
MW24-ROX-010722	SVOCs	4-Nitrophenol	**126**/118	6	10-120/82

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW24-ROX-010722	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW24-ROX-010722	VOCs	Ethyl methacrylate	**UJ**
MW24-ROX-010722	VOCs	2-Hexanone	**UJ**
MW24-ROX-010722	VOCs	4-Methyl-2-pentanone (MIBK)	**UJ**
MW24-ROX-010722	VOCs	1,1,2,2-Tetrachloroethane	**UJ**
MW24-ROX-010722	VOCs	1,2,3-Trichloropropane	**UJ**
MW24-ROX-010722	SVOCs	1,4-Dioxane	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for quinoline was outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-010722	SVOCs	Quinoline	**UJ**
MW24-ROX-010722	SVOCs	Quinoline	**UJ**
MW6B-ROX-010722	SVOCs	Quinoline	**UJ**
MW6A-ROX-010722	SVOCs	Quinoline	**UJ**
MW5-ROX-010722	SVOCs	Quinoline	**UJ**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-213805-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Authorized for release by:
1/21/2022 5:38:27 PM

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

LINKS
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Reviewed 2/24/2022 MR

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

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

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

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Job ID: 400-213805-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-213805-1

Comments
No additional comments.

Receipt
The samples were received on 1/8/2022 10:24 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 0.0° C, 0.0° C, 1.6° C and 1.6° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563062 recovered above the upper control limit for Bromomethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-563062 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563062 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563062 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-563062 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-010722-8260-A (400-213805-1), MW16-ROX-010722 (400-213805-3), MW24-ROX-010722 (400-213805-4), TB-ROX-010722-8260-B (400-213806-1), MW6B-ROX-010722 (400-213806-3), MW6A-ROX-010722 (400-213806-4), MW5-ROX-010722-EB (400-213806-5) and MW5-ROX-010722 (400-213806-6). 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 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-562825 and analytical batch 400-563190 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-562825 and analytical batch 400-563190: 2-Chlorophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered above the upper control limit for N-Nitrosodimethylamine, 2,4-Dinitrophenol, 4-Nitrophenol, Di-n-butyl phthalate and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563190 recovered outside acceptance criteria, low biased, for Quinoline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Job ID: 400-213805-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-562825 and analytical batch 400-563190 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW6A-ROX-010722 (400-213806-4), MW5-ROX-010722 (400-213806-6) and (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW5-ROX-010722-EB (400-213806-5) and (MB 400-562825/1-A). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-562825 and 400-562825 contained 2-Methylnaphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-563662 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) for preparation batch 400-563584 and analytical batch 400-563662 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: Spike compounds were inadvertently omitted during the extraction process for the matrix spike duplicate (MSD). The associated matrix spike (MS) and laboratory control sample (LCS) have been reported for preparation batch 400-563584 and analytical batch 400-563662.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-213805-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-213805-1	TB-ROX-010722-8260-A	Water	01/07/22 00:00	01/08/22 10:24
400-213805-2	TB-ROX-010722-8011-A	Water	01/07/22 00:00	01/08/22 10:24
400-213805-3	MW16-ROX-010722	Water	01/07/22 11:00	01/08/22 10:24
400-213805-4	MW24-ROX-010722	Water	01/07/22 12:20	01/08/22 10:24
400-213806-1	TB-ROX-010722-8260-B	Water	01/07/22 00:00	01/08/22 10:24
400-213806-2	TB-ROX-010722-8011-B	Water	01/07/22 00:00	01/08/22 10:24
400-213806-3	MW6B-ROX-010722	Water	01/07/22 10:35	01/08/22 10:24
400-213806-4	MW6A-ROX-010722	Water	01/07/22 11:35	01/08/22 10:24
400-213806-5	MW5-ROX-010722-EB	Water	01/07/22 12:55	01/08/22 10:24
400-213806-6	MW5-ROX-010722	Water	01/07/22 13:30	01/08/22 10:24

Detection Summary

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

Job ID: 400-213805-1

Client Sample ID: TB-ROX-010722-8260-A — Lab Sample ID: 400-213805-1

No Detections.

Client Sample ID: TB-ROX-010722-8011-A — Lab Sample ID: 400-213805-2

No Detections.

Client Sample ID: MW16-ROX-010722 — Lab Sample ID: 400-213805-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	5.1	J	9.6	4.8	ug/L	1		8270D	Total/NA

Client Sample ID: MW24-ROX-010722 — Lab Sample ID: 400-213805-4

No Detections.

Client Sample ID: TB-ROX-010722-8260-B — Lab Sample ID: 400-213806-1

No Detections.

Client Sample ID: TB-ROX-010722-8011-B — Lab Sample ID: 400-213806-2

No Detections.

Client Sample ID: MW6B-ROX-010722 — Lab Sample ID: 400-213806-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.41	J	1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: MW6A-ROX-010722 — Lab Sample ID: 400-213806-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.54	J	1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: MW5-ROX-010722-EB — Lab Sample ID: 400-213806-5

No Detections.

Client Sample ID: MW5-ROX-010722 — Lab Sample ID: 400-213806-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.4		1.0	0.22	ug/L	1		8260B	Total/NA
tert-Butylbenzene	1.6		1.0	0.63	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-213805-1

Client Sample ID: TB-ROX-010722-8260-A
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 13:52	1
Acrolein	ND		20	3.3	ug/L			01/13/22 13:52	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 13:52	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 13:52	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 13:52	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 13:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 13:52	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 13:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 13:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 13:52	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 13:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 13:52	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 13:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 13:52	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 13:52	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 13:52	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 13:52	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 13:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 13:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 13:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 13:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 13:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 13:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 13:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 13:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 13:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 13:52	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 13:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 13:52	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 13:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 13:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 13:52	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 13:52	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 13:52	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 13:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 13:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 13:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 13:52	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 13:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 13:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 13:52	1

Client Sample ID: TB-ROX-010722-8260-A
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 13:52	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 13:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 13:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 13:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 13:52	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 13:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 13:52	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 13:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 13:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 13:52	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 13:52	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 13:52	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 13:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 13:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 13:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 13:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 13:52	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 13:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 13:52	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 13:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/13/22 13:52*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 13:52*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/13/22 13:52*	*1*

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

Job ID: 400-213805-1

Client Sample ID: TB-ROX-010722-8011-A
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 22:45	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*01/11/22 10:45*	*01/11/22 22:45*	*1*

Client Sample ID: MW16-ROX-010722
Date Collected: 01/07/22 11:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 14:19	1
Acrolein	ND		20	3.3	ug/L			01/13/22 14:19	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 14:19	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 14:19	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 14:19	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 14:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 14:19	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 14:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 14:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 14:19	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 14:19	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 14:19	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 14:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 14:19	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 14:19	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 14:19	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 14:19	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 14:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 14:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 14:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 14:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 14:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 14:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 14:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 14:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 14:19	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 14:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 14:19	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 14:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 14:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 14:19	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 14:19	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 14:19	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 14:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 14:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 14:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 14:19	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 14:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 14:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 14:19	1

Client Sample ID: MW16-ROX-010722
Date Collected: 01/07/22 11:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 14:19	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 14:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 14:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 14:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 14:19	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 14:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:19	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 14:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 14:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 14:19	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 14:19	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 14:19	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 14:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 14:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 14:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 14:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 14:19	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 14:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 14:19	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/13/22 14:19*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 14:19*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/13/22 14:19*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 14:38	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 14:38	1
Anthracene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 14:38	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 14:38	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 14:38	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/11/22 09:14	01/14/22 14:38	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/11/22 09:14	01/14/22 14:38	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/11/22 09:14	01/14/22 14:38	1
Chrysene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 14:38	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/11/22 09:14	01/14/22 14:38	1
Fluoranthene	ND		0.19	0.065	ug/L		01/11/22 09:14	01/14/22 14:38	1
Fluorene	ND		0.19	0.11	ug/L		01/11/22 09:14	01/14/22 14:38	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 14:38	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 14:38	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/11/22 09:14	01/14/22 14:38	1
Phenanthrene	ND		0.19	0.034	ug/L		01/11/22 09:14	01/14/22 14:38	1
Pyrene	ND		0.19	0.038	ug/L		01/11/22 09:14	01/14/22 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*15 - 122*	*01/11/22 09:14*	*01/14/22 14:38*	*1*
Nitrobenzene-d5	*100*		*19 - 130*	*01/11/22 09:14*	*01/14/22 14:38*	*1*

Client Sample ID: MW16-ROX-010722
Date Collected: 01/07/22 11:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*132*		*33 - 138*	*01/11/22 09:14*	*01/14/22 14:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/11/22 09:14	01/14/22 16:06	1
Benzenethiol	ND	*- UJ	9.6	1.6	ug/L		01/11/22 09:14	01/14/22 16:06	1
Benzoic acid	ND		29	7.0	ug/L		01/11/22 09:14	01/14/22 16:06	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 16:06	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 16:06	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 16:06	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 16:06	1
Bis(2-ethylhexyl) phthalate	**5.1**	**J**	9.6	4.8	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/11/22 09:14	01/14/22 16:06	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/11/22 09:14	01/14/22 16:06	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 16:06	1
2-Chlorophenol	ND	*- UJ	9.6	2.1	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 16:06	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:06	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:06	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/11/22 09:14	01/14/22 16:06	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 16:06	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:06	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 16:06	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 16:06	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:06	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:06	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:06	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 16:06	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/11/22 09:14	01/14/22 16:06	1
Indene	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:06	1
Isophorone	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 16:06	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 16:06	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/11/22 09:14	01/14/22 16:06	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/11/22 09:14	01/14/22 16:06	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/11/22 09:14	01/14/22 16:06	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/11/22 09:14	01/14/22 16:06	1
2-Nitrophenol	ND		9.6	5.0	ug/L		01/11/22 09:14	01/14/22 16:06	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/11/22 09:14	01/14/22 16:06	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 16:06	1

Client Sample ID: MW16-ROX-010722
Date Collected: 01/07/22 11:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/11/22 09:14	01/14/22 16:06	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/11/22 09:14	01/14/22 16:06	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 16:06	1
Phenol	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 16:06	1
Pyridine	ND		9.6	3.1	ug/L		01/11/22 09:14	01/14/22 16:06	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/11/22 09:14	01/14/22 16:06	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*46 - 124*	*01/11/22 09:14*	*01/14/22 16:06*	*1*
2-Fluorophenol	*26*		*13 - 113*	*01/11/22 09:14*	*01/14/22 16:06*	*1*
Nitrobenzene-d5	*69*		*36 - 126*	*01/11/22 09:14*	*01/14/22 16:06*	*1*
Phenol-d5	*50*		*17 - 127*	*01/11/22 09:14*	*01/14/22 16:06*	*1*
Terphenyl-d14	*95*		*44 - 149*	*01/11/22 09:14*	*01/14/22 16:06*	*1*
2,4,6-Tribromophenol	*83*		*26 - 150*	*01/11/22 09:14*	*01/14/22 16:06*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 23:05	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/11/22 10:45*	*01/11/22 23:05*	*1*

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

Job ID: 400-213805-1

Client Sample ID: MW24-ROX-010722
Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 12:08	1
Acrolein	ND		20	3.3	ug/L			01/13/22 12:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 12:08	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 12:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 12:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 12:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 12:08	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 12:08	1
Bromomethane	ND	F1 *+	1.0	0.98	ug/L			01/13/22 12:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 12:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 12:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 12:08	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 12:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 12:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 12:08	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/13/22 12:08	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 12:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 12:08	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 12:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 12:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 12:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 12:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 12:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 12:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 12:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 12:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 12:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 12:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 12:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 12:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 12:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 12:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 12:08	1
Ethyl methacrylate	ND	F1 UJ	1.0	0.60	ug/L			01/13/22 12:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 12:08	1
2-Hexanone	ND	F1 UJ	25	1.4	ug/L			01/13/22 12:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 12:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 12:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 12:08	1
4-Methyl-2-pentanone (MIBK)	ND	F1 UJ	25	1.8	ug/L			01/13/22 12:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 12:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 12:08	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 12:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 12:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 12:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 12:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 12:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 12:08	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 12:08	1

Client Sample ID: MW24-ROX-010722

Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 12:08	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 12:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 12:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 12:08	1
1,1,2,2-Tetrachloroethane	ND	F1 UJ	1.0	0.50	ug/L			01/13/22 12:08	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 12:08	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 12:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 12:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 12:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 12:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 12:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 12:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 12:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 12:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 12:08	1
1,2,3-Trichloropropane	ND	F1 UJ	5.0	0.84	ug/L			01/13/22 12:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 12:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 12:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 12:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 12:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 12:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/13/22 12:08*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/13/22 12:08*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/13/22 12:08*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 14:56	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/11/22 09:14	01/14/22 14:56	1
Anthracene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 14:56	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 14:56	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/11/22 09:14	01/14/22 14:56	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/11/22 09:14	01/14/22 14:56	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/11/22 09:14	01/14/22 14:56	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/11/22 09:14	01/14/22 14:56	1
Chrysene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 14:56	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/11/22 09:14	01/14/22 14:56	1
Fluoranthene	ND		0.19	0.066	ug/L		01/11/22 09:14	01/14/22 14:56	1
Fluorene	ND		0.19	0.11	ug/L		01/11/22 09:14	01/14/22 14:56	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 14:56	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/11/22 09:14	01/14/22 14:56	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/11/22 09:14	01/14/22 14:56	1
Phenanthrene	ND		0.19	0.035	ug/L		01/11/22 09:14	01/14/22 14:56	1
Pyrene	ND		0.19	0.039	ug/L		01/11/22 09:14	01/14/22 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*15 - 122*	*01/11/22 09:14*	*01/14/22 14:56*	*1*
Nitrobenzene-d5	*94*		*19 - 130*	*01/11/22 09:14*	*01/14/22 14:56*	*1*

Client Sample ID: MW24-ROX-010722
Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*132*		*33 - 138*	*01/11/22 09:14*	*01/14/22 14:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/11/22 09:14	01/14/22 16:27	1
Benzenethiol	ND	*- UJ	9.6	1.6	ug/L		01/11/22 09:14	01/14/22 16:27	1
Benzoic acid	ND		29	7.0	ug/L		01/11/22 09:14	01/14/22 16:27	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 16:27	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 16:27	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 16:27	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/11/22 09:14	01/14/22 16:27	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/11/22 09:14	01/14/22 16:27	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/11/22 09:14	01/14/22 16:27	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 16:27	1
2-Chlorophenol	ND	*- UJ	9.6	2.1	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/11/22 09:14	01/14/22 16:27	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:27	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:27	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/11/22 09:14	01/14/22 16:27	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 16:27	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:27	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/11/22 09:14	01/14/22 16:27	1
4,6-Dinitro-ortho-cresol	ND	F1	9.6	1.5	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4-Dinitrophenol	ND	F1	29	3.3	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/11/22 09:14	01/14/22 16:27	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:27	1
1,4-Dioxane	ND	F1 UJ	9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:27	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/11/22 09:14	01/14/22 16:27	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 16:27	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/11/22 09:14	01/14/22 16:27	1
Indene	ND		9.6	0.96	ug/L		01/11/22 09:14	01/14/22 16:27	1
Isophorone	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 16:27	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 16:27	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/11/22 09:14	01/14/22 16:27	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/11/22 09:14	01/14/22 16:27	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/11/22 09:14	01/14/22 16:27	1
Nitrobenzene	ND		9.6	0.13	ug/L		01/11/22 09:14	01/14/22 16:27	1
2-Nitrophenol	ND		9.6	5.0	ug/L		01/11/22 09:14	01/14/22 16:27	1
4-Nitrophenol	ND	F1	9.6	2.0	ug/L		01/11/22 09:14	01/14/22 16:27	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 16:27	1

Client Sample ID: MW24-ROX-010722
Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/11/22 09:14	01/14/22 16:27	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/11/22 09:14	01/14/22 16:27	1
Pentachlorophenol	ND		19	1.3	ug/L		01/11/22 09:14	01/14/22 16:27	1
Phenol	ND		9.6	2.5	ug/L		01/11/22 09:14	01/14/22 16:27	1
Pyridine	ND		9.6	3.1	ug/L		01/11/22 09:14	01/14/22 16:27	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/11/22 09:14	01/14/22 16:27	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/11/22 09:14	01/14/22 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/11/22 09:14*	*01/14/22 16:27*	*1*
2-Fluorophenol	*33*		*13 - 113*	*01/11/22 09:14*	*01/14/22 16:27*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/11/22 09:14*	*01/14/22 16:27*	*1*
Phenol-d5	*51*		*17 - 127*	*01/11/22 09:14*	*01/14/22 16:27*	*1*
Terphenyl-d14	*98*		*44 - 149*	*01/11/22 09:14*	*01/14/22 16:27*	*1*
2,4,6-Tribromophenol	*68*		*26 - 150*	*01/11/22 09:14*	*01/14/22 16:27*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 23:44	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*01/11/22 10:45*	*01/11/22 23:44*	*1*

Client Sample ID: TB-ROX-010722-8260-B

Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-1

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 14:45	1
Acrolein	ND		20	3.3	ug/L			01/13/22 14:45	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 14:45	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 14:45	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 14:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 14:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 14:45	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 14:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 14:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 14:45	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 14:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 14:45	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 14:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 14:45	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 14:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 14:45	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 14:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 14:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 14:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 14:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 14:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 14:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 14:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 14:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 14:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 14:45	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 14:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 14:45	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 14:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 14:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 14:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 14:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 14:45	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 14:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 14:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 14:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 14:45	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 14:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 14:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 14:45	1

Client Sample ID: TB-ROX-010722-8260-B
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 14:45	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 14:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 14:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 14:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 14:45	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 14:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 14:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 14:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 14:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 14:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 14:45	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 14:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 14:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 14:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 14:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 14:45	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 14:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 14:45	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/13/22 14:45*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 14:45*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/13/22 14:45*	*1*

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

Job ID: 400-213805-1

Client Sample ID: TB-ROX-010722-8011-B
Date Collected: 01/07/22 00:00
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 16:08	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*01/18/22 14:52*	*01/19/22 16:08*	*1*

Client Sample ID: MW6B-ROX-010722
Date Collected: 01/07/22 10:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 15:11	1
Acrolein	ND		20	3.3	ug/L			01/13/22 15:11	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 15:11	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 15:11	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 15:11	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 15:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 15:11	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 15:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 15:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 15:11	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 15:11	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 15:11	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 15:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 15:11	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 15:11	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 15:11	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 15:11	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 15:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 15:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 15:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 15:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 15:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 15:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 15:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 15:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 15:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 15:11	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 15:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 15:11	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 15:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 15:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 15:11	1
Methyl tert-butyl ether	**0.41**	J	1.0	0.22	ug/L			01/13/22 15:11	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 15:11	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 15:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 15:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 15:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 15:11	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 15:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 15:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 15:11	1

Client Sample ID: MW6B-ROX-010722
Date Collected: 01/07/22 10:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 15:11	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 15:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 15:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 15:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 15:11	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 15:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 15:11	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 15:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 15:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 15:11	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 15:11	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 15:11	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 15:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 15:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 15:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 15:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 15:11	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 15:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 15:11	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 15:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/13/22 15:11*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/13/22 15:11*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/13/22 15:11*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 15:47	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 15:47	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 15:47	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 15:47	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 15:47	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:14	01/14/22 15:47	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:14	01/14/22 15:47	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		01/11/22 09:14	01/14/22 15:47	1
Chrysene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 15:47	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/22 09:14	01/14/22 15:47	1
Fluoranthene	ND		0.20	0.067	ug/L		01/11/22 09:14	01/14/22 15:47	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:14	01/14/22 15:47	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/11/22 09:14	01/14/22 15:47	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 15:47	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/11/22 09:14	01/14/22 15:47	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:14	01/14/22 15:47	1
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:14	01/14/22 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*01/11/22 09:14*	*01/14/22 15:47*	*1*
Nitrobenzene-d5	*93*		*19 - 130*	*01/11/22 09:14*	*01/14/22 15:47*	*1*

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

Job ID: 400-213805-1

Client Sample ID: MW6B-ROX-010722
Date Collected: 01/07/22 10:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*126*		*33 - 138*	*01/11/22 09:14*	*01/14/22 15:47*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		01/11/22 09:14	01/14/22 17:29	1
Benzenethiol	ND	*- UJ	9.9	1.7	ug/L		01/11/22 09:14	01/14/22 17:29	1
Benzoic acid	ND		30	7.2	ug/L		01/11/22 09:14	01/14/22 17:29	1
Benzyl alcohol	ND		9.9	2.0	ug/L		01/11/22 09:14	01/14/22 17:29	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		01/11/22 09:14	01/14/22 17:29	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		01/11/22 09:14	01/14/22 17:29	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		01/11/22 09:14	01/14/22 17:29	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		01/11/22 09:14	01/14/22 17:29	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Chloroaniline	ND		9.9	3.4	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		01/11/22 09:14	01/14/22 17:29	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		01/11/22 09:14	01/14/22 17:29	1
2-Chlorophenol	ND	*- UJ	9.9	2.2	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		01/11/22 09:14	01/14/22 17:29	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 17:29	1
Dibenzofuran	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 17:29	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		01/11/22 09:14	01/14/22 17:29	1
Diethyl phthalate	ND		9.9	0.24	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 17:29	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 17:29	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		01/11/22 09:14	01/14/22 17:29	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		01/11/22 09:14	01/14/22 17:29	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 17:29	1
1,4-Dioxane	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 17:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 17:29	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 17:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:14	01/14/22 17:29	1
Hexachloroethane	ND		9.9	4.2	ug/L		01/11/22 09:14	01/14/22 17:29	1
Indene	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 17:29	1
Isophorone	ND		9.9	0.14	ug/L		01/11/22 09:14	01/14/22 17:29	1
2-Methylphenol	ND		9.9	1.8	ug/L		01/11/22 09:14	01/14/22 17:29	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:14	01/14/22 17:29	1
2-Nitroaniline	ND		9.9	2.2	ug/L		01/11/22 09:14	01/14/22 17:29	1
3-Nitroaniline	ND		9.9	1.8	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Nitroaniline	ND		9.9	1.5	ug/L		01/11/22 09:14	01/14/22 17:29	1
Nitrobenzene	ND		9.9	0.13	ug/L		01/11/22 09:14	01/14/22 17:29	1
2-Nitrophenol	ND		9.9	5.1	ug/L		01/11/22 09:14	01/14/22 17:29	1
4-Nitrophenol	ND		9.9	2.1	ug/L		01/11/22 09:14	01/14/22 17:29	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 17:29	1

Client Sample ID: MW6B-ROX-010722
Date Collected: 01/07/22 10:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		01/11/22 09:14	01/14/22 17:29	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		01/11/22 09:14	01/14/22 17:29	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:14	01/14/22 17:29	1
Phenol	ND		9.9	2.6	ug/L		01/11/22 09:14	01/14/22 17:29	1
Pyridine	ND		9.9	3.2	ug/L		01/11/22 09:14	01/14/22 17:29	1
Quinoline	ND	UJ	9.9	4.5	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		01/11/22 09:14	01/14/22 17:29	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/11/22 09:14*	*01/14/22 17:29*	*1*
2-Fluorophenol	*18*		*13 - 113*	*01/11/22 09:14*	*01/14/22 17:29*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/11/22 09:14*	*01/14/22 17:29*	*1*
Phenol-d5	*45*		*17 - 127*	*01/11/22 09:14*	*01/14/22 17:29*	*1*
Terphenyl-d14	*92*		*44 - 149*	*01/11/22 09:14*	*01/14/22 17:29*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*01/11/22 09:14*	*01/14/22 17:29*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 16:29	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/18/22 14:52	01/19/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/18/22 14:52*	*01/19/22 16:29*	*1*

Client Sample ID: MW6A-ROX-010722
Date Collected: 01/07/22 11:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 15:37	1
Acrolein	ND		20	3.3	ug/L			01/13/22 15:37	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 15:37	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 15:37	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 15:37	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 15:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 15:37	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 15:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 15:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 15:37	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 15:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 15:37	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 15:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 15:37	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 15:37	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 15:37	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 15:37	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 15:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 15:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 15:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 15:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 15:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 15:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 15:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 15:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 15:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 15:37	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 15:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 15:37	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 15:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 15:37	1
Methyl tert-butyl ether	**0.54**	J	1.0	0.22	ug/L			01/13/22 15:37	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 15:37	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 15:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 15:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 15:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 15:37	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 15:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 15:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 15:37	1

Client Sample ID: MW6A-ROX-010722
Date Collected: 01/07/22 11:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 15:37	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 15:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 15:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 15:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 15:37	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 15:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 15:37	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 15:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 15:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 15:37	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 15:37	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 15:37	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 15:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 15:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 15:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 15:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 15:37	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 15:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 15:37	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/13/22 15:37*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/13/22 15:37*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/13/22 15:37*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 16:04	1
Acenaphthylene	ND		0.19	0.044	ug/L		01/11/22 09:14	01/14/22 16:04	1
Anthracene	ND		0.19	0.031	ug/L		01/11/22 09:14	01/14/22 16:04	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		01/11/22 09:14	01/14/22 16:04	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		01/11/22 09:14	01/14/22 16:04	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/11/22 09:14	01/14/22 16:04	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/11/22 09:14	01/14/22 16:04	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		01/11/22 09:14	01/14/22 16:04	1
Chrysene	ND		0.19	0.072	ug/L		01/11/22 09:14	01/14/22 16:04	1
Dibenz(a,h)anthracene	ND		0.19	0.049	ug/L		01/11/22 09:14	01/14/22 16:04	1
Fluoranthene	ND		0.19	0.066	ug/L		01/11/22 09:14	01/14/22 16:04	1
Fluorene	ND		0.19	0.11	ug/L		01/11/22 09:14	01/14/22 16:04	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		01/11/22 09:14	01/14/22 16:04	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		01/11/22 09:14	01/14/22 16:04	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/11/22 09:14	01/14/22 16:04	1
Phenanthrene	ND		0.19	0.035	ug/L		01/11/22 09:14	01/14/22 16:04	1
Pyrene	ND		0.19	0.039	ug/L		01/11/22 09:14	01/14/22 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*15 - 122*	*01/11/22 09:14*	*01/14/22 16:04*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/11/22 09:14*	*01/14/22 16:04*	*1*

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

Job ID: 400-213805-1

Client Sample ID: MW6A-ROX-010722
Date Collected: 01/07/22 11:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	88		33 - 138	01/11/22 09:14	01/14/22 16:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.7	3.7	ug/L		01/11/22 09:14	01/14/22 17:49	1
Benzenethiol	ND	*- UJ	9.7	1.7	ug/L		01/11/22 09:14	01/14/22 17:49	1
Benzoic acid	ND		29	7.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/11/22 09:14	01/14/22 17:49	1
Bis(2-chloroethoxy)methane	ND		9.7	0.16	ug/L		01/11/22 09:14	01/14/22 17:49	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		01/11/22 09:14	01/14/22 17:49	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		01/11/22 09:14	01/14/22 17:49	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		01/11/22 09:14	01/14/22 17:49	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/11/22 09:14	01/14/22 17:49	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		01/11/22 09:14	01/14/22 17:49	1
2-Chlorophenol	ND	*- UJ	9.7	2.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/11/22 09:14	01/14/22 17:49	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		01/11/22 09:14	01/14/22 17:49	1
Dibenzofuran	ND		9.7	0.17	ug/L		01/11/22 09:14	01/14/22 17:49	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/11/22 09:14	01/14/22 17:49	1
Diethyl phthalate	ND		9.7	0.23	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/11/22 09:14	01/14/22 17:49	1
Dimethyl phthalate	ND		9.7	0.17	ug/L		01/11/22 09:14	01/14/22 17:49	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/11/22 09:14	01/14/22 17:49	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		01/11/22 09:14	01/14/22 17:49	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		01/11/22 09:14	01/14/22 17:49	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/11/22 09:14	01/14/22 17:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/11/22 09:14	01/14/22 17:49	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		01/11/22 09:14	01/14/22 17:49	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/11/22 09:14	01/14/22 17:49	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
Indene	ND		9.7	0.97	ug/L		01/11/22 09:14	01/14/22 17:49	1
Isophorone	ND		9.7	0.14	ug/L		01/11/22 09:14	01/14/22 17:49	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/11/22 09:14	01/14/22 17:49	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/11/22 09:14	01/14/22 17:49	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Nitroaniline	ND		9.7	1.5	ug/L		01/11/22 09:14	01/14/22 17:49	1
Nitrobenzene	ND		9.7	0.13	ug/L		01/11/22 09:14	01/14/22 17:49	1
2-Nitrophenol	ND		9.7	5.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
4-Nitrophenol	ND		9.7	2.0	ug/L		01/11/22 09:14	01/14/22 17:49	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/11/22 09:14	01/14/22 17:49	1

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

Job ID: 400-213805-1

Client Sample ID: MW6A-ROX-010722
Date Collected: 01/07/22 11:35
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		01/11/22 09:14	01/14/22 17:49	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		01/11/22 09:14	01/14/22 17:49	1
Pentachlorophenol	ND		19	1.4	ug/L		01/11/22 09:14	01/14/22 17:49	1
Phenol	ND		9.7	2.5	ug/L		01/11/22 09:14	01/14/22 17:49	1
Pyridine	ND		9.7	3.1	ug/L		01/11/22 09:14	01/14/22 17:49	1
Quinoline	ND	UJ	9.7	4.4	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/11/22 09:14	01/14/22 17:49	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/11/22 09:14	01/14/22 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*46 - 124*	*01/11/22 09:14*	*01/14/22 17:49*	*1*
2-Fluorophenol	*8*	*S1-*	*13 - 113*	*01/11/22 09:14*	*01/14/22 17:49*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*01/11/22 09:14*	*01/14/22 17:49*	*1*
Phenol-d5	*24*		*17 - 127*	*01/11/22 09:14*	*01/14/22 17:49*	*1*
Terphenyl-d14	*73*		*44 - 149*	*01/11/22 09:14*	*01/14/22 17:49*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*01/11/22 09:14*	*01/14/22 17:49*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 16:49	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/18/22 14:52	01/19/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*01/18/22 14:52*	*01/19/22 16:49*	*1*

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

Job ID: 400-213805-1

Client Sample ID: MW5-ROX-010722-EB
Date Collected: 01/07/22 12:55
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 16:03	1
Acrolein	ND		20	3.3	ug/L			01/13/22 16:03	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 16:03	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 16:03	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 16:03	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 16:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 16:03	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 16:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 16:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 16:03	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 16:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 16:03	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 16:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 16:03	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 16:03	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 16:03	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 16:03	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 16:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 16:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 16:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 16:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 16:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 16:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 16:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 16:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 16:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 16:03	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 16:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 16:03	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 16:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 16:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 16:03	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 16:03	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 16:03	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 16:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 16:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 16:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 16:03	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 16:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 16:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 16:03	1

Client Sample ID: MW5-ROX-010722-EB

Date Collected: 01/07/22 12:55
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 16:03	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 16:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 16:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 16:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 16:03	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 16:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 16:03	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 16:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 16:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 16:03	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 16:03	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 16:03	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 16:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 16:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 16:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 16:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 16:03	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 16:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 16:03	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 16:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/13/22 16:03*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 16:03*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/13/22 16:03*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 16:21	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/11/22 09:14	01/14/22 16:21	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 16:21	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 16:21	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 16:21	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:14	01/14/22 16:21	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:14	01/14/22 16:21	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		01/11/22 09:14	01/14/22 16:21	1
Chrysene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 16:21	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/11/22 09:14	01/14/22 16:21	1
Fluoranthene	ND		0.20	0.067	ug/L		01/11/22 09:14	01/14/22 16:21	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:14	01/14/22 16:21	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 16:21	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		01/11/22 09:14	01/14/22 16:21	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/11/22 09:14	01/14/22 16:21	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:14	01/14/22 16:21	1
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:14	01/14/22 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*110*		*15 - 122*	*01/11/22 09:14*	*01/14/22 16:21*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*01/11/22 09:14*	*01/14/22 16:21*	*1*

Client Sample ID: MW5-ROX-010722-EB
Date Collected: 01/07/22 12:55
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	147	S1+	33 - 138	01/11/22 09:14	01/14/22 16:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		01/11/22 09:14	01/14/22 18:10	1
Benzenethiol	ND	*-	9.9	1.7	ug/L		01/11/22 09:14	01/14/22 18:10	1
Benzoic acid	ND		30	7.2	ug/L		01/11/22 09:14	01/14/22 18:10	1
Benzyl alcohol	ND		9.9	2.0	ug/L		01/11/22 09:14	01/14/22 18:10	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		01/11/22 09:14	01/14/22 18:10	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		01/11/22 09:14	01/14/22 18:10	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		01/11/22 09:14	01/14/22 18:10	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		01/11/22 09:14	01/14/22 18:10	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Chloroaniline	ND		9.9	3.4	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		01/11/22 09:14	01/14/22 18:10	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		01/11/22 09:14	01/14/22 18:10	1
2-Chlorophenol	ND	*-	9.9	2.2	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		01/11/22 09:14	01/14/22 18:10	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 18:10	1
Dibenzofuran	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 18:10	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		01/11/22 09:14	01/14/22 18:10	1
Diethyl phthalate	ND		9.9	0.24	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 18:10	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 18:10	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		01/11/22 09:14	01/14/22 18:10	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		01/11/22 09:14	01/14/22 18:10	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 18:10	1
1,4-Dioxane	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 18:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 18:10	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		01/11/22 09:14	01/14/22 18:10	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:14	01/14/22 18:10	1
Hexachloroethane	ND		9.9	4.2	ug/L		01/11/22 09:14	01/14/22 18:10	1
Indene	ND		9.9	0.99	ug/L		01/11/22 09:14	01/14/22 18:10	1
Isophorone	ND		9.9	0.14	ug/L		01/11/22 09:14	01/14/22 18:10	1
2-Methylphenol	ND		9.9	1.8	ug/L		01/11/22 09:14	01/14/22 18:10	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:14	01/14/22 18:10	1
2-Nitroaniline	ND		9.9	2.2	ug/L		01/11/22 09:14	01/14/22 18:10	1
3-Nitroaniline	ND		9.9	1.8	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Nitroaniline	ND		9.9	1.5	ug/L		01/11/22 09:14	01/14/22 18:10	1
Nitrobenzene	ND		9.9	0.13	ug/L		01/11/22 09:14	01/14/22 18:10	1
2-Nitrophenol	ND		9.9	5.1	ug/L		01/11/22 09:14	01/14/22 18:10	1
4-Nitrophenol	ND		9.9	2.1	ug/L		01/11/22 09:14	01/14/22 18:10	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 18:10	1

Client Sample ID: MW5-ROX-010722-EB
Date Collected: 01/07/22 12:55
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		01/11/22 09:14	01/14/22 18:10	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		01/11/22 09:14	01/14/22 18:10	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:14	01/14/22 18:10	1
Phenol	ND		9.9	2.6	ug/L		01/11/22 09:14	01/14/22 18:10	1
Pyridine	ND		9.9	3.2	ug/L		01/11/22 09:14	01/14/22 18:10	1
Quinoline	ND		9.9	4.4	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		01/11/22 09:14	01/14/22 18:10	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/11/22 09:14	01/14/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*64*		*46 - 124*	*01/11/22 09:14*	*01/14/22 18:10*	*1*
2-Fluorophenol	*46*		*13 - 113*	*01/11/22 09:14*	*01/14/22 18:10*	*1*
Nitrobenzene-d5	*74*		*36 - 126*	*01/11/22 09:14*	*01/14/22 18:10*	*1*
Phenol-d5	*61*		*17 - 127*	*01/11/22 09:14*	*01/14/22 18:10*	*1*
Terphenyl-d14	*109*		*44 - 149*	*01/11/22 09:14*	*01/14/22 18:10*	*1*
2,4,6-Tribromophenol	*80*		*26 - 150*	*01/11/22 09:14*	*01/14/22 18:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 17:10	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*01/18/22 14:52*	*01/19/22 17:10*	*1*

Client Sample ID: MW5-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 16:29	1
Acrolein	ND		20	3.3	ug/L			01/13/22 16:29	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 16:29	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 16:29	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 16:29	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 16:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 16:29	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/13/22 16:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 16:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 16:29	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 16:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 16:29	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 16:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 16:29	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 16:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 16:29	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 16:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 16:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 16:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 16:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 16:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 16:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 16:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 16:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 16:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 16:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 16:29	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 16:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 16:29	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 16:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 16:29	1
Methyl tert-butyl ether	**2.4**		1.0	0.22	ug/L			01/13/22 16:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 16:29	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 16:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 16:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 16:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 16:29	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 16:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 16:29	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 16:29	1

Client Sample ID: MW5-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 16:29	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 16:29	1
tert-Butylbenzene	**1.6**		1.0	0.63	ug/L			01/13/22 16:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 16:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 16:29	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 16:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 16:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 16:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 16:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 16:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 16:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 16:29	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 16:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 16:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 16:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 16:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 16:29	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 16:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 16:29	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 119*		*01/13/22 16:29*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/13/22 16:29*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/13/22 16:29*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 16:38	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/22 09:14	01/14/22 16:38	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:14	01/14/22 16:38	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/11/22 09:14	01/14/22 16:38	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:14	01/14/22 16:38	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:14	01/14/22 16:38	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:14	01/14/22 16:38	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/11/22 09:14	01/14/22 16:38	1
Chrysene	ND		0.20	0.074	ug/L		01/11/22 09:14	01/14/22 16:38	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/11/22 09:14	01/14/22 16:38	1
Fluoranthene	ND		0.20	0.068	ug/L		01/11/22 09:14	01/14/22 16:38	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:14	01/14/22 16:38	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/11/22 09:14	01/14/22 16:38	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/11/22 09:14	01/14/22 16:38	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/11/22 09:14	01/14/22 16:38	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:14	01/14/22 16:38	1
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:14	01/14/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*15 - 122*	*01/11/22 09:14*	*01/14/22 16:38*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*01/11/22 09:14*	*01/14/22 16:38*	*1*

Client Sample ID: MW5-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-6
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*129*		*33 - 138*	*01/11/22 09:14*	*01/14/22 16:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/11/22 09:14	01/14/22 18:31	1
Benzenethiol	ND	*- UJ	10	1.7	ug/L		01/11/22 09:14	01/14/22 18:31	1
Benzoic acid	ND		30	7.3	ug/L		01/11/22 09:14	01/14/22 18:31	1
Benzyl alcohol	ND		10	2.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/11/22 09:14	01/14/22 18:31	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/11/22 09:14	01/14/22 18:31	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/11/22 09:14	01/14/22 18:31	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/11/22 09:14	01/14/22 18:31	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Chloroaniline	ND		10	3.4	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/11/22 09:14	01/14/22 18:31	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/11/22 09:14	01/14/22 18:31	1
2-Chlorophenol	ND	*- UJ	10	2.2	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Dibenzofuran	ND		10	0.17	ug/L		01/11/22 09:14	01/14/22 18:31	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Diethyl phthalate	ND		10	0.24	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/11/22 09:14	01/14/22 18:31	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/11/22 09:14	01/14/22 18:31	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/11/22 09:14	01/14/22 18:31	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:14	01/14/22 18:31	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/11/22 09:14	01/14/22 18:31	1
1,4-Dioxane	ND		10	1.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/11/22 09:14	01/14/22 18:31	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:14	01/14/22 18:31	1
Hexachloroethane	ND		10	4.2	ug/L		01/11/22 09:14	01/14/22 18:31	1
Indene	ND		10	1.0	ug/L		01/11/22 09:14	01/14/22 18:31	1
Isophorone	ND		10	0.14	ug/L		01/11/22 09:14	01/14/22 18:31	1
2-Methylphenol	ND		10	1.8	ug/L		01/11/22 09:14	01/14/22 18:31	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:14	01/14/22 18:31	1
2-Nitroaniline	ND		10	2.2	ug/L		01/11/22 09:14	01/14/22 18:31	1
3-Nitroaniline	ND		10	1.8	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Nitroaniline	ND		10	1.5	ug/L		01/11/22 09:14	01/14/22 18:31	1
Nitrobenzene	ND		10	0.13	ug/L		01/11/22 09:14	01/14/22 18:31	1
2-Nitrophenol	ND		10	5.2	ug/L		01/11/22 09:14	01/14/22 18:31	1
4-Nitrophenol	ND		10	2.1	ug/L		01/11/22 09:14	01/14/22 18:31	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/11/22 09:14	01/14/22 18:31	1

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

Job ID: 400-213805-1

Client Sample ID: MW5-ROX-010722
Date Collected: 01/07/22 13:30
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213806-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/11/22 09:14	01/14/22 18:31	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/11/22 09:14	01/14/22 18:31	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:14	01/14/22 18:31	1
Phenol	ND		10	2.6	ug/L		01/11/22 09:14	01/14/22 18:31	1
Pyridine	ND		10	3.2	ug/L		01/11/22 09:14	01/14/22 18:31	1
Quinoline	ND		10	4.5	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/11/22 09:14	01/14/22 18:31	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/22 09:14	01/14/22 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*01/11/22 09:14*	*01/14/22 18:31*	*1*
2-Fluorophenol	*12*	*S1-*	*13 - 113*	*01/11/22 09:14*	*01/14/22 18:31*	*1*
Nitrobenzene-d5	*73*		*36 - 126*	*01/11/22 09:14*	*01/14/22 18:31*	*1*
Phenol-d5	*42*		*17 - 127*	*01/11/22 09:14*	*01/14/22 18:31*	*1*
Terphenyl-d14	*98*		*44 - 149*	*01/11/22 09:14*	*01/14/22 18:31*	*1*
2,4,6-Tribromophenol	*85*		*26 - 150*	*01/11/22 09:14*	*01/14/22 18:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.016	ug/L		01/18/22 14:52	01/19/22 17:30	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/18/22 14:52	01/19/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*51 - 149*	*01/18/22 14:52*	*01/19/22 17:30*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-213805-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-213805-1	TB-ROX-010722-8260-A	93	104	96
400-213805-3	MW16-ROX-010722	92	104	96
400-213805-4	MW24-ROX-010722	92	101	97
400-213805-4 MS	MW24-ROX-010722-MS	91	104	95
400-213805-4 MSD	MW24-ROX-010722-MSD	93	103	96
400-213806-1	TB-ROX-010722-8260-B	91	104	95
400-213806-3	MW6B-ROX-010722	92	103	95
400-213806-4	MW6A-ROX-010722	91	105	96
400-213806-5	MW5-ROX-010722-EB	92	104	96
400-213806-6	MW5-ROX-010722	90	105	98
LCS 400-563062/1002	Lab Control Sample	91	103	94
MB 400-563062/5	Method Blank	92	104	96

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-213805-3	MW16-ROX-010722	59	26	69	50	95	83
400-213805-4	MW24-ROX-010722	55	33	65	51	98	68
400-213805-4 MS	MW24-ROX-010722-MS	66	23	63	52	97	94
400-213805-4 MSD	MW24-ROX-010722-MSD	66	29	64	55	99	88
400-213806-3	MW6B-ROX-010722	55	18	66	45	92	80
400-213806-4	MW6A-ROX-010722	57	8 S1-	68	24	73	75
400-213806-5	MW5-ROX-010722-EB	64	46	74	61	109	80
400-213806-6	MW5-ROX-010722	63	12 S1-	73	42	98	85
LCS 400-562825/2-A	Lab Control Sample	54	26	64	49	77	66
LCS 400-562825/4-A	Lab Control Sample	63	16	60	41	80	71
LCSD 400-562825/3-A	Lab Control Sample Dup	60	37	65	56	100	60
MB 400-562825/1-A	Method Blank	58	11 S1-	67	34	104	60

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-213805-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-213805-3	MW16-ROX-010722	93	100	132
400-213805-4	MW24-ROX-010722	99	94	132
400-213805-4 MS	MW24-ROX-010722-MS	102	110	116
400-213805-4 MSD	MW24-ROX-010722-MSD	95	111	117
400-213806-3	MW6B-ROX-010722	96	93	126
400-213806-4	MW6A-ROX-010722	97	98	88
400-213806-5	MW5-ROX-010722-EB	110	101	147 S1+
400-213806-6	MW5-ROX-010722	108	101	129
LCS 400-562825/4-A	Lab Control Sample	90	96	105
MB 400-562825/1-A	Method Blank	100	94	140 S1+

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-213805-2	TB-ROX-010722-8011-A	81
400-213805-3	MW16-ROX-010722	89
400-213805-4	MW24-ROX-010722	82
400-213805-4 MS	MW24-ROX-010722-MS	87
400-213805-4 MSD	MW24-ROX-010722-MSD	90
400-213806-2	TB-ROX-010722-8011-B	77
400-213806-3	MW6B-ROX-010722	84
400-213806-4	MW6A-ROX-010722	75
400-213806-5	MW5-ROX-010722-EB	81
400-213806-6	MW5-ROX-010722	81
LCS 400-562844/2-A	Lab Control Sample	92
LCS 400-563584/2-A	Lab Control Sample	133
MB 400-562844/1-A	Method Blank	84
MB 400-563584/1-A	Method Blank	137

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-213805-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-213805-1

Client Sample ID: TB-ROX-010722-8260-A

Lab Sample ID: 400-213805-1

Date Collected: 01/07/22 00:00
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 13:52	CAR	TAL PEN

Client Sample ID: TB-ROX-010722-8011-A

Lab Sample ID: 400-213805-2

Date Collected: 01/07/22 00:00
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.8 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 22:45	DS	TAL PEN

Client Sample ID: MW16-ROX-010722

Lab Sample ID: 400-213805-3

Date Collected: 01/07/22 11:00
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 14:19	CAR	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 16:06	S1B	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 14:38	VC1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 23:05	DS	TAL PEN

Client Sample ID: MW24-ROX-010722

Lab Sample ID: 400-213805-4

Date Collected: 01/07/22 12:20
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 12:08	CAR	TAL PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 16:27	S1B	TAL PEN
Total/NA	Prep	3520C			259.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 14:56	VC1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 23:44	DS	TAL PEN

Client Sample ID: TB-ROX-010722-8260-B

Lab Sample ID: 400-213806-1

Date Collected: 01/07/22 00:00
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 14:45	CAR	TAL PEN

Client Sample ID: TB-ROX-010722-8011-B

Lab Sample ID: 400-213806-2

Date Collected: 01/07/22 00:00
Matrix: Water
Date Received: 01/08/22 10:24

Prep 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	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 16:08	DS	TAL PEN

Client Sample ID: MW6B-ROX-010722

Lab Sample ID: 400-213806-3

Date Collected: 01/07/22 10:35
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 15:11	CAR	TAL PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 17:29	S1B	TAL PEN
Total/NA	Prep	3520C			252.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 15:47	VC1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 16:29	DS	TAL PEN

Client Sample ID: MW6A-ROX-010722

Lab Sample ID: 400-213806-4

Date Collected: 01/07/22 11:35
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 15:37	CAR	TAL PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 17:49	S1B	TAL PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 16:04	VC1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 16:49	DS	TAL PEN

Client Sample ID: MW5-ROX-010722-EB

Lab Sample ID: 400-213806-5

Date Collected: 01/07/22 12:55
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 16:03	CAR	TAL PEN
Total/NA	Prep	3520C			253 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 18:10	S1B	TAL PEN
Total/NA	Prep	3520C			253 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 16:21	VC1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 17:10	DS	TAL PEN

Client Sample ID: MW5-ROX-010722

Lab Sample ID: 400-213806-6

Date Collected: 01/07/22 13:30
Matrix: Water
Date Received: 01/08/22 10:24

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 16:29	CAR	TAL PEN
Total/NA	Prep	3520C			249.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 18:31	S1B	TAL PEN
Total/NA	Prep	3520C			249.4 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 16:38	VC1	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 17:30	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562825/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 11:58	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563194	01/14/22 10:40	VC1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-562844/1-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	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:24	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563062/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 11:42	CAR	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563584/1-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	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:24	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-562825/2-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:18	S1B	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-562825/4-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 13:00	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563194	01/14/22 12:05	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-562844/2-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	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/11/22 16:44	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563062/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563062	01/13/22 10:11	CAR	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563584/2-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	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:44	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-562825/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	562825	01/11/22 09:13	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 12:39	S1B	TAL PEN

Lab Chronicle

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

Job ID: 400-213805-1

Client Sample ID: MW24-ROX-010722-MS

Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4 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	8260B		1	5 mL	5 mL	563062	01/13/22 12:34	CAR	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 16:47	S1B	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563194	01/14/22 15:13	VC1	TAL PEN
Total/NA	Prep	8011			32.2 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/12/22 00:04	DS	TAL PEN

Client Sample ID: MW24-ROX-010722-MSD

Date Collected: 01/07/22 12:20
Date Received: 01/08/22 10:24

Lab Sample ID: 400-213805-4 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	8260B		1	5 mL	5 mL	563062	01/13/22 13:00	CAR	TAL PEN
Total/NA	Prep	3520C			261.6 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D		1			563190	01/14/22 17:08	S1B	TAL PEN
Total/NA	Prep	3520C			261.6 mL	1 mL	562825	01/11/22 09:14	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563194	01/14/22 15:30	VC1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	562844	01/11/22 10:45	KIS	TAL PEN
Total/NA	Analysis	8011		1			562891	01/12/22 00:24	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 563062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-1	TB-ROX-010722-8260-A	Total/NA	Water	8260B	
400-213805-3	MW16-ROX-010722	Total/NA	Water	8260B	
400-213805-4	MW24-ROX-010722	Total/NA	Water	8260B	
400-213806-1	TB-ROX-010722-8260-B	Total/NA	Water	8260B	
400-213806-3	MW6B-ROX-010722	Total/NA	Water	8260B	
400-213806-4	MW6A-ROX-010722	Total/NA	Water	8260B	
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	8260B	
400-213806-6	MW5-ROX-010722	Total/NA	Water	8260B	
MB 400-563062/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563062/1002	Lab Control Sample	Total/NA	Water	8260B	
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	8260B	
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 562825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-3	MW16-ROX-010722	Total/NA	Water	3520C	
400-213805-4	MW24-ROX-010722	Total/NA	Water	3520C	
400-213806-3	MW6B-ROX-010722	Total/NA	Water	3520C	
400-213806-4	MW6A-ROX-010722	Total/NA	Water	3520C	
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	3520C	
400-213806-6	MW5-ROX-010722	Total/NA	Water	3520C	
MB 400-562825/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	3520C	
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	3520C	

Analysis Batch: 563190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-3	MW16-ROX-010722	Total/NA	Water	8270D	562825
400-213805-4	MW24-ROX-010722	Total/NA	Water	8270D	562825
400-213806-3	MW6B-ROX-010722	Total/NA	Water	8270D	562825
400-213806-4	MW6A-ROX-010722	Total/NA	Water	8270D	562825
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	8270D	562825
400-213806-6	MW5-ROX-010722	Total/NA	Water	8270D	562825
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D	562825
LCS 400-562825/2-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D	562825
LCSD 400-562825/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	562825
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	8270D	562825
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	8270D	562825

Analysis Batch: 563194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-3	MW16-ROX-010722	Total/NA	Water	8270D LL	562825
400-213805-4	MW24-ROX-010722	Total/NA	Water	8270D LL	562825
400-213806-3	MW6B-ROX-010722	Total/NA	Water	8270D LL	562825
400-213806-4	MW6A-ROX-010722	Total/NA	Water	8270D LL	562825

GC/MS Semi VOA (Continued)

Analysis Batch: 563194 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	8270D LL	562825
400-213806-6	MW5-ROX-010722	Total/NA	Water	8270D LL	562825
MB 400-562825/1-A	Method Blank	Total/NA	Water	8270D LL	562825
LCS 400-562825/4-A	Lab Control Sample	Total/NA	Water	8270D LL	562825
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	8270D LL	562825
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	8270D LL	562825

GC Semi VOA

Prep Batch: 562844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-2	TB-ROX-010722-8011-A	Total/NA	Water	8011	
400-213805-3	MW16-ROX-010722	Total/NA	Water	8011	
400-213805-4	MW24-ROX-010722	Total/NA	Water	8011	
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	8011	
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	8011	

Analysis Batch: 562891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213805-2	TB-ROX-010722-8011-A	Total/NA	Water	8011	562844
400-213805-3	MW16-ROX-010722	Total/NA	Water	8011	562844
400-213805-4	MW24-ROX-010722	Total/NA	Water	8011	562844
MB 400-562844/1-A	Method Blank	Total/NA	Water	8011	562844
LCS 400-562844/2-A	Lab Control Sample	Total/NA	Water	8011	562844
400-213805-4 MS	MW24-ROX-010722-MS	Total/NA	Water	8011	562844
400-213805-4 MSD	MW24-ROX-010722-MSD	Total/NA	Water	8011	562844

Prep Batch: 563584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213806-2	TB-ROX-010722-8011-B	Total/NA	Water	8011	
400-213806-3	MW6B-ROX-010722	Total/NA	Water	8011	
400-213806-4	MW6A-ROX-010722	Total/NA	Water	8011	
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	8011	
400-213806-6	MW5-ROX-010722	Total/NA	Water	8011	
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 563662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213806-2	TB-ROX-010722-8011-B	Total/NA	Water	8011	563584
400-213806-3	MW6B-ROX-010722	Total/NA	Water	8011	563584
400-213806-4	MW6A-ROX-010722	Total/NA	Water	8011	563584
400-213806-5	MW5-ROX-010722-EB	Total/NA	Water	8011	563584
400-213806-6	MW5-ROX-010722	Total/NA	Water	8011	563584
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	563584
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	563584

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563062/5
Matrix: Water
Analysis Batch: 563062

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 11:42	1
Acrolein	ND		20	3.3	ug/L			01/13/22 11:42	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 11:42	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 11:42	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 11:42	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 11:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 11:42	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 11:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 11:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 11:42	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 11:42	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 11:42	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 11:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 11:42	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 11:42	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 11:42	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 11:42	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 11:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 11:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 11:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 11:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 11:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 11:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 11:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 11:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 11:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 11:42	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 11:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 11:42	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 11:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 11:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 11:42	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 11:42	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 11:42	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 11:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 11:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 11:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 11:42	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 11:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 11:42	1

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

Lab Sample ID: MB 400-563062/5
Matrix: Water
Analysis Batch: 563062

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 11:42	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 11:42	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 11:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 11:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 11:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 11:42	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 11:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 11:42	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 11:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 11:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 11:42	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 11:42	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 11:42	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 11:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 11:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 11:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 11:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 11:42	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 11:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 11:42	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 11:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/13/22 11:42*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 11:42*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/13/22 11:42*	*1*

Lab Sample ID: LCS 400-563062/1002
Matrix: Water
Analysis Batch: 563062

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	195		ug/L		98	43 - 160
Acrolein	500	504		ug/L		101	38 - 160
Acrylonitrile	500	479		ug/L		96	64 - 142
Benzene	50.0	53.8		ug/L		108	70 - 130
Bromobenzene	50.0	50.5		ug/L		101	70 - 132
Bromochloromethane	50.0	54.9		ug/L		110	70 - 130
Bromodichloromethane	50.0	51.9		ug/L		104	67 - 133
Bromoform	50.0	45.7		ug/L		91	57 - 140
Bromomethane	50.0	100	*+	ug/L		200	10 - 160
2-Butanone (MEK)	200	188		ug/L		94	61 - 145
Carbon disulfide	50.0	54.6		ug/L		109	61 - 137
Carbon tetrachloride	50.0	52.6		ug/L		105	61 - 137
Chlorobenzene	50.0	52.0		ug/L		104	70 - 130
Dibromochloromethane	50.0	48.8		ug/L		98	67 - 135
Chloroethane	50.0	62.2		ug/L		124	55 - 141

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

Lab Sample ID: LCS 400-563062/1002
Matrix: Water
Analysis Batch: 563062

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	56.5		ug/L		113	10 - 160
Chloroform	50.0	52.9		ug/L		106	69 - 130
1-Chlorohexane	50.0	52.7		ug/L		105	69 - 130
Chloromethane	50.0	61.5		ug/L		123	58 - 137
cis-1,2-Dichloroethene	50.0	52.0		ug/L		104	68 - 130
cis-1,3-Dichloropropene	50.0	51.8		ug/L		104	69 - 132
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	52.3		ug/L		105	70 - 130
1,4-Dichlorobenzene	50.0	51.8		ug/L		104	70 - 130
Dichlorodifluoromethane	50.0	61.1		ug/L		122	41 - 146
1,1-Dichloroethane	50.0	52.1		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	50.9		ug/L		102	69 - 130
1,1-Dichloroethene	50.0	52.8		ug/L		106	63 - 134
1,2-Dichloropropane	50.0	53.1		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	49.2		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	49.7		ug/L		99	52 - 135
1,1-Dichloropropene	50.0	54.6		ug/L		109	70 - 130
Ethylbenzene	50.0	51.7		ug/L		103	70 - 130
Ethyl methacrylate	50.0	44.8		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	59.3		ug/L		119	53 - 140
2-Hexanone	200	169		ug/L		85	65 - 137
Isopropylbenzene	50.0	53.2		ug/L		106	70 - 130
Methylene bromide	50.0	52.4		ug/L		105	70 - 130
Methylene Chloride	50.0	51.5		ug/L		103	66 - 135
4-Methyl-2-pentanone (MIBK)	200	184		ug/L		92	69 - 138
Methyl tert-butyl ether	50.0	49.1		ug/L		98	66 - 130
m-Xylene & p-Xylene	50.0	50.3		ug/L		101	70 - 130
Naphthalene	50.0	46.8		ug/L		94	47 - 149
n-Butylbenzene	50.0	55.9		ug/L		112	67 - 130
N-Propylbenzene	50.0	53.7		ug/L		107	70 - 130
o-Chlorotoluene	50.0	50.3		ug/L		101	70 - 130
o-Xylene	50.0	50.4		ug/L		101	70 - 130
p-Chlorotoluene	50.0	49.6		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	52.1		ug/L		104	65 - 130
sec-Butylbenzene	50.0	53.3		ug/L		107	66 - 130
Styrene	50.0	51.2		ug/L		102	70 - 130
tert-Butylbenzene	50.0	50.1		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.7		ug/L		101	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.5		ug/L		93	70 - 131
Tetrachloroethene	50.0	54.5		ug/L		109	65 - 130
Toluene	50.0	48.5		ug/L		97	70 - 130
trans-1,2-Dichloroethene	50.0	53.6		ug/L		107	70 - 130
trans-1,3-Dichloropropene	50.0	47.9		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	52.3		ug/L		105	60 - 138
1,2,4-Trichlorobenzene	50.0	53.7		ug/L		107	60 - 140
1,1,1-Trichloroethane	50.0	53.6		ug/L		107	68 - 130
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	70 - 130
Trichloroethene	50.0	56.3		ug/L		113	70 - 130
Trichlorofluoromethane	50.0	59.2		ug/L		118	65 - 138

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

Lab Sample ID: LCS 400-563062/1002
Matrix: Water
Analysis Batch: 563062

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	44.6		ug/L		89	70 - 130
1,2,4-Trimethylbenzene	50.0	52.1		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	50.0	50.8		ug/L		102	69 - 130
Vinyl acetate	100	106		ug/L		106	26 - 160
Vinyl chloride	50.0	60.7		ug/L		121	59 - 136
Xylenes, Total	100	101		ug/L		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*94*		*64 - 132*

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 563062

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	121		ug/L		61	43 - 150
Acrolein	ND		500	382		ug/L		76	38 - 150
Acrylonitrile	ND		500	328		ug/L		66	62 - 149
Benzene	ND		50.0	37.3		ug/L		75	56 - 142
Bromobenzene	ND		50.0	34.2		ug/L		68	59 - 136
Bromochloromethane	ND		50.0	37.5		ug/L		75	64 - 140
Bromodichloromethane	ND		50.0	35.8		ug/L		72	59 - 143
Bromoform	ND		50.0	29.8		ug/L		60	50 - 140
Bromomethane	ND	F1 *+	50.0	69.5		ug/L		139	10 - 150
2-Butanone (MEK)	ND		200	127		ug/L		64	55 - 150
Carbon disulfide	ND		50.0	35.9		ug/L		72	48 - 150
Carbon tetrachloride	ND		50.0	35.8		ug/L		72	55 - 145
Chlorobenzene	ND		50.0	35.7		ug/L		71	64 - 130
Dibromochloromethane	ND		50.0	33.3		ug/L		67	56 - 143
Chloroethane	ND		50.0	46.0		ug/L		92	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	36.9		ug/L		74	60 - 141
1-Chlorohexane	ND		50.0	34.1		ug/L		68	56 - 136
Chloromethane	ND		50.0	43.4		ug/L		87	49 - 148
cis-1,2-Dichloroethene	ND		50.0	35.8		ug/L		72	59 - 143
cis-1,3-Dichloropropene	ND		50.0	35.2		ug/L		70	57 - 140
1,2-Dichlorobenzene	ND		50.0	35.1		ug/L		70	52 - 137
1,3-Dichlorobenzene	ND		50.0	35.1		ug/L		70	54 - 135
1,4-Dichlorobenzene	ND		50.0	35.1		ug/L		70	53 - 135
Dichlorodifluoromethane	ND		50.0	42.7		ug/L		85	16 - 150
1,1-Dichloroethane	ND		50.0	36.2		ug/L		72	61 - 144
1,2-Dichloroethane	ND		50.0	35.4		ug/L		71	60 - 141
1,1-Dichloroethene	ND		50.0	35.2		ug/L		70	54 - 147
1,2-Dichloropropane	ND		50.0	37.6		ug/L		75	66 - 137
1,3-Dichloropropane	ND		50.0	33.8		ug/L		68	66 - 133
2,2-Dichloropropane	ND		50.0	33.2		ug/L		66	42 - 144

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

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 563062

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	37.2		ug/L		74	65 - 136
Ethylbenzene	ND		50.0	35.0		ug/L		70	58 - 131
Ethyl methacrylate	ND	F1	50.0	30.6	F1	ug/L		61	64 - 130
Hexachlorobutadiene	ND		50.0	37.7		ug/L		75	31 - 149
2-Hexanone	ND	F1	200	113	F1	ug/L		56	65 - 140
Isopropylbenzene	ND		50.0	35.5		ug/L		71	56 - 133
Methylene bromide	ND		50.0	36.7		ug/L		73	63 - 138
Methylene Chloride	ND		50.0	35.5		ug/L		71	60 - 146
4-Methyl-2-pentanone (MIBK)	ND	F1	200	125	F1	ug/L		62	63 - 146
Methyl tert-butyl ether	ND		50.0	33.3		ug/L		67	59 - 137
m-Xylene & p-Xylene	ND		50.0	33.8		ug/L		68	57 - 130
Naphthalene	ND		50.0	30.2		ug/L		60	25 - 150
n-Butylbenzene	ND		50.0	36.7		ug/L		73	41 - 142
N-Propylbenzene	ND		50.0	34.8		ug/L		70	51 - 138
o-Chlorotoluene	ND		50.0	34.9		ug/L		70	53 - 134
o-Xylene	ND		50.0	34.5		ug/L		69	61 - 130
p-Chlorotoluene	ND		50.0	33.0		ug/L		66	54 - 133
p-Isopropyltoluene	ND		50.0	33.3		ug/L		67	48 - 139
sec-Butylbenzene	ND		50.0	35.1		ug/L		70	50 - 138
Styrene	ND		50.0	34.8		ug/L		70	58 - 131
tert-Butylbenzene	ND		50.0	32.9		ug/L		66	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	34.6		ug/L		69	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1	50.0	31.0	F1	ug/L		62	66 - 135
Tetrachloroethene	ND		50.0	35.2		ug/L		70	52 - 133
Toluene	ND		50.0	33.1		ug/L		66	65 - 130
trans-1,2-Dichloroethene	ND		50.0	35.9		ug/L		72	61 - 143
trans-1,3-Dichloropropene	ND		50.0	32.1		ug/L		64	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	34.1		ug/L		68	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	34.7		ug/L		69	39 - 148
1,1,1-Trichloroethane	ND		50.0	37.0		ug/L		74	57 - 142
1,1,2-Trichloroethane	ND		50.0	34.1		ug/L		68	66 - 131
Trichloroethene	ND		50.0	38.5		ug/L		77	64 - 136
Trichlorofluoromethane	ND		50.0	43.2		ug/L		86	54 - 150
1,2,3-Trichloropropane	ND	F1	50.0	31.3	F1	ug/L		63	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	34.5		ug/L		69	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	34.2		ug/L		68	52 - 135
Vinyl acetate	ND		100	78.3		ug/L		78	26 - 150
Vinyl chloride	ND		50.0	42.8		ug/L		86	46 - 150
Xylenes, Total	ND		100	68.4		ug/L		68	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: 400-213805-4 MSD
Matrix: Water
Analysis Batch: 563062

Client Sample ID: MW24-ROX-010722-MSD
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	150		ug/L		75	43 - 150	21	30
Acrolein	ND		500	424		ug/L		85	38 - 150	10	31
Acrylonitrile	ND		500	402		ug/L		80	62 - 149	20	30
Benzene	ND		50.0	43.1		ug/L		86	56 - 142	14	30
Bromobenzene	ND		50.0	38.7		ug/L		77	59 - 136	12	30
Bromochloromethane	ND		50.0	44.2		ug/L		88	64 - 140	16	30
Bromodichloromethane	ND		50.0	42.0		ug/L		84	59 - 143	16	30
Bromoform	ND		50.0	36.1		ug/L		72	50 - 140	19	30
Bromomethane	ND	F1 *+	50.0	77.2	F1	ug/L		154	10 - 150	10	50
2-Butanone (MEK)	ND		200	156		ug/L		78	55 - 150	20	30
Carbon disulfide	ND		50.0	43.1		ug/L		86	48 - 150	18	30
Carbon tetrachloride	ND		50.0	41.9		ug/L		84	55 - 145	16	30
Chlorobenzene	ND		50.0	40.0		ug/L		80	64 - 130	12	30
Dibromochloromethane	ND		50.0	38.9		ug/L		78	56 - 143	16	30
Chloroethane	ND		50.0	48.4		ug/L		97	50 - 150	5	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	42.3		ug/L		85	60 - 141	14	30
1-Chlorohexane	ND		50.0	38.6		ug/L		77	56 - 136	12	30
Chloromethane	ND		50.0	47.4		ug/L		95	49 - 148	9	31
cis-1,2-Dichloroethene	ND		50.0	41.7		ug/L		83	59 - 143	15	30
cis-1,3-Dichloropropene	ND		50.0	40.6		ug/L		81	57 - 140	14	30
1,2-Dichlorobenzene	ND		50.0	38.9		ug/L		78	52 - 137	10	30
1,3-Dichlorobenzene	ND		50.0	38.7		ug/L		77	54 - 135	10	30
1,4-Dichlorobenzene	ND		50.0	39.1		ug/L		78	53 - 135	11	30
Dichlorodifluoromethane	ND		50.0	45.9		ug/L		92	16 - 150	7	31
1,1-Dichloroethane	ND		50.0	42.4		ug/L		85	61 - 144	16	30
1,2-Dichloroethane	ND		50.0	41.3		ug/L		83	60 - 141	15	30
1,1-Dichloroethene	ND		50.0	41.9		ug/L		84	54 - 147	17	30
1,2-Dichloropropane	ND		50.0	42.8		ug/L		86	66 - 137	13	30
1,3-Dichloropropane	ND		50.0	39.9		ug/L		80	66 - 133	17	30
2,2-Dichloropropane	ND		50.0	39.5		ug/L		79	42 - 144	17	31
1,1-Dichloropropene	ND		50.0	42.9		ug/L		86	65 - 136	14	30
Ethylbenzene	ND		50.0	39.1		ug/L		78	58 - 131	11	30
Ethyl methacrylate	ND	F1	50.0	36.9		ug/L		74	64 - 130	18	30
Hexachlorobutadiene	ND		50.0	41.1		ug/L		82	31 - 149	9	36
2-Hexanone	ND	F1	200	140		ug/L		70	65 - 140	22	30
Isopropylbenzene	ND		50.0	39.3		ug/L		79	56 - 133	10	30
Methylene bromide	ND		50.0	42.9		ug/L		86	63 - 138	16	30
Methylene Chloride	ND		50.0	41.3		ug/L		83	60 - 146	15	32
4-Methyl-2-pentanone (MIBK)	ND	F1	200	154		ug/L		77	63 - 146	21	30
Methyl tert-butyl ether	ND		50.0	40.1		ug/L		80	59 - 137	18	30
m-Xylene & p-Xylene	ND		50.0	37.3		ug/L		75	57 - 130	10	30
Naphthalene	ND		50.0	36.2		ug/L		72	25 - 150	18	30
n-Butylbenzene	ND		50.0	39.1		ug/L		78	41 - 142	6	31
N-Propylbenzene	ND		50.0	38.7		ug/L		77	51 - 138	11	30
o-Chlorotoluene	ND		50.0	37.4		ug/L		75	53 - 134	7	30
o-Xylene	ND		50.0	38.2		ug/L		76	61 - 130	10	30
p-Chlorotoluene	ND		50.0	36.6		ug/L		73	54 - 133	10	30

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

Lab Sample ID: 400-213805-4 MSD
Matrix: Water
Analysis Batch: 563062

Client Sample ID: MW24-ROX-010722-MSD
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	37.4		ug/L		75	48 - 139	11	30
sec-Butylbenzene	ND		50.0	38.7		ug/L		77	50 - 138	10	30
Styrene	ND		50.0	38.7		ug/L		77	58 - 131	11	30
tert-Butylbenzene	ND		50.0	36.8		ug/L		74	54 - 146	11	30
1,1,1,2-Tetrachloroethane	ND		50.0	39.8		ug/L		80	59 - 137	14	30
1,1,2,2-Tetrachloroethane	ND	F1	50.0	37.4		ug/L		75	66 - 135	19	30
Tetrachloroethene	ND		50.0	40.1		ug/L		80	52 - 133	13	30
Toluene	ND		50.0	37.7		ug/L		75	65 - 130	13	30
trans-1,2-Dichloroethene	ND		50.0	42.6		ug/L		85	61 - 143	17	30
trans-1,3-Dichloropropene	ND		50.0	37.6		ug/L		75	53 - 133	16	30
1,2,3-Trichlorobenzene	ND		50.0	39.2		ug/L		78	43 - 145	14	30
1,2,4-Trichlorobenzene	ND		50.0	39.1		ug/L		78	39 - 148	12	30
1,1,1-Trichloroethane	ND		50.0	42.7		ug/L		85	57 - 142	14	30
1,1,2-Trichloroethane	ND		50.0	39.3		ug/L		79	66 - 131	14	30
Trichloroethene	ND		50.0	44.0		ug/L		88	64 - 136	13	30
Trichlorofluoromethane	ND		50.0	47.2		ug/L		94	54 - 150	9	30
1,2,3-Trichloropropane	ND	F1	50.0	38.3		ug/L		77	65 - 133	20	30
1,2,4-Trimethylbenzene	ND		50.0	38.0		ug/L		76	50 - 139	10	30
1,3,5-Trimethylbenzene	ND		50.0	37.6		ug/L		75	52 - 135	9	30
Vinyl acetate	ND		100	84.2		ug/L		84	26 - 150	7	33
Vinyl chloride	ND		50.0	46.3		ug/L		93	46 - 150	8	30
Xylenes, Total	ND		100	75.5		ug/L		75	59 - 130	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzenethiol	ND		10	1.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzoic acid	ND		30	7.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
Benzyl alcohol	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/11/22 09:13	01/14/22 11:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/11/22 09:13	01/14/22 11:58	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloroaniline	ND		10	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Chlorophenol	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1

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

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dibenzofuran	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Diethyl phthalate	ND		10	0.24	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/11/22 09:13	01/14/22 11:58	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
1,4-Dioxane	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Hexachloroethane	ND		10	4.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Indene	ND		10	1.0	ug/L		01/11/22 09:13	01/14/22 11:58	1
Isophorone	ND		10	0.14	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Methylphenol	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitroaniline	ND		10	2.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
3-Nitroaniline	ND		10	1.8	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitroaniline	ND		10	1.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
Nitrobenzene	ND		10	0.13	ug/L		01/11/22 09:13	01/14/22 11:58	1
2-Nitrophenol	ND		10	5.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
4-Nitrophenol	ND		10	2.1	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/11/22 09:13	01/14/22 11:58	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pentachlorophenol	ND		20	1.4	ug/L		01/11/22 09:13	01/14/22 11:58	1
Phenol	ND		10	2.6	ug/L		01/11/22 09:13	01/14/22 11:58	1
Pyridine	ND		10	3.2	ug/L		01/11/22 09:13	01/14/22 11:58	1
Quinoline	ND		10	4.5	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/11/22 09:13	01/14/22 11:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/11/22 09:13	01/14/22 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Phenol-d5	*34*		*17 - 127*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
Terphenyl-d14	*104*		*44 - 149*	*01/11/22 09:13*	*01/14/22 11:58*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*01/11/22 09:13*	*01/14/22 11:58*	*1*

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

Lab Sample ID: LCS 400-562825/2-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	4.36	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*46 - 124*
2-Fluorophenol	*26*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*77*		*44 - 149*
2,4,6-Tribromophenol	*66*		*26 - 150*

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.2		ug/L		51	21 - 120
Benzoic acid	498	281		ug/L		56	10 - 144
Benzyl alcohol	120	86.8		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	64.0		ug/L		53	47 - 120
Bis(2-chloroethyl)ether	120	71.8		ug/L		60	44 - 120
bis (2-chloroisopropyl) ether	120	83.7		ug/L		70	33 - 121
Bis(2-ethylhexyl) phthalate	120	104		ug/L		86	52 - 147
4-Bromophenyl phenyl ether	120	90.6		ug/L		75	54 - 122
Butyl benzyl phthalate	120	96.8		ug/L		81	54 - 133
4-Chloroaniline	120	55.2		ug/L		46	26 - 120
4-Chloro-3-methylphenol	120	74.5		ug/L		62	48 - 131
2-Chloronaphthalene	120	76.3		ug/L		64	52 - 121
2-Chlorophenol	120	43.1	*-	ug/L		36	40 - 120
4-Chlorophenyl phenyl ether	120	81.7		ug/L		68	56 - 125
Dibenz[a,h]acridine	120	117		ug/L		98	31 - 150
Dibenzofuran	120	79.6		ug/L		66	56 - 122
3,3'-Dichlorobenzidine	160	125		ug/L		78	36 - 132
2,4-Dichlorophenol	120	60.2		ug/L		50	49 - 120
Diethyl phthalate	120	105		ug/L		88	50 - 137
2,4-Dimethylphenol	120	85.9		ug/L		72	48 - 120
Dimethyl phthalate	120	85.8		ug/L		71	57 - 124
Di-n-butyl phthalate	120	95.7		ug/L		80	58 - 126
4,6-Dinitro-ortho-cresol	240	287		ug/L		120	23 - 148
2,4-Dinitrophenol	240	290		ug/L		121	10 - 150
2,4-Dinitrotoluene	120	82.9		ug/L		69	54 - 142
2,6-Dinitrotoluene	120	73.8		ug/L		61	55 - 130
Di-n-octyl phthalate	120	99.9		ug/L		83	57 - 138
1,4-Dioxane	120	51.5		ug/L		43	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	85.2		ug/L		71	45 - 124
Hexachlorobenzene	120	113		ug/L		94	52 - 129
Hexachlorocyclopentadiene	120	37.9		ug/L		32	10 - 134
Hexachloroethane	120	55.8		ug/L		46	20 - 120

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

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	120	77.1		ug/L		64	49 - 120
Isophorone	120	71.0		ug/L		59	48 - 120
2-Methylphenol	120	78.9		ug/L		66	46 - 124
3 & 4 Methylphenol	120	80.7		ug/L		67	45 - 120
2-Nitroaniline	120	91.0		ug/L		76	51 - 145
3-Nitroaniline	120	69.0		ug/L		58	37 - 127
4-Nitroaniline	120	80.7		ug/L		67	36 - 137
Nitrobenzene	120	71.7		ug/L		60	45 - 120
2-Nitrophenol	120	59.6		ug/L		50	40 - 124
4-Nitrophenol	240	221		ug/L		92	23 - 146
N-Nitrosodimethylamine	120	108		ug/L		90	29 - 137
N-Nitrosodi-n-propylamine	120	97.1		ug/L		81	45 - 120
N-Nitrosodiphenylamine	119	77.6		ug/L		65	54 - 120
Pentachlorophenol	240	221		ug/L		92	31 - 130
Phenol	120	47.3		ug/L		39	11 - 120
Pyridine	240	101		ug/L		42	16 - 120
Quinoline	120	76.7		ug/L		64	49 - 130
2,4,5-Trichlorophenol	120	76.6		ug/L		64	51 - 136
2,4,6-Trichlorophenol	120	70.1		ug/L		58	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*46 - 124*
2-Fluorophenol	*16*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*41*		*17 - 127*
Terphenyl-d14	*80*		*44 - 149*
2,4,6-Tribromophenol	*71*		*26 - 150*

Lab Sample ID: LCSD 400-562825/3-A
Matrix: Water
Analysis Batch: 563190

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	5.46	J *-	ug/L		5	10 - 120	22	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*65*		*36 - 126*
Phenol-d5	*56*		*17 - 127*
Terphenyl-d14	*100*		*44 - 149*
2,4,6-Tribromophenol	*60*		*26 - 150*

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

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 563190

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		114	60.2		ug/L		53	10 - 120
Benzoic acid	ND		472	332		ug/L		70	10 - 149
Benzyl alcohol	ND		114	88.4		ug/L		78	33 - 120
Bis(2-chloroethoxy)methane	ND		114	64.9		ug/L		57	26 - 120
Bis(2-chloroethyl)ether	ND		114	68.3		ug/L		60	42 - 120
bis (2-chloroisopropyl) ether	ND		114	86.2		ug/L		76	28 - 120
Bis(2-ethylhexyl) phthalate	ND		114	104		ug/L		91	39 - 120
4-Bromophenyl phenyl ether	ND		114	93.5		ug/L		82	40 - 120
Butyl benzyl phthalate	ND		114	97.4		ug/L		86	45 - 120
4-Chloroaniline	ND		114	37.8		ug/L		33	10 - 120
4-Chloro-3-methylphenol	ND		114	81.2		ug/L		71	34 - 120
2-Chloronaphthalene	ND		114	74.2		ug/L		65	39 - 120
2-Chlorophenol	ND	*-	114	56.3		ug/L		49	25 - 120
4-Chlorophenyl phenyl ether	ND		114	82.5		ug/L		73	44 - 120
Dibenz[a,h]acridine	ND		113	115		ug/L		101	50 - 150
Dibenzofuran	ND		114	81.0		ug/L		71	25 - 130
3,3'-Dichlorobenzidine	ND		152	114		ug/L		75	10 - 120
2,4-Dichlorophenol	ND		114	71.2		ug/L		63	31 - 120
Diethyl phthalate	ND		114	104		ug/L		92	46 - 120
2,4-Dimethylphenol	ND		114	84.9		ug/L		75	21 - 120
Dimethyl phthalate	ND		114	85.9		ug/L		76	38 - 120
Di-n-butyl phthalate	ND		114	106		ug/L		93	49 - 120
4,6-Dinitro-ortho-cresol	ND	F1	227	367	F1	ug/L		161	25 - 120
2,4-Dinitrophenol	ND	F1	227	370	F1	ug/L		163	15 - 140
2,4-Dinitrotoluene	ND		114	84.2		ug/L		74	53 - 120
2,6-Dinitrotoluene	ND		114	74.6		ug/L		66	43 - 120
Di-n-octyl phthalate	ND		114	99.7		ug/L		88	35 - 121
1,4-Dioxane	ND	F1	114	47.5	F1	ug/L		42	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		114	86.5		ug/L		76	50 - 150
Hexachlorobenzene	ND		114	117		ug/L		103	38 - 122
Hexachlorocyclopentadiene	ND		114	59.4		ug/L		52	10 - 120
Hexachloroethane	ND		114	66.2		ug/L		58	10 - 150
Indene	ND		114	78.7		ug/L		69	50 - 150
Isophorone	ND		114	70.9		ug/L		62	42 - 120
2-Methylphenol	ND		114	85.9		ug/L		76	28 - 120
3 & 4 Methylphenol	ND		114	90.2		ug/L		79	31 - 120
2-Nitroaniline	ND		114	83.5		ug/L		73	45 - 120
3-Nitroaniline	ND		114	70.5		ug/L		62	10 - 130
4-Nitroaniline	ND		114	80.5		ug/L		71	10 - 132
Nitrobenzene	ND		114	78.5		ug/L		69	39 - 120
2-Nitrophenol	ND		114	71.6		ug/L		63	33 - 120
4-Nitrophenol	ND	F1	227	287	F1	ug/L		126	10 - 120
N-Nitrosodimethylamine	ND		114	106		ug/L		93	10 - 139
N-Nitrosodi-n-propylamine	ND		114	101		ug/L		89	37 - 124
N-Nitrosodiphenylamine	ND		113	78.7		ug/L		70	10 - 150
Pentachlorophenol	ND		227	281		ug/L		123	29 - 130
Phenol	ND		114	58.6		ug/L		52	10 - 150
Pyridine	ND		227	102		ug/L		45	10 - 120

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

Lab Sample ID: 400-213805-4 MS — **Client Sample ID: MW24-ROX-010722-MS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 563190 — **Prep Batch: 562825**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	ND		113	75.6		ug/L		67	51 - 120
2,4,5-Trichlorophenol	ND		114	92.8		ug/L		82	34 - 120
2,4,6-Trichlorophenol	ND		114	84.9		ug/L		75	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*23*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*52*		*17 - 127*
Terphenyl-d14	*97*		*44 - 149*
2,4,6-Tribromophenol	*94*		*26 - 150*

Lab Sample ID: 400-213805-4 MSD — **Client Sample ID: MW24-ROX-010722-MSD**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 563190 — **Prep Batch: 562825**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		115	61.6		ug/L		54	10 - 120	2	63
Benzoic acid	ND		475	344		ug/L		72	10 - 149	3	49
Benzyl alcohol	ND		115	90.9		ug/L		79	33 - 120	3	37
Bis(2-chloroethoxy)methane	ND		115	67.0		ug/L		58	26 - 120	3	70
Bis(2-chloroethyl)ether	ND		115	69.9		ug/L		61	42 - 120	2	42
bis (2-chloroisopropyl) ether	ND		115	89.4		ug/L		78	28 - 120	4	41
Bis(2-ethylhexyl) phthalate	ND		115	107		ug/L		93	39 - 120	3	35
4-Bromophenyl phenyl ether	ND		115	91.1		ug/L		79	40 - 120	3	30
Butyl benzyl phthalate	ND		115	104		ug/L		91	45 - 120	7	32
4-Chloroaniline	ND		115	56.8		ug/L		50	10 - 120	40	94
4-Chloro-3-methylphenol	ND		115	81.2		ug/L		71	34 - 120	0	40
2-Chloronaphthalene	ND		115	73.8		ug/L		64	39 - 120	1	29
2-Chlorophenol	ND	*-	115	63.2		ug/L		55	25 - 120	12	42
4-Chlorophenyl phenyl ether	ND		115	81.2		ug/L		71	44 - 120	2	27
Dibenz[a,h]acridine	ND		114	109		ug/L		95	50 - 150	5	40
Dibenzofuran	ND		115	78.3		ug/L		68	25 - 130	3	29
3,3'-Dichlorobenzidine	ND		153	115		ug/L		75	10 - 120	1	58
2,4-Dichlorophenol	ND		115	73.9		ug/L		64	31 - 120	4	43
Diethyl phthalate	ND		115	107		ug/L		93	46 - 120	2	40
2,4-Dimethylphenol	ND		115	87.8		ug/L		77	21 - 120	3	47
Dimethyl phthalate	ND		115	86.2		ug/L		75	38 - 120	0	36
Di-n-butyl phthalate	ND		115	99.5		ug/L		87	49 - 120	6	32
4,6-Dinitro-ortho-cresol	ND	F1	229	341	F1	ug/L		149	25 - 120	7	42
2,4-Dinitrophenol	ND	F1	229	349	F1	ug/L		152	15 - 140	6	36
2,4-Dinitrotoluene	ND		115	82.7		ug/L		72	53 - 120	2	28
2,6-Dinitrotoluene	ND		115	74.8		ug/L		65	43 - 120	0	28
Di-n-octyl phthalate	ND		115	104		ug/L		91	35 - 121	4	35
1,4-Dioxane	ND	F1	115	51.6	F1	ug/L		45	50 - 150	8	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	85.0		ug/L		74	50 - 150	2	40
Hexachlorobenzene	ND		115	115		ug/L		100	38 - 122	2	33
Hexachlorocyclopentadiene	ND		115	49.2		ug/L		43	10 - 120	19	50

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

Lab Sample ID: 400-213805-4 MSD
Matrix: Water
Analysis Batch: 563190

Client Sample ID: MW24-ROX-010722-MSD
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Hexachloroethane	ND		115	69.2		ug/L		60	10 - 150	4	41
Indene	ND		115	83.2		ug/L		73	50 - 150	6	40
Isophorone	ND		115	72.7		ug/L		63	42 - 120	3	33
2-Methylphenol	ND		115	86.8		ug/L		76	28 - 120	1	47
3 & 4 Methylphenol	ND		115	92.1		ug/L		80	31 - 120	2	47
2-Nitroaniline	ND		115	82.9		ug/L		72	45 - 120	1	33
3-Nitroaniline	ND		115	71.2		ug/L		62	10 - 130	1	39
4-Nitroaniline	ND		115	77.7		ug/L		68	10 - 132	4	50
Nitrobenzene	ND		115	79.5		ug/L		69	39 - 120	1	35
2-Nitrophenol	ND		115	79.3		ug/L		69	33 - 120	10	43
4-Nitrophenol	ND	F1	229	270		ug/L		118	10 - 120	6	82
N-Nitrosodimethylamine	ND		115	110		ug/L		96	10 - 139	3	62
N-Nitrosodi-n-propylamine	ND		115	103		ug/L		90	37 - 124	2	36
N-Nitrosodiphenylamine	ND		114	76.8		ug/L		67	10 - 150	3	34
Pentachlorophenol	ND		229	272		ug/L		118	29 - 130	3	42
Phenol	ND		115	61.5		ug/L		54	10 - 150	5	52
Pyridine	ND		229	104		ug/L		45	10 - 120	2	55
Quinoline	ND		114	77.2		ug/L		67	51 - 120	2	40
2,4,5-Trichlorophenol	ND		115	95.6		ug/L		83	34 - 120	3	42
2,4,6-Trichlorophenol	ND		115	86.8		ug/L		76	33 - 120	2	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*29*		*13 - 113*
Nitrobenzene-d5	*64*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*88*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/11/22 09:13	01/14/22 10:40	1
Anthracene	ND		0.20	0.032	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/11/22 09:13	01/14/22 10:40	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/11/22 09:13	01/14/22 10:40	1
Chrysene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluoranthene	ND		0.20	0.068	ug/L		01/11/22 09:13	01/14/22 10:40	1
Fluorene	ND		0.20	0.11	ug/L		01/11/22 09:13	01/14/22 10:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/11/22 09:13	01/14/22 10:40	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-562825/1-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562825

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/11/22 09:13	01/14/22 10:40	1
2-Methylnaphthalene	0.200		0.20	0.060	ug/L		01/11/22 09:13	01/14/22 10:40	1
Phenanthrene	ND		0.20	0.036	ug/L		01/11/22 09:13	01/14/22 10:40	1
Pyrene	ND		0.20	0.040	ug/L		01/11/22 09:13	01/14/22 10:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Nitrobenzene-d5	*94*		*19 - 130*	*01/11/22 09:13*	*01/14/22 10:40*	*1*
Terphenyl-d14	*140*	*S1+*	*33 - 138*	*01/11/22 09:13*	*01/14/22 10:40*	*1*

Lab Sample ID: LCS 400-562825/4-A
Matrix: Water
Analysis Batch: 563194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	115		ug/L		96	41 - 120
Acenaphthylene	120	98.3		ug/L		82	44 - 120
Anthracene	120	120		ug/L		100	49 - 120
Benzo[a]anthracene	120	112		ug/L		93	61 - 135
Benzo[a]pyrene	120	93.3		ug/L		78	52 - 120
Benzo[b]fluoranthene	120	119		ug/L		99	53 - 134
Benzo[g,h,i]perylene	120	118		ug/L		98	47 - 133
Benzo[k]fluoranthene	120	106		ug/L		88	57 - 134
Chrysene	120	108		ug/L		90	55 - 122
Dibenz(a,h)anthracene	120	140		ug/L		117	48 - 146
Fluoranthene	120	128		ug/L		107	54 - 128
Fluorene	120	121		ug/L		101	45 - 125
Indeno[1,2,3-cd]pyrene	120	122		ug/L		102	43 - 142
1-Methylnaphthalene	120	96.9		ug/L		81	41 - 120
2-Methylnaphthalene	120	91.9		ug/L		77	32 - 124
Phenanthrene	120	119		ug/L		99	48 - 120
Pyrene	120	112		ug/L		93	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*15 - 122*
Nitrobenzene-d5	*96*		*19 - 130*
Terphenyl-d14	*105*		*33 - 138*

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 563194

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		114	121		ug/L		106	35 - 113
Acenaphthylene	ND		114	105		ug/L		92	41 - 118
Anthracene	ND		114	112		ug/L		98	45 - 122
Benzo[a]anthracene	ND		114	114		ug/L		100	55 - 133
Benzo[a]pyrene	ND		114	106		ug/L		93	50 - 108

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 563194

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	ND		114	124		ug/L		109	50 - 128
Benzo[g,h,i]perylene	ND		114	116		ug/L		102	46 - 133
Benzo[k]fluoranthene	ND		114	119		ug/L		105	52 - 128
Chrysene	ND		114	109		ug/L		96	52 - 116
Dibenz(a,h)anthracene	ND		114	133		ug/L		117	52 - 143
Fluoranthene	ND		114	126		ug/L		111	32 - 150
Fluorene	ND		114	129		ug/L		113	15 - 150
Indeno[1,2,3-cd]pyrene	ND		114	127		ug/L		111	41 - 141
1-Methylnaphthalene	ND		114	105		ug/L		92	10 - 150
2-Methylnaphthalene	ND		114	95.8		ug/L		84	10 - 150
Phenanthrene	ND		114	112		ug/L		99	36 - 125
Pyrene	ND		114	107		ug/L		94	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*102*		*15 - 122*
Nitrobenzene-d5	*110*		*19 - 130*
Terphenyl-d14	*116*		*33 - 138*

Lab Sample ID: 400-213805-4 MSD
Matrix: Water
Analysis Batch: 563194

Client Sample ID: MW24-ROX-010722-MSD
Prep Type: Total/NA
Prep Batch: 562825

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		115	118		ug/L		103	35 - 113	2	49
Acenaphthylene	ND		115	102		ug/L		89	41 - 118	3	48
Anthracene	ND		115	114		ug/L		99	45 - 122	2	56
Benzo[a]anthracene	ND		115	118		ug/L		103	55 - 133	4	57
Benzo[a]pyrene	ND		115	103		ug/L		90	50 - 108	3	59
Benzo[b]fluoranthene	ND		115	122		ug/L		107	50 - 128	2	62
Benzo[g,h,i]perylene	ND		115	115		ug/L		100	46 - 133	0	58
Benzo[k]fluoranthene	ND		115	108		ug/L		94	52 - 128	10	58
Chrysene	ND		115	122		ug/L		106	52 - 116	11	59
Dibenz(a,h)anthracene	ND		115	118		ug/L		103	52 - 143	12	60
Fluoranthene	ND		115	122		ug/L		107	32 - 150	3	59
Fluorene	ND		115	127		ug/L		111	15 - 150	1	49
Indeno[1,2,3-cd]pyrene	ND		115	115		ug/L		101	41 - 141	9	58
1-Methylnaphthalene	ND		115	104		ug/L		90	10 - 150	1	66
2-Methylnaphthalene	ND		115	94.6		ug/L		82	10 - 150	1	66
Phenanthrene	ND		115	115		ug/L		100	36 - 125	2	69
Pyrene	ND		115	118		ug/L		103	41 - 127	9	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*15 - 122*
Nitrobenzene-d5	*111*		*19 - 130*
Terphenyl-d14	*117*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-562844/1-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 562844

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/11/22 10:45	01/11/22 16:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/11/22 10:45	01/11/22 16:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/11/22 10:45*	*01/11/22 16:24*	*1*

Lab Sample ID: LCS 400-562844/2-A
Matrix: Water
Analysis Batch: 562891

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 562844

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.102		ug/L		101	60 - 140
1,2-Dibromoethane	0.101	0.109		ug/L		108	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*51 - 149*

Lab Sample ID: 400-213805-4 MS
Matrix: Water
Analysis Batch: 562891

Client Sample ID: MW24-ROX-010722-MS
Prep Type: Total/NA
Prep Batch: 562844

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.109	0.114		ug/L		104	10 - 150
1,2-Dibromoethane	ND		0.110	0.117		ug/L		107	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*51 - 149*

Lab Sample ID: 400-213805-4 MSD
Matrix: Water
Analysis Batch: 562891

Client Sample ID: MW24-ROX-010722-MSD
Prep Type: Total/NA
Prep Batch: 562844

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		0.0999	0.103		ug/L		104	10 - 150	10	20
1,2-Dibromoethane	ND		0.100	0.108		ug/L		107	39 - 150	9	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*51 - 149*

Lab Sample ID: MB 400-563584/1-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/18/22 14:52	01/19/22 10:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 10:24	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-563584/1-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563584

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	137		51 - 149	01/18/22 14:52	01/19/22 10:24	1

Lab Sample ID: LCS 400-563584/2-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.191	*+	ug/L		190	60 - 140
1,2-Dibromoethane	0.101	0.110		ug/L		109	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	133		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/7/2021
PO #	GSAP Project ID	PAGE: 1 of 2
60674381 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

SAMPLER NAME(S) (Print): J. Mayer, T. Jones

LAB USE ONLY

TELEPHONE	FAX	Bill To Contact E-MAIL
314-429-0100	314-429-0462	melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@secomshell.com; andrei.zemfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-010722-8260-A	1/7/2021	0000	Water	X					2	X			
	TB-ROX-010722-8011-A	1/7/2021	0000	Water	X					2		X		
	MW16-ROX-010722	1/7/2021	1100	Water	X			X		8	X	X	X	X
	MW24-ROX-010722	1/7/2021	1220	Water	X			X		8	X	X	X	X
	MW24-ROX-010722-MS	1/7/2021	1220	Water	X			X		8	X	X	X	X
	MW24-ROX-010722-MSD	1/7/2021	1220	Water	X			X		8	X	X	X	X

400-213805 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.0°C 1.6°C

DR

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Joe Mayer	FEDEX: 1482 3811 4955, 1482 3811 4944	1/7/2022	16:00
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
		1-8-21	10:11
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

CUSTODY SEALS: 1599666, 1599667, 1599668, 1599669

Version: 2Apr21

1/21/2022

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Shell Oil Products US Chain Of Custody Record

AECOM

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID
Melissa Remiger	25278
PO #	**GSAP Project ID**
60674381 – 3.1.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE 1/7/2022
PAGE 2 of 2

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger
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 60674381 – 3.1.2
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions
PHONE NO.: 314-802-1207; 314-932-1122
E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): MD'Angelo MHeintz
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-010722-8011-B	1/7/2022	0000	Water	2					2		X		
	TB-ROX-010722-8260-B	1/7/2022	0000	Water	2					2	X			
	MW6B-ROX-010722	1/7/2022	1035	Water	6			2		8	X	X	X	X
	MW6A-ROX-010722	1/7/2022	1135	Water	6			2		8	X	X	X	X
	MW5-ROX-010722-EB	1/7/2022	1255	Water	6			2		8	X	X	X	X
	MW5-ROX-010722	1/7/2022	1330	Water	6			2		8	X	X	X	X

400-213806 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
0.0° 1.6°C
IR4
Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MARY D'ANGELO	FEDEX; See page 1	1/7/2022	1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 1-8-21	Time: 1024
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: See page 1

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213805-1

Login Number: 213805
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0, 1.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213805-1

Login Number: 213806
List Number: 1
Creator: Whitley, Adrian

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0, 1.6°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-213805-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-213909-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/24/2022

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

Sample Identification	Sample Identification
TB-ROX-011022-8260-A	TB-ROX-011022-8011-A
P93C-ROX-011022-EB	P93C-ROX-011022
MW13-ROX-011022	P114R-ROX-011022
TB-ROX-011022-8011-B	TB-ROX-011022-8260-B
P54-ROX-011022	MW3-ROX-011022
MW22-ROX-011022	ROST4PZG-ROX-011022

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated bis(2-ethylhexyl)phthalate was re-extracted outside extraction time criteria in equipment blank P93C-ROX-011022-EB. bis(2-Ethylhexyl) phthalate and butyl benzyl phthalate were detected in equipment blank P93C-ROX-011022-EB. Several VOC and VOC by 8011 LCS recoveries, and benzenethiol LCS/LCSD recoveries and LCS/LCSD RPD, were outside evaluation criteria. Several VOC and SVOC MS/MSD recoveries were outside evaluation criteria in sample P93C-ROX-011022. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

No, bis(2-ethylhexyl)phthalate was re-extracted 3 days outside analysis extraction time criteria (7 days) in equipment blank P93C-ROX-011022-EB, for confirmation. Equipment blanks are quality control samples and do not require qualification. No qualification of data was required.

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
P93C-ROX-011022-EB	SVOCs	bis(2-Ethylhexyl) phthalate	13 µg/L
P93C-ROX-011022-EB	SVOCs	Butyl benzyl phthalate	0.51 µg/L

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

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-563094/1003	VOCs	Acrylonitrile	**183**	NA	64-142
LCS 400-563094/1003	VOCs	Bromochloromethane	**147**	NA	70-130
LCS 400-563094/1003	VOCs	Chloromethane	**178**	NA	58-137
LCS 400-563094/1003	VOCs	1,1-Dichloroethene	**140**	NA	63-134
LCS 400-563094/1003	VOCs	Methylene Chloride	**137**	NA	66-135
LCS 400-563094/1003	VOCs	4-Methyl-2-pentanone (MIBK)	**211**	NA	69-138
LCS/LCSD 400-563163/2-A/3-A	SVOCs	Benzenethiol	**1/2**	**54**	10-120/30
LCS 400-563584/2-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**190**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-563163/2-A/3-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-011022	SVOCs	Benzenethiol	**UJ**
MW13-ROX-011022	SVOCs	Benzenethiol	**UJ**
P114R-ROX-011022	SVOCs	Benzenethiol	**UJ**
P54-ROX-011022	SVOCs	Benzenethiol	**UJ**
MW3-ROX-011022	SVOCs	Benzenethiol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-011022	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-011022	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample P93C-ROX-011022 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P93C-ROX-011022	VOCs	Acrylonitrile	**188/175**	7	62-149/30
P93C-ROX-011022	VOCs	Bromochloromethane	**154**/132	15	64-140/30
P93C-ROX-011022	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
P93C-ROX-011022	VOCs	4-Methyl-2-pentanone (MIBK)	**217/204**	6	63-146/30
P93C-ROX-011022	SVOCs	1,4-Dioxane	**46/47**	3	50-150/40

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-011022	VOCs	2-Chloroethyl vinyl ether	**UJ**
P93C-ROX-011022	SVOCs	1,4-Dioxane	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

Yes, sample P93C-ROX-011022 was duplicated and analyzed for VOCs by 8011. The

relative percent difference (RPD) could not be calculated due to 1,2-dibromo-3-chloropropane and 1,2-dibromoethane being non-detect in both the parent and laboratory duplicate samples.

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes were outside evaluation criteria, biased low. 1,4-Dioxane in sample P93C-ROX-011022 was previously qualified in Section 7.0 of this data review due to matrix spike recoveries outside evaluation criteria; no further qualification was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P93C-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93C-ROX-011022	SVOCs	Pyridine	**UJ**
MW13-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW13-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
MW13-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW13-ROX-011022	SVOCs	Pyridine	**UJ**
P114R-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P114R-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
P114R-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
P114R-ROX-011022	SVOCs	Pyridine	**UJ**
P54-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
P54-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
P54-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
P54-ROX-011022	SVOCs	Pyridine	**UJ**
MW3-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW3-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
MW3-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW3-ROX-011022	SVOCs	Pyridine	**UJ**
MW22-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
MW22-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
MW22-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW22-ROX-011022	SVOCs	Pyridine	**UJ**
ROST4PZG-ROX-011022	SVOCs	bis(2-Chloroethyl) ether	**UJ**
ROST4PZG-ROX-011022	SVOCs	1,4-Dioxane	**UJ**
ROST4PZG-ROX-011022	SVOCs	Hexachlorocyclopentadiene	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-011022	SVOCs	Pyridine	**UJ**

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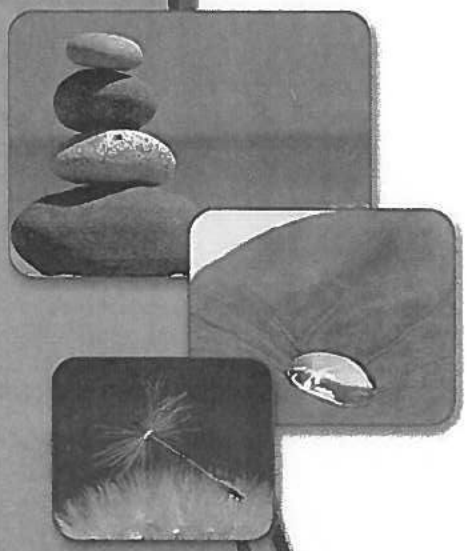
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15



ANALYTICAL REPORT

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

Laboratory Job ID: 400-213909-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Authorized for release by:
1/21/2022 5:47:26 PM

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

Reviewed 2/24/2022
MR

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

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

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

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Job ID: 400-213909-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-213909-1

Comments
No additional comments.

Receipt
The samples were received on 1/12/2022 8:49 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 2.5° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563094 recovered above the upper control limit for 1,1-Dichloroethene, 4-Methyl-2-pentanone (MIBK), Acrylonitrile, Chloromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563094 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-563094 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-563094 recovered outside control limits for the following analytes: 1,1-Dichloroethene, 4-Methyl-2-pentanone (MIBK), Acrylonitrile, Bromochloromethane, Chloromethane and Methylene Chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-546492 was outside method criteria for the following analyte(s): Bromomethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-011022-8260-A (400-213909-1), P93C-ROX-011022-EB (400-213909-3), P93C-ROX-011022 (400-213909-4), MW13-ROX-011022 (400-213909-5), P114R-ROX-011022 (400-213909-6), TB-ROX-011022-8260-B (400-213909-8), P54-ROX-011022 (400-213909-9), MW3-ROX-011022 (400-213909-10), MW22-ROX-011022 (400-213909-11) and ROST4PZG-ROX-011022 (400-213909-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563094 were outside control limits for 4-Methyl-2-pentanone (MIBK), Acrylonitrile and Bromochloromethane due to high bias for these analytes on this day of analysis.

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

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563522 recovered above the upper control limit for N-Nitrosodimethylamine, 2,4,5-Trichlorophenol, 4-Chlorophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-563163 and analytical batch 400-563522 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563163 and analytical batch 400-563522 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563522 recovered outside acceptance criteria, low

Job ID: 400-213909-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

biased, for Pyridine, Bis(2-chloroethyl)ether, Hexachlorocyclopentadiene and 1,4-Dioxane. 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 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-563163 and analytical batch 400-563522 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: Sample P93C-ROX-011022-EB (400-213909-3) was re-analyzed to confirm a detection of Bis(2-ethylhexyl) phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-563662 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) for preparation batch 400-563584 and analytical batch 400-563662 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: Spike compounds were inadvertently omitted during the extraction process for the matrix spike duplicate (MSD). The associated matrix spike (MS) and laboratory control sample (LCS) have been reported for preparation batch 400-563584 and analytical batch 400-563662.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-213909-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-213909-1	TB-ROX-011022-8260-A	Water	01/10/22 00:00	01/12/22 08:49
400-213909-2	TB-ROX-011022-8011-A	Water	01/10/22 00:00	01/12/22 08:49
400-213909-3	P93C-ROX-011022-EB	Water	01/10/22 08:55	01/12/22 08:49
400-213909-4	P93C-ROX-011022	Water	01/10/22 10:35	01/12/22 08:49
400-213909-5	MW13-ROX-011022	Water	01/10/22 12:30	01/12/22 08:49
400-213909-6	P114R-ROX-011022	Water	01/10/22 13:15	01/12/22 08:49
400-213909-7	TB-ROX-011022-8011-B	Water	01/10/22 00:00	01/12/22 08:49
400-213909-8	TB-ROX-011022-8260-B	Water	01/10/22 00:00	01/12/22 08:49
400-213909-9	P54-ROX-011022	Water	01/10/22 09:40	01/12/22 08:49
400-213909-10	MW3-ROX-011022	Water	01/10/22 10:40	01/12/22 08:49
400-213909-11	MW22-ROX-011022	Water	01/10/22 12:45	01/12/22 08:49
400-213909-12	ROST4PZG-ROX-011022	Water	01/10/22 13:45	01/12/22 08:49

Detection Summary

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

Job ID: 400-213909-1

Client Sample ID: TB-ROX-011022-8260-A — Lab Sample ID: 400-213909-1

No Detections.

Client Sample ID: TB-ROX-011022-8011-A — Lab Sample ID: 400-213909-2

No Detections.

Client Sample ID: P93C-ROX-011022-EB — Lab Sample ID: 400-213909-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	13		10	5.1	ug/L	1		8270D	Total/NA
Butyl benzyl phthalate	0.51	J	10	0.19	ug/L	1		8270D	Total/NA

Client Sample ID: P93C-ROX-011022 — Lab Sample ID: 400-213909-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	6.3		1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: MW13-ROX-011022 — Lab Sample ID: 400-213909-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	2.3		1.0	0.22	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	5.5	J	9.4	4.7	ug/L	1		8270D	Total/NA

Client Sample ID: P114R-ROX-011022 — Lab Sample ID: 400-213909-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.84	J	1.0	0.13	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.2		1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: TB-ROX-011022-8011-B — Lab Sample ID: 400-213909-7

No Detections.

Client Sample ID: TB-ROX-011022-8260-B — Lab Sample ID: 400-213909-8

No Detections.

Client Sample ID: P54-ROX-011022 — Lab Sample ID: 400-213909-9

No Detections.

Client Sample ID: MW3-ROX-011022 — Lab Sample ID: 400-213909-10

No Detections.

Client Sample ID: MW22-ROX-011022 — Lab Sample ID: 400-213909-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.60	J	1.0	0.13	ug/L	1		8260B	Total/NA
Ethylbenzene	1.4		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	0.63	J	1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	1.5	J	5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene	1.1		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	0.73	J	1.0	0.69	ug/L	1		8260B	Total/NA
tert-Butylbenzene	1.1		1.0	0.63	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	28		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	4.9		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	1.9	J	10	1.6	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW22-ROX-011022 (Continued)

Lab Sample ID: 400-213909-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.83		0.20	0.076	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.12	J	0.20	0.061	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST4PZG-ROX-011022

Lab Sample ID: 400-213909-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.49	J	1.0	0.13	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	0.66	J	5.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.41	J	1.0	0.41	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-011022-8260-A
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 16:55	1
Acrolein	ND		20	3.3	ug/L			01/13/22 16:55	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 16:55	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 16:55	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 16:55	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 16:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 16:55	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 16:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 16:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 16:55	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 16:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 16:55	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 16:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 16:55	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 16:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 16:55	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 16:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 16:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 16:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 16:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 16:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 16:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 16:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 16:55	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 16:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 16:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 16:55	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 16:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 16:55	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 16:55	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 16:55	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 16:55	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 16:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 16:55	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 16:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 16:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 16:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 16:55	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 16:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 16:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 16:55	1

Client Sample ID: TB-ROX-011022-8260-A
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 16:55	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 16:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 16:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 16:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 16:55	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 16:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 16:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 16:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 16:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 16:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 16:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 16:55	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 16:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 16:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 16:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 16:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 16:55	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 16:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 16:55	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*01/13/22 16:55*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 16:55*	*1*
Toluene-d8 (Surr)	*77*		*64 - 132*		*01/13/22 16:55*	*1*

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

Job ID: 400-213909-1

Client Sample ID: TB-ROX-011022-8011-A
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 12:45	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*01/18/22 14:52*	*01/19/22 12:45*	*1*

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

Job ID: 400-213909-1

Client Sample ID: P93C-ROX-011022-EB
Date Collected: 01/10/22 08:55
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 17:21	1
Acrolein	ND		20	3.3	ug/L			01/13/22 17:21	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 17:21	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 17:21	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 17:21	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 17:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 17:21	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 17:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 17:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 17:21	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 17:21	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 17:21	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 17:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 17:21	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 17:21	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 17:21	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 17:21	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 17:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 17:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 17:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 17:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 17:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 17:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 17:21	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 17:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 17:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 17:21	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 17:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 17:21	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 17:21	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 17:21	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 17:21	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 17:21	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 17:21	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 17:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 17:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 17:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 17:21	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 17:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 17:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 17:21	1

Client Sample ID: P93C-ROX-011022-EB
Date Collected: 01/10/22 08:55
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 17:21	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 17:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 17:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 17:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 17:21	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 17:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 17:21	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 17:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 17:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 17:21	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 17:21	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 17:21	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 17:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 17:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 17:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 17:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 17:21	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 17:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 17:21	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 17:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*01/13/22 17:21*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 17:21*	*1*
Toluene-d8 (Surr)	*75*		*64 - 132*		*01/13/22 17:21*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 16:09	1
Acenaphthylene	ND		0.20	0.046	ug/L		01/13/22 15:31	01/18/22 16:09	1
Anthracene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 16:09	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		01/13/22 15:31	01/18/22 16:09	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		01/13/22 15:31	01/18/22 16:09	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/13/22 15:31	01/18/22 16:09	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/13/22 15:31	01/18/22 16:09	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/13/22 15:31	01/18/22 16:09	1
Chrysene	ND		0.20	0.075	ug/L		01/13/22 15:31	01/18/22 16:09	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		01/13/22 15:31	01/18/22 16:09	1
Fluoranthene	ND		0.20	0.069	ug/L		01/13/22 15:31	01/18/22 16:09	1
Fluorene	ND		0.20	0.11	ug/L		01/13/22 15:31	01/18/22 16:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		01/13/22 15:31	01/18/22 16:09	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		01/13/22 15:31	01/18/22 16:09	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		01/13/22 15:31	01/18/22 16:09	1
Phenanthrene	ND		0.20	0.036	ug/L		01/13/22 15:31	01/18/22 16:09	1
Pyrene	ND		0.20	0.041	ug/L		01/13/22 15:31	01/18/22 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*15 - 122*	*01/13/22 15:31*	*01/18/22 16:09*	*1*
Nitrobenzene-d5	*97*		*19 - 130*	*01/13/22 15:31*	*01/18/22 16:09*	*1*

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

Job ID: 400-213909-1

Client Sample ID: P93C-ROX-011022-EB
Date Collected: 01/10/22 08:55
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*134*		*33 - 138*	*01/13/22 15:31*	*01/18/22 16:09*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		01/13/22 15:31	01/18/22 15:10	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		01/13/22 15:31	01/18/22 15:10	1
Benzoic acid	ND		30	7.4	ug/L		01/13/22 15:31	01/18/22 15:10	1
Benzyl alcohol	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 15:10	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 15:10	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 15:10	1
Bis(2-ethylhexyl) phthalate	13		10	5.1	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/13/22 15:31	01/18/22 15:10	1
Butyl benzyl phthalate	0.51	J	10	0.19	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Chloroaniline	ND		10	3.4	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		01/13/22 15:31	01/18/22 15:10	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 15:10	1
2-Chlorophenol	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Dibenzofuran	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 15:10	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Diethyl phthalate	ND		10	0.24	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 15:10	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 15:10	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 15:10	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 15:10	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 15:10	1
1,4-Dioxane	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 15:10	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/13/22 15:31	01/18/22 15:10	1
Hexachloroethane	ND		10	4.3	ug/L		01/13/22 15:31	01/18/22 15:10	1
Indene	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 15:10	1
Isophorone	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 15:10	1
2-Methylphenol	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 15:10	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		01/13/22 15:31	01/18/22 15:10	1
2-Nitroaniline	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 15:10	1
3-Nitroaniline	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Nitroaniline	ND		10	1.5	ug/L		01/13/22 15:31	01/18/22 15:10	1
Nitrobenzene	ND		10	0.13	ug/L		01/13/22 15:31	01/18/22 15:10	1
2-Nitrophenol	ND		10	5.3	ug/L		01/13/22 15:31	01/18/22 15:10	1
4-Nitrophenol	ND		10	2.1	ug/L		01/13/22 15:31	01/18/22 15:10	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 15:10	1

Client Sample ID: P93C-ROX-011022-EB
Date Collected: 01/10/22 08:55
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/13/22 15:31	01/18/22 15:10	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 15:10	1
Pentachlorophenol	ND		20	1.4	ug/L		01/13/22 15:31	01/18/22 15:10	1
Phenol	ND		10	2.6	ug/L		01/13/22 15:31	01/18/22 15:10	1
Pyridine	ND		10	3.2	ug/L		01/13/22 15:31	01/18/22 15:10	1
Quinoline	ND		10	4.6	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		01/13/22 15:31	01/18/22 15:10	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*01/13/22 15:31*	*01/18/22 15:10*	*1*
2-Fluorophenol	*45*		*13 - 113*	*01/13/22 15:31*	*01/18/22 15:10*	*1*
Nitrobenzene-d5	*68*		*36 - 126*	*01/13/22 15:31*	*01/18/22 15:10*	*1*
Phenol-d5	*54*		*17 - 127*	*01/13/22 15:31*	*01/18/22 15:10*	*1*
Terphenyl-d14	*107*		*44 - 149*	*01/13/22 15:31*	*01/18/22 15:10*	*1*
2,4,6-Tribromophenol	*110*		*26 - 150*	*01/13/22 15:31*	*01/18/22 15:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		01/20/22 08:27	01/21/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/20/22 08:27*	*01/21/22 15:41*	*1*
2-Fluorophenol	*49*		*13 - 113*	*01/20/22 08:27*	*01/21/22 15:41*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/20/22 08:27*	*01/21/22 15:41*	*1*
Phenol-d5	*55*		*17 - 127*	*01/20/22 08:27*	*01/21/22 15:41*	*1*
Terphenyl-d14	*74*		*44 - 149*	*01/20/22 08:27*	*01/21/22 15:41*	*1*
2,4,6-Tribromophenol	*46*		*26 - 150*	*01/20/22 08:27*	*01/21/22 15:41*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 13:05	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/18/22 14:52	01/19/22 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/18/22 14:52*	*01/19/22 13:05*	*1*

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

Job ID: 400-213909-1

Client Sample ID: P93C-ROX-011022
Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 15:10	1
Acrolein	ND		20	3.3	ug/L			01/13/22 15:10	1
Acrylonitrile	ND	F1 *+	10	2.8	ug/L			01/13/22 15:10	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 15:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 15:10	1
Bromochloromethane	ND	F1 *+	1.0	0.21	ug/L			01/13/22 15:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 15:10	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 15:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 15:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 15:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 15:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 15:10	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 15:10	1
2-Chloroethyl vinyl ether	ND	F1 ws	5.0	2.0	ug/L			01/13/22 15:10	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 15:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 15:10	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 15:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 15:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 15:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 15:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 15:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 15:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 15:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 15:10	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 15:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 15:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 15:10	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 15:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 15:10	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 15:10	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 15:10	1
4-Methyl-2-pentanone (MIBK)	ND	F1 *+	25	1.8	ug/L			01/13/22 15:10	1
Methyl tert-butyl ether	**6.3**		1.0	0.22	ug/L			01/13/22 15:10	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 15:10	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 15:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 15:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 15:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 15:10	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 15:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 15:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 15:10	1

Client Sample ID: P93C-ROX-011022
Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 15:10	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 15:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 15:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 15:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 15:10	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 15:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 15:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 15:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 15:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 15:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 15:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 15:10	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 15:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 15:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 15:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 15:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 15:10	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 15:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 15:10	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 119*		*01/13/22 15:10*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 15:10*	*1*
Toluene-d8 (Surr)	*73*		*64 - 132*		*01/13/22 15:10*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 16:26	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/13/22 15:31	01/18/22 16:26	1
Anthracene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 16:26	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/13/22 15:31	01/18/22 16:26	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/13/22 15:31	01/18/22 16:26	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/13/22 15:31	01/18/22 16:26	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/13/22 15:31	01/18/22 16:26	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/13/22 15:31	01/18/22 16:26	1
Chrysene	ND		0.19	0.070	ug/L		01/13/22 15:31	01/18/22 16:26	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/13/22 15:31	01/18/22 16:26	1
Fluoranthene	ND		0.19	0.064	ug/L		01/13/22 15:31	01/18/22 16:26	1
Fluorene	ND		0.19	0.10	ug/L		01/13/22 15:31	01/18/22 16:26	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/13/22 15:31	01/18/22 16:26	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/13/22 15:31	01/18/22 16:26	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/13/22 15:31	01/18/22 16:26	1
Phenanthrene	ND		0.19	0.034	ug/L		01/13/22 15:31	01/18/22 16:26	1
Pyrene	ND		0.19	0.038	ug/L		01/13/22 15:31	01/18/22 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*15 - 122*	*01/13/22 15:31*	*01/18/22 16:26*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*01/13/22 15:31*	*01/18/22 16:26*	*1*

Client Sample ID: P93C-ROX-011022
Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	111		33 - 138	01/13/22 15:31	01/18/22 16:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/13/22 15:31	01/18/22 15:35	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		01/13/22 15:31	01/18/22 15:35	1
Benzoic acid	ND		28	6.9	ug/L		01/13/22 15:31	01/18/22 15:35	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/13/22 15:31	01/18/22 15:35	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/13/22 15:31	01/18/22 15:35	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/13/22 15:31	01/18/22 15:35	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/13/22 15:31	01/18/22 15:35	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/13/22 15:31	01/18/22 15:35	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/13/22 15:31	01/18/22 15:35	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/13/22 15:31	01/18/22 15:35	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/13/22 15:31	01/18/22 15:35	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 15:35	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 15:35	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/13/22 15:31	01/18/22 15:35	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 15:35	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 15:35	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/13/22 15:31	01/18/22 15:35	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/13/22 15:31	01/18/22 15:35	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 15:35	1
1,4-Dioxane	ND	F1	9.5	0.95	ug/L		01/13/22 15:31	01/18/22 15:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 15:35	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 15:35	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/13/22 15:31	01/18/22 15:35	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/13/22 15:31	01/18/22 15:35	1
Indene	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 15:35	1
Isophorone	ND		9.5	0.13	ug/L		01/13/22 15:31	01/18/22 15:35	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/13/22 15:31	01/18/22 15:35	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/13/22 15:31	01/18/22 15:35	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/13/22 15:31	01/18/22 15:35	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/13/22 15:31	01/18/22 15:35	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/13/22 15:31	01/18/22 15:35	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/13/22 15:31	01/18/22 15:35	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/13/22 15:31	01/18/22 15:35	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 15:35	1

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

Job ID: 400-213909-1

Client Sample ID: P93C-ROX-011022
Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/13/22 15:31	01/18/22 15:35	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/13/22 15:31	01/18/22 15:35	1
Pentachlorophenol	ND		19	1.3	ug/L		01/13/22 15:31	01/18/22 15:35	1
Phenol	ND		9.5	2.5	ug/L		01/13/22 15:31	01/18/22 15:35	1
Pyridine	ND	us	9.5	3.0	ug/L		01/13/22 15:31	01/18/22 15:35	1
Quinoline	ND		9.5	4.3	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/13/22 15:31	01/18/22 15:35	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*86*		*46 - 124*	*01/13/22 15:31*	*01/18/22 15:35*	*1*
2-Fluorophenol	*41*		*13 - 113*	*01/13/22 15:31*	*01/18/22 15:35*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/13/22 15:31*	*01/18/22 15:35*	*1*
Phenol-d5	*53*		*17 - 127*	*01/13/22 15:31*	*01/18/22 15:35*	*1*
Terphenyl-d14	*97*		*44 - 149*	*01/13/22 15:31*	*01/18/22 15:35*	*1*
2,4,6-Tribromophenol	*119*		*26 - 150*	*01/13/22 15:31*	*01/18/22 15:35*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 12:25	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 12:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*01/18/22 14:52*	*01/19/22 12:25*	*1*

Client Sample ID: MW13-ROX-011022
Date Collected: 01/10/22 12:30
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 18:40	1
Acrolein	ND		20	3.3	ug/L			01/13/22 18:40	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 18:40	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 18:40	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 18:40	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 18:40	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 18:40	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 18:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 18:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 18:40	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 18:40	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 18:40	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 18:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 18:40	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 18:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 18:40	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 18:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 18:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 18:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 18:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 18:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 18:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 18:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 18:40	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 18:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 18:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 18:40	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 18:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 18:40	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 18:40	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 18:40	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 18:40	1
Methyl tert-butyl ether	**2.3**		1.0	0.22	ug/L			01/13/22 18:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 18:40	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 18:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 18:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 18:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 18:40	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 18:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 18:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 18:40	1

Client Sample ID: MW13-ROX-011022
Date Collected: 01/10/22 12:30
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 18:40	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 18:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 18:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 18:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 18:40	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 18:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 18:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 18:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 18:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 18:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 18:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 18:40	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 18:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 18:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 18:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 18:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 18:40	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 18:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 18:40	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/13/22 18:40*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/13/22 18:40*	*1*
Toluene-d8 (Surr)	*74*		*64 - 132*		*01/13/22 18:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 16:43	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/13/22 15:31	01/18/22 16:43	1
Anthracene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 16:43	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/13/22 15:31	01/18/22 16:43	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/13/22 15:31	01/18/22 16:43	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/13/22 15:31	01/18/22 16:43	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/13/22 15:31	01/18/22 16:43	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/13/22 15:31	01/18/22 16:43	1
Chrysene	ND		0.19	0.070	ug/L		01/13/22 15:31	01/18/22 16:43	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/13/22 15:31	01/18/22 16:43	1
Fluoranthene	ND		0.19	0.064	ug/L		01/13/22 15:31	01/18/22 16:43	1
Fluorene	ND		0.19	0.10	ug/L		01/13/22 15:31	01/18/22 16:43	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/13/22 15:31	01/18/22 16:43	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/13/22 15:31	01/18/22 16:43	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/13/22 15:31	01/18/22 16:43	1
Phenanthrene	ND		0.19	0.034	ug/L		01/13/22 15:31	01/18/22 16:43	1
Pyrene	ND		0.19	0.038	ug/L		01/13/22 15:31	01/18/22 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*15 - 122*	*01/13/22 15:31*	*01/18/22 16:43*	*1*
Nitrobenzene-d5	*103*		*19 - 130*	*01/13/22 15:31*	*01/18/22 16:43*	*1*

Client Sample ID: MW13-ROX-011022
Date Collected: 01/10/22 12:30
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*104*		*33 - 138*	*01/13/22 15:31*	*01/18/22 16:43*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		01/13/22 15:31	01/18/22 15:59	1
Benzenethiol	ND	*- *1	9.4	1.6	ug/L		01/13/22 15:31	01/18/22 15:59	1
Benzoic acid	ND		28	6.9	ug/L		01/13/22 15:31	01/18/22 15:59	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/13/22 15:31	01/18/22 15:59	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		01/13/22 15:31	01/18/22 15:59	1
Bis(2-chloroethyl)ether	ND		9.4	2.6	ug/L		01/13/22 15:31	01/18/22 15:59	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/13/22 15:31	01/18/22 15:59	1
Bis(2-ethylhexyl) phthalate	**5.5**	**J**	9.4	4.7	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/13/22 15:31	01/18/22 15:59	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/13/22 15:31	01/18/22 15:59	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/13/22 15:31	01/18/22 15:59	1
2-Chlorophenol	ND		9.4	2.1	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/13/22 15:31	01/18/22 15:59	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 15:59	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 15:59	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/13/22 15:31	01/18/22 15:59	1
Diethyl phthalate	ND		9.4	0.23	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 15:59	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 15:59	1
Di-n-butyl phthalate	ND		9.4	2.6	ug/L		01/13/22 15:31	01/18/22 15:59	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		01/13/22 15:31	01/18/22 15:59	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 15:59	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 15:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 15:59	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 15:59	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/13/22 15:31	01/18/22 15:59	1
Hexachloroethane	ND		9.4	4.0	ug/L		01/13/22 15:31	01/18/22 15:59	1
Indene	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 15:59	1
Isophorone	ND		9.4	0.13	ug/L		01/13/22 15:31	01/18/22 15:59	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/13/22 15:31	01/18/22 15:59	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/13/22 15:31	01/18/22 15:59	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/13/22 15:31	01/18/22 15:59	1
3-Nitroaniline	ND		9.4	1.7	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/13/22 15:31	01/18/22 15:59	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/13/22 15:31	01/18/22 15:59	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/13/22 15:31	01/18/22 15:59	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/13/22 15:31	01/18/22 15:59	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 15:59	1

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

Job ID: 400-213909-1

Client Sample ID: MW13-ROX-011022
Date Collected: 01/10/22 12:30
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/13/22 15:31	01/18/22 15:59	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/13/22 15:31	01/18/22 15:59	1
Pentachlorophenol	ND		19	1.3	ug/L		01/13/22 15:31	01/18/22 15:59	1
Phenol	ND		9.4	2.5	ug/L		01/13/22 15:31	01/18/22 15:59	1
Pyridine	ND	UJ	9.4	3.0	ug/L		01/13/22 15:31	01/18/22 15:59	1
Quinoline	ND		9.4	4.3	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/13/22 15:31	01/18/22 15:59	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*46 - 124*	*01/13/22 15:31*	*01/18/22 15:59*	*1*
2-Fluorophenol	*49*		*13 - 113*	*01/13/22 15:31*	*01/18/22 15:59*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/13/22 15:31*	*01/18/22 15:59*	*1*
Phenol-d5	*55*		*17 - 127*	*01/13/22 15:31*	*01/18/22 15:59*	*1*
Terphenyl-d14	*88*		*44 - 149*	*01/13/22 15:31*	*01/18/22 15:59*	*1*
2,4,6-Tribromophenol	*127*		*26 - 150*	*01/13/22 15:31*	*01/18/22 15:59*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 13:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*01/18/22 14:52*	*01/19/22 13:26*	*1*

Client Sample ID: P114R-ROX-011022
Date Collected: 01/10/22 13:15
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 19:06	1
Acrolein	ND		20	3.3	ug/L			01/13/22 19:06	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 19:06	1
Benzene	**0.84**	**J**	1.0	0.13	ug/L			01/13/22 19:06	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 19:06	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 19:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 19:06	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 19:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 19:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 19:06	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 19:06	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 19:06	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 19:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 19:06	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 19:06	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 19:06	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 19:06	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 19:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 19:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 19:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 19:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 19:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 19:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 19:06	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 19:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 19:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 19:06	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 19:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 19:06	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 19:06	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 19:06	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 19:06	1
Methyl tert-butyl ether	**2.2**		1.0	0.22	ug/L			01/13/22 19:06	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 19:06	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 19:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 19:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 19:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 19:06	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 19:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 19:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 19:06	1

Client Sample ID: P114R-ROX-011022
Date Collected: 01/10/22 13:15
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 19:06	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 19:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 19:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 19:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 19:06	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 19:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 19:06	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 19:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 19:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 19:06	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 19:06	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 19:06	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 19:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 19:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 19:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 19:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 19:06	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 19:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 19:06	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*01/13/22 19:06*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/13/22 19:06*	*1*
Toluene-d8 (Surr)	*75*		*64 - 132*		*01/13/22 19:06*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 17:00	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/13/22 15:31	01/18/22 17:00	1
Anthracene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 17:00	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/13/22 15:31	01/18/22 17:00	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/13/22 15:31	01/18/22 17:00	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/13/22 15:31	01/18/22 17:00	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/13/22 15:31	01/18/22 17:00	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/13/22 15:31	01/18/22 17:00	1
Chrysene	ND		0.19	0.069	ug/L		01/13/22 15:31	01/18/22 17:00	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/13/22 15:31	01/18/22 17:00	1
Fluoranthene	ND		0.19	0.064	ug/L		01/13/22 15:31	01/18/22 17:00	1
Fluorene	ND		0.19	0.10	ug/L		01/13/22 15:31	01/18/22 17:00	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		01/13/22 15:31	01/18/22 17:00	1
1-Methylnaphthalene	ND		0.19	0.069	ug/L		01/13/22 15:31	01/18/22 17:00	1
2-Methylnaphthalene	ND		0.19	0.056	ug/L		01/13/22 15:31	01/18/22 17:00	1
Phenanthrene	ND		0.19	0.034	ug/L		01/13/22 15:31	01/18/22 17:00	1
Pyrene	ND		0.19	0.037	ug/L		01/13/22 15:31	01/18/22 17:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*01/13/22 15:31*	*01/18/22 17:00*	*1*
Nitrobenzene-d5	*91*		*19 - 130*	*01/13/22 15:31*	*01/18/22 17:00*	*1*

Client Sample ID: P114R-ROX-011022

Date Collected: 01/10/22 13:15
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-6

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*01/13/22 15:31*	*01/18/22 17:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		01/13/22 15:31	01/18/22 16:24	1
Benzenethiol	ND	*- *1	9.4	1.6	ug/L		01/13/22 15:31	01/18/22 16:24	1
Benzoic acid	ND		28	6.8	ug/L		01/13/22 15:31	01/18/22 16:24	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/13/22 15:31	01/18/22 16:24	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		01/13/22 15:31	01/18/22 16:24	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		01/13/22 15:31	01/18/22 16:24	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/13/22 15:31	01/18/22 16:24	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/13/22 15:31	01/18/22 16:24	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/13/22 15:31	01/18/22 16:24	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/13/22 15:31	01/18/22 16:24	1
2-Chlorophenol	ND		9.4	2.1	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/13/22 15:31	01/18/22 16:24	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 16:24	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 16:24	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/13/22 15:31	01/18/22 16:24	1
Diethyl phthalate	ND		9.4	0.22	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 16:24	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 16:24	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		01/13/22 15:31	01/18/22 16:24	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		01/13/22 15:31	01/18/22 16:24	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 16:24	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 16:24	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 16:24	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/13/22 15:31	01/18/22 16:24	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		01/13/22 15:31	01/18/22 16:24	1
Hexachloroethane	ND		9.4	3.9	ug/L		01/13/22 15:31	01/18/22 16:24	1
Indene	ND		9.4	0.94	ug/L		01/13/22 15:31	01/18/22 16:24	1
Isophorone	ND		9.4	0.13	ug/L		01/13/22 15:31	01/18/22 16:24	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/13/22 15:31	01/18/22 16:24	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/13/22 15:31	01/18/22 16:24	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/13/22 15:31	01/18/22 16:24	1
3-Nitroaniline	ND		9.4	1.7	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/13/22 15:31	01/18/22 16:24	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/13/22 15:31	01/18/22 16:24	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/13/22 15:31	01/18/22 16:24	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/13/22 15:31	01/18/22 16:24	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 16:24	1

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

Job ID: 400-213909-1

Client Sample ID: P114R-ROX-011022
Date Collected: 01/10/22 13:15
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/13/22 15:31	01/18/22 16:24	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/13/22 15:31	01/18/22 16:24	1
Pentachlorophenol	ND		19	1.3	ug/L		01/13/22 15:31	01/18/22 16:24	1
Phenol	ND		9.4	2.4	ug/L		01/13/22 15:31	01/18/22 16:24	1
Pyridine	ND	UJ	9.4	3.0	ug/L		01/13/22 15:31	01/18/22 16:24	1
Quinoline	ND		9.4	4.2	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/13/22 15:31	01/18/22 16:24	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/13/22 15:31	01/18/22 16:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*46 - 124*	*01/13/22 15:31*	*01/18/22 16:24*	*1*
2-Fluorophenol	*53*		*13 - 113*	*01/13/22 15:31*	*01/18/22 16:24*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/13/22 15:31*	*01/18/22 16:24*	*1*
Phenol-d5	*56*		*17 - 127*	*01/13/22 15:31*	*01/18/22 16:24*	*1*
Terphenyl-d14	*71*		*44 - 149*	*01/13/22 15:31*	*01/18/22 16:24*	*1*
2,4,6-Tribromophenol	*118*		*26 - 150*	*01/13/22 15:31*	*01/18/22 16:24*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 13:46	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/18/22 14:52	01/19/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*67*		*51 - 149*	*01/18/22 14:52*	*01/19/22 13:46*	*1*

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

Job ID: 400-213909-1

Client Sample ID: TB-ROX-011022-8011-B
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 14:06	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 14:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*75*		*51 - 149*	*01/18/22 14:52*	*01/19/22 14:06*	*1*

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

Job ID: 400-213909-1

Client Sample ID: TB-ROX-011022-8260-B
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 17:47	1
Acrolein	ND		20	3.3	ug/L			01/13/22 17:47	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 17:47	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 17:47	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 17:47	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 17:47	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 17:47	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 17:47	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 17:47	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 17:47	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 17:47	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 17:47	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 17:47	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 17:47	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 17:47	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 17:47	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 17:47	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 17:47	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 17:47	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 17:47	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 17:47	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 17:47	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 17:47	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 17:47	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 17:47	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 17:47	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 17:47	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 17:47	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 17:47	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 17:47	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 17:47	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 17:47	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 17:47	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 17:47	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 17:47	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 17:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 17:47	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 17:47	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 17:47	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 17:47	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 17:47	1

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

Job ID: 400-213909-1

Client Sample ID: TB-ROX-011022-8260-B
Date Collected: 01/10/22 00:00
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 17:47	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 17:47	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 17:47	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 17:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 17:47	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 17:47	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 17:47	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 17:47	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 17:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 17:47	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 17:47	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 17:47	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 17:47	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 17:47	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 17:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 17:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 17:47	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 17:47	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 17:47	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/13/22 17:47*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/13/22 17:47*	*1*
Toluene-d8 (Surr)	*76*		*64 - 132*		*01/13/22 17:47*	*1*

Client Sample ID: P54-ROX-011022
Date Collected: 01/10/22 09:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 19:32	1
Acrolein	ND		20	3.3	ug/L			01/13/22 19:32	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 19:32	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 19:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 19:32	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 19:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 19:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 19:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 19:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 19:32	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 19:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 19:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 19:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 19:32	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 19:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 19:32	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 19:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 19:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 19:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 19:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 19:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 19:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 19:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 19:32	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 19:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 19:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 19:32	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 19:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 19:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 19:32	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 19:32	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 19:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 19:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 19:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 19:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 19:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 19:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 19:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 19:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 19:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 19:32	1

Client Sample ID: P54-ROX-011022
Date Collected: 01/10/22 09:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 19:32	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 19:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 19:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 19:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 19:32	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 19:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 19:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 19:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 19:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 19:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 19:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 19:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 19:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 19:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 19:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 19:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 19:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 19:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 19:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*01/13/22 19:32*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/13/22 19:32*	*1*
Toluene-d8 (Surr)	*73*		*64 - 132*		*01/13/22 19:32*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 17:18	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/13/22 15:31	01/18/22 17:18	1
Anthracene	ND		0.19	0.030	ug/L		01/13/22 15:31	01/18/22 17:18	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/13/22 15:31	01/18/22 17:18	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/13/22 15:31	01/18/22 17:18	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/13/22 15:31	01/18/22 17:18	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/13/22 15:31	01/18/22 17:18	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/13/22 15:31	01/18/22 17:18	1
Chrysene	ND		0.19	0.071	ug/L		01/13/22 15:31	01/18/22 17:18	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/13/22 15:31	01/18/22 17:18	1
Fluoranthene	ND		0.19	0.065	ug/L		01/13/22 15:31	01/18/22 17:18	1
Fluorene	ND		0.19	0.10	ug/L		01/13/22 15:31	01/18/22 17:18	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/13/22 15:31	01/18/22 17:18	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/13/22 15:31	01/18/22 17:18	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/13/22 15:31	01/18/22 17:18	1
Phenanthrene	ND		0.19	0.034	ug/L		01/13/22 15:31	01/18/22 17:18	1
Pyrene	ND		0.19	0.038	ug/L		01/13/22 15:31	01/18/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*15 - 122*	*01/13/22 15:31*	*01/18/22 17:18*	*1*
Nitrobenzene-d5	*97*		*19 - 130*	*01/13/22 15:31*	*01/18/22 17:18*	*1*

Client Sample ID: P54-ROX-011022
Date Collected: 01/10/22 09:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*93*		*33 - 138*	*01/13/22 15:31*	*01/18/22 17:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/13/22 15:31	01/18/22 16:49	1
Benzenethiol	ND	*- *1 UJ	9.5	1.6	ug/L		01/13/22 15:31	01/18/22 16:49	1
Benzoic acid	ND		29	7.0	ug/L		01/13/22 15:31	01/18/22 16:49	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/13/22 15:31	01/18/22 16:49	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/13/22 15:31	01/18/22 16:49	1
Bis(2-chloroethyl)ether	ND	UJ	9.5	2.6	ug/L		01/13/22 15:31	01/18/22 16:49	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/13/22 15:31	01/18/22 16:49	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/13/22 15:31	01/18/22 16:49	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/13/22 15:31	01/18/22 16:49	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/13/22 15:31	01/18/22 16:49	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/13/22 15:31	01/18/22 16:49	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 16:49	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 16:49	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/13/22 15:31	01/18/22 16:49	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 16:49	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 16:49	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/13/22 15:31	01/18/22 16:49	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/13/22 15:31	01/18/22 16:49	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 16:49	1
1,4-Dioxane	ND	UJ	9.5	0.95	ug/L		01/13/22 15:31	01/18/22 16:49	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 16:49	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/13/22 15:31	01/18/22 16:49	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/13/22 15:31	01/18/22 16:49	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/13/22 15:31	01/18/22 16:49	1
Indene	ND		9.5	0.95	ug/L		01/13/22 15:31	01/18/22 16:49	1
Isophorone	ND		9.5	0.13	ug/L		01/13/22 15:31	01/18/22 16:49	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/13/22 15:31	01/18/22 16:49	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/13/22 15:31	01/18/22 16:49	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/13/22 15:31	01/18/22 16:49	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/13/22 15:31	01/18/22 16:49	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/13/22 15:31	01/18/22 16:49	1
2-Nitrophenol	ND		9.5	5.0	ug/L		01/13/22 15:31	01/18/22 16:49	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/13/22 15:31	01/18/22 16:49	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 16:49	1

Client Sample ID: P54-ROX-011022
Date Collected: 01/10/22 09:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/13/22 15:31	01/18/22 16:49	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/13/22 15:31	01/18/22 16:49	1
Pentachlorophenol	ND		19	1.3	ug/L		01/13/22 15:31	01/18/22 16:49	1
Phenol	ND		9.5	2.5	ug/L		01/13/22 15:31	01/18/22 16:49	1
Pyridine	ND		9.5	3.0	ug/L		01/13/22 15:31	01/18/22 16:49	1
Quinoline	ND		9.5	4.3	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/13/22 15:31	01/18/22 16:49	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/13/22 15:31	01/18/22 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*46 - 124*	*01/13/22 15:31*	*01/18/22 16:49*	*1*
2-Fluorophenol	*41*		*13 - 113*	*01/13/22 15:31*	*01/18/22 16:49*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/13/22 15:31*	*01/18/22 16:49*	*1*
Phenol-d5	*42*		*17 - 127*	*01/13/22 15:31*	*01/18/22 16:49*	*1*
Terphenyl-d14	*77*		*44 - 149*	*01/13/22 15:31*	*01/18/22 16:49*	*1*
2,4,6-Tribromophenol	*96*		*26 - 150*	*01/13/22 15:31*	*01/18/22 16:49*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.031	0.017	ug/L		01/18/22 14:52	01/19/22 14:26	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*01/18/22 14:52*	*01/19/22 14:26*	*1*

Client Sample ID: MW3-ROX-011022
Date Collected: 01/10/22 10:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 19:58	1
Acrolein	ND		20	3.3	ug/L			01/13/22 19:58	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 19:58	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 19:58	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 19:58	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 19:58	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 19:58	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 19:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 19:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 19:58	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 19:58	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 19:58	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 19:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 19:58	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 19:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 19:58	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 19:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 19:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 19:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 19:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 19:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 19:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 19:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 19:58	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 19:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 19:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 19:58	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 19:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 19:58	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 19:58	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 19:58	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 19:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 19:58	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 19:58	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 19:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 19:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 19:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 19:58	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 19:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 19:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 19:58	1

Client Sample ID: MW3-ROX-011022
Date Collected: 01/10/22 10:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 19:58	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 19:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 19:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 19:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 19:58	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 19:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 19:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 19:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 19:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 19:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 19:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 19:58	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 19:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 19:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 19:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 19:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 19:58	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 19:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 19:58	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/13/22 19:58*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/13/22 19:58*	*1*
Toluene-d8 (Surr)	*77*		*64 - 132*		*01/13/22 19:58*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.034	ug/L		01/13/22 15:31	01/18/22 17:35	1
Acenaphthylene	ND		0.21	0.047	ug/L		01/13/22 15:31	01/18/22 17:35	1
Anthracene	ND		0.21	0.034	ug/L		01/13/22 15:31	01/18/22 17:35	1
Benzo[a]anthracene	ND		0.21	0.048	ug/L		01/13/22 15:31	01/18/22 17:35	1
Benzo[a]pyrene	ND		0.21	0.044	ug/L		01/13/22 15:31	01/18/22 17:35	1
Benzo[b]fluoranthene	ND		0.21	0.036	ug/L		01/13/22 15:31	01/18/22 17:35	1
Benzo[g,h,i]perylene	ND		0.21	0.14	ug/L		01/13/22 15:31	01/18/22 17:35	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		01/13/22 15:31	01/18/22 17:35	1
Chrysene	ND		0.21	0.077	ug/L		01/13/22 15:31	01/18/22 17:35	1
Dibenz(a,h)anthracene	ND		0.21	0.052	ug/L		01/13/22 15:31	01/18/22 17:35	1
Fluoranthene	ND		0.21	0.071	ug/L		01/13/22 15:31	01/18/22 17:35	1
Fluorene	ND		0.21	0.12	ug/L		01/13/22 15:31	01/18/22 17:35	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.045	ug/L		01/13/22 15:31	01/18/22 17:35	1
1-Methylnaphthalene	ND		0.21	0.077	ug/L		01/13/22 15:31	01/18/22 17:35	1
2-Methylnaphthalene	ND		0.21	0.063	ug/L		01/13/22 15:31	01/18/22 17:35	1
Phenanthrene	ND		0.21	0.038	ug/L		01/13/22 15:31	01/18/22 17:35	1
Pyrene	ND		0.21	0.042	ug/L		01/13/22 15:31	01/18/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/13/22 15:31*	*01/18/22 17:35*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*01/13/22 15:31*	*01/18/22 17:35*	*1*

Client Sample ID: MW3-ROX-011022
Date Collected: 01/10/22 10:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*80*		*33 - 138*	*01/13/22 15:31*	*01/18/22 17:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	4.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
Benzenethiol	ND	*- *1 UCL	10	1.8	ug/L		01/13/22 15:31	01/18/22 17:13	1
Benzoic acid	ND		31	7.6	ug/L		01/13/22 15:31	01/18/22 17:13	1
Benzyl alcohol	ND		10	2.1	ug/L		01/13/22 15:31	01/18/22 17:13	1
Bis(2-chloroethoxy)methane	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:13	1
Bis(2-chloroethyl)ether	ND	UCL	10	2.8	ug/L		01/13/22 15:31	01/18/22 17:13	1
bis (2-chloroisopropyl) ether	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:13	1
Bis(2-ethylhexyl) phthalate	ND		10	5.2	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		01/13/22 15:31	01/18/22 17:13	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Chloroaniline	ND		10	3.6	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Chloro-3-methylphenol	ND		10	4.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
2-Chloronaphthalene	ND		10	0.15	ug/L		01/13/22 15:31	01/18/22 17:13	1
2-Chlorophenol	ND		10	2.3	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		01/13/22 15:31	01/18/22 17:13	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
Dibenzofuran	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 17:13	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		01/13/22 15:31	01/18/22 17:13	1
Diethyl phthalate	ND		10	0.25	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4-Dimethylphenol	ND		10	3.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
Dimethyl phthalate	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 17:13	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		01/13/22 15:31	01/18/22 17:13	1
4,6-Dinitro-ortho-cresol	ND		10	1.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4-Dinitrophenol	ND		31	3.6	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,6-Dinitrotoluene	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
Di-n-octyl phthalate	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 17:13	1
1,4-Dioxane	ND	UCL	10	1.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
Hexachlorobenzene	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 17:13	1
Hexachlorocyclopentadiene	ND	UCL	21	2.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
Hexachloroethane	ND		10	4.4	ug/L		01/13/22 15:31	01/18/22 17:13	1
Indene	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:13	1
Isophorone	ND		10	0.15	ug/L		01/13/22 15:31	01/18/22 17:13	1
2-Methylphenol	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 17:13	1
3 & 4 Methylphenol	ND		21	0.41	ug/L		01/13/22 15:31	01/18/22 17:13	1
2-Nitroaniline	ND		10	2.3	ug/L		01/13/22 15:31	01/18/22 17:13	1
3-Nitroaniline	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Nitroaniline	ND		10	1.6	ug/L		01/13/22 15:31	01/18/22 17:13	1
Nitrobenzene	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 17:13	1
2-Nitrophenol	ND		10	5.4	ug/L		01/13/22 15:31	01/18/22 17:13	1
4-Nitrophenol	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 17:13	1
N-Nitrosodimethylamine	ND		10	3.7	ug/L		01/13/22 15:31	01/18/22 17:13	1

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

Job ID: 400-213909-1

Client Sample ID: MW3-ROX-011022
Date Collected: 01/10/22 10:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 17:13	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		01/13/22 15:31	01/18/22 17:13	1
Pentachlorophenol	ND		21	1.5	ug/L		01/13/22 15:31	01/18/22 17:13	1
Phenol	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
Pyridine	ND	UJ	10	3.4	ug/L		01/13/22 15:31	01/18/22 17:13	1
Quinoline	ND		10	4.7	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4,5-Trichlorophenol	ND		10	3.9	ug/L		01/13/22 15:31	01/18/22 17:13	1
2,4,6-Trichlorophenol	ND		10	3.7	ug/L		01/13/22 15:31	01/18/22 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*89*		*46 - 124*	*01/13/22 15:31*	*01/18/22 17:13*	*1*
2-Fluorophenol	*47*		*13 - 113*	*01/13/22 15:31*	*01/18/22 17:13*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/13/22 15:31*	*01/18/22 17:13*	*1*
Phenol-d5	*55*		*17 - 127*	*01/13/22 15:31*	*01/18/22 17:13*	*1*
Terphenyl-d14	*68*		*44 - 149*	*01/13/22 15:31*	*01/18/22 17:13*	*1*
2,4,6-Tribromophenol	*112*		*26 - 150*	*01/13/22 15:31*	*01/18/22 17:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 14:47	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/18/22 14:52*	*01/19/22 14:47*	*1*

Client Sample ID: MW22-ROX-011022
Date Collected: 01/10/22 12:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 20:24	1
Acrolein	ND		20	3.3	ug/L			01/13/22 20:24	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 20:24	1
Benzene	**0.60**	**J**	1.0	0.13	ug/L			01/13/22 20:24	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 20:24	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 20:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 20:24	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 20:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 20:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 20:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 20:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 20:24	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 20:24	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 20:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 20:24	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 20:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 20:24	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 20:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 20:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 20:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 20:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 20:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 20:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 20:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 20:24	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 20:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 20:24	1
Ethylbenzene	**1.4**		1.0	0.50	ug/L			01/13/22 20:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 20:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 20:24	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 20:24	1
Isopropylbenzene	**0.63**	**J**	1.0	0.53	ug/L			01/13/22 20:24	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 20:24	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 20:24	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 20:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 20:24	1
m-Xylene & p-Xylene	**1.5**	**J**	5.0	0.63	ug/L			01/13/22 20:24	1
Naphthalene	**1.1**		1.0	1.0	ug/L			01/13/22 20:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 20:24	1
N-Propylbenzene	**0.73**	**J**	1.0	0.69	ug/L			01/13/22 20:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 20:24	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 20:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 20:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 20:24	1

Client Sample ID: MW22-ROX-011022
Date Collected: 01/10/22 12:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 20:24	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 20:24	1
tert-Butylbenzene	**1.1**		1.0	0.63	ug/L			01/13/22 20:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 20:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 20:24	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 20:24	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 20:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 20:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 20:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 20:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 20:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 20:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 20:24	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 20:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 20:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 20:24	1
1,2,4-Trimethylbenzene	**28**		1.0	0.82	ug/L			01/13/22 20:24	1
1,3,5-Trimethylbenzene	**4.9**		1.0	0.56	ug/L			01/13/22 20:24	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 20:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 20:24	1
Xylenes, Total	**1.9**	J	10	1.6	ug/L			01/13/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*72 - 119*		*01/13/22 20:24*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/13/22 20:24*	*1*
Toluene-d8 (Surr)	*76*		*64 - 132*		*01/13/22 20:24*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.033	ug/L		01/13/22 15:31	01/18/22 17:52	1
Acenaphthylene	ND		0.20	0.046	ug/L		01/13/22 15:31	01/18/22 17:52	1
Anthracene	ND		0.20	0.033	ug/L		01/13/22 15:31	01/18/22 17:52	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		01/13/22 15:31	01/18/22 17:52	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		01/13/22 15:31	01/18/22 17:52	1
Benzo[b]fluoranthene	ND		0.20	0.035	ug/L		01/13/22 15:31	01/18/22 17:52	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/13/22 15:31	01/18/22 17:52	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/13/22 15:31	01/18/22 17:52	1
Chrysene	ND		0.20	0.076	ug/L		01/13/22 15:31	01/18/22 17:52	1
Dibenz(a,h)anthracene	ND		0.20	0.051	ug/L		01/13/22 15:31	01/18/22 17:52	1
Fluoranthene	ND		0.20	0.070	ug/L		01/13/22 15:31	01/18/22 17:52	1
Fluorene	ND		0.20	0.11	ug/L		01/13/22 15:31	01/18/22 17:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.044	ug/L		01/13/22 15:31	01/18/22 17:52	1
1-Methylnaphthalene	**0.83**		0.20	0.076	ug/L		01/13/22 15:31	01/18/22 17:52	1
2-Methylnaphthalene	**0.12**	J	0.20	0.061	ug/L		01/13/22 15:31	01/18/22 17:52	1
Phenanthrene	ND		0.20	0.037	ug/L		01/13/22 15:31	01/18/22 17:52	1
Pyrene	ND		0.20	0.041	ug/L		01/13/22 15:31	01/18/22 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*110*		*15 - 122*	*01/13/22 15:31*	*01/18/22 17:52*	*1*
Nitrobenzene-d5	*103*		*19 - 130*	*01/13/22 15:31*	*01/18/22 17:52*	*1*

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

Job ID: 400-213909-1

Client Sample ID: MW22-ROX-011022
Date Collected: 01/10/22 12:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	104		33 - 138	01/13/22 15:31	01/18/22 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		01/13/22 15:31	01/18/22 17:38	1
Benzenethiol	ND	*- *1	10	1.7	ug/L		01/13/22 15:31	01/18/22 17:38	1
Benzoic acid	ND		31	7.5	ug/L		01/13/22 15:31	01/18/22 17:38	1
Benzyl alcohol	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 17:38	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		01/13/22 15:31	01/18/22 17:38	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 17:38	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/13/22 15:31	01/18/22 17:38	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Chloroaniline	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		01/13/22 15:31	01/18/22 17:38	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 17:38	1
2-Chlorophenol	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
Dibenzofuran	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:38	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		01/13/22 15:31	01/18/22 17:38	1
Diethyl phthalate	ND		10	0.25	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		01/13/22 15:31	01/18/22 17:38	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:38	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		01/13/22 15:31	01/18/22 17:38	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 17:38	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:38	1
1,4-Dioxane	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 17:38	1
Hexachlorocyclopentadiene	ND		20	2.7	ug/L		01/13/22 15:31	01/18/22 17:38	1
Hexachloroethane	ND		10	4.3	ug/L		01/13/22 15:31	01/18/22 17:38	1
Indene	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 17:38	1
Isophorone	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 17:38	1
2-Methylphenol	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 17:38	1
3 & 4 Methylphenol	ND		20	0.40	ug/L		01/13/22 15:31	01/18/22 17:38	1
2-Nitroaniline	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 17:38	1
3-Nitroaniline	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Nitroaniline	ND		10	1.5	ug/L		01/13/22 15:31	01/18/22 17:38	1
Nitrobenzene	ND		10	0.13	ug/L		01/13/22 15:31	01/18/22 17:38	1
2-Nitrophenol	ND		10	5.3	ug/L		01/13/22 15:31	01/18/22 17:38	1
4-Nitrophenol	ND		10	2.1	ug/L		01/13/22 15:31	01/18/22 17:38	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		01/13/22 15:31	01/18/22 17:38	1

Client Sample ID: MW22-ROX-011022
Date Collected: 01/10/22 12:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		01/13/22 15:31	01/18/22 17:38	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 17:38	1
Pentachlorophenol	ND		20	1.4	ug/L		01/13/22 15:31	01/18/22 17:38	1
Phenol	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 17:38	1
Pyridine	ND		10	3.3	ug/L		01/13/22 15:31	01/18/22 17:38	1
Quinoline	ND		10	4.6	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		01/13/22 15:31	01/18/22 17:38	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/13/22 15:31	01/18/22 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*85*		*46 - 124*	*01/13/22 15:31*	*01/18/22 17:38*	*1*
2-Fluorophenol	*38*		*13 - 113*	*01/13/22 15:31*	*01/18/22 17:38*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/13/22 15:31*	*01/18/22 17:38*	*1*
Phenol-d5	*50*		*17 - 127*	*01/13/22 15:31*	*01/18/22 17:38*	*1*
Terphenyl-d14	*88*		*44 - 149*	*01/13/22 15:31*	*01/18/22 17:38*	*1*
2,4,6-Tribromophenol	*110*		*26 - 150*	*01/13/22 15:31*	*01/18/22 17:38*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 15:28	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*51 - 149*	*01/18/22 14:52*	*01/19/22 15:28*	*1*

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

Job ID: 400-213909-1

Client Sample ID: ROST4PZG-ROX-011022
Date Collected: 01/10/22 13:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 20:50	1
Acrolein	ND		20	3.3	ug/L			01/13/22 20:50	1
Acrylonitrile	ND	*+	10	2.8	ug/L			01/13/22 20:50	1
Benzene	**0.49**	**J**	1.0	0.13	ug/L			01/13/22 20:50	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 20:50	1
Bromochloromethane	ND	*+	1.0	0.21	ug/L			01/13/22 20:50	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 20:50	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 20:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 20:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 20:50	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 20:50	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 20:50	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 20:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 20:50	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 20:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 20:50	1
Chloromethane	ND	*+	1.0	0.32	ug/L			01/13/22 20:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 20:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 20:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 20:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 20:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 20:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 20:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 20:50	1
1,1-Dichloroethene	ND	*+	1.0	0.50	ug/L			01/13/22 20:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 20:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 20:50	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 20:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 20:50	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 20:50	1
Methylene Chloride	ND	*+	5.0	3.0	ug/L			01/13/22 20:50	1
4-Methyl-2-pentanone (MIBK)	ND	*+	25	1.8	ug/L			01/13/22 20:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 20:50	1
m-Xylene & p-Xylene	**0.66**	**J**	5.0	0.63	ug/L			01/13/22 20:50	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 20:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 20:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 20:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 20:50	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 20:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 20:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 20:50	1

Client Sample ID: ROST4PZG-ROX-011022
Date Collected: 01/10/22 13:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 20:50	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 20:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 20:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 20:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 20:50	1
Toluene	0.41	J	1.0	0.41	ug/L			01/13/22 20:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 20:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 20:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 20:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 20:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 20:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 20:50	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 20:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 20:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 20:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 20:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 20:50	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 20:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 20:50	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*01/13/22 20:50*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 20:50*	*1*
Toluene-d8 (Surr)	*78*		*64 - 132*		*01/13/22 20:50*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 18:09	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/13/22 15:31	01/18/22 18:09	1
Anthracene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 18:09	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/13/22 15:31	01/18/22 18:09	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/13/22 15:31	01/18/22 18:09	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/13/22 15:31	01/18/22 18:09	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/13/22 15:31	01/18/22 18:09	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		01/13/22 15:31	01/18/22 18:09	1
Chrysene	ND		0.20	0.074	ug/L		01/13/22 15:31	01/18/22 18:09	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/13/22 15:31	01/18/22 18:09	1
Fluoranthene	ND		0.20	0.068	ug/L		01/13/22 15:31	01/18/22 18:09	1
Fluorene	ND		0.20	0.11	ug/L		01/13/22 15:31	01/18/22 18:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/13/22 15:31	01/18/22 18:09	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/13/22 15:31	01/18/22 18:09	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/13/22 15:31	01/18/22 18:09	1
Phenanthrene	ND		0.20	0.036	ug/L		01/13/22 15:31	01/18/22 18:09	1
Pyrene	ND		0.20	0.040	ug/L		01/13/22 15:31	01/18/22 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*110*		*15 - 122*	*01/13/22 15:31*	*01/18/22 18:09*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*01/13/22 15:31*	*01/18/22 18:09*	*1*

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

Job ID: 400-213909-1

Client Sample ID: ROST4PZG-ROX-011022
Date Collected: 01/10/22 13:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	135		33 - 138	01/13/22 15:31	01/18/22 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.8	ug/L		01/13/22 15:31	01/18/22 18:03	1
Benzenethiol	ND	*- *1	9.9	1.7	ug/L		01/13/22 15:31	01/18/22 18:03	1
Benzoic acid	ND		30	7.3	ug/L		01/13/22 15:31	01/18/22 18:03	1
Benzyl alcohol	ND		9.9	2.0	ug/L		01/13/22 15:31	01/18/22 18:03	1
Bis(2-chloroethoxy)methane	ND		9.9	0.16	ug/L		01/13/22 15:31	01/18/22 18:03	1
Bis(2-chloroethyl)ether	ND		9.9	2.7	ug/L		01/13/22 15:31	01/18/22 18:03	1
bis (2-chloroisopropyl) ether	ND		9.9	0.16	ug/L		01/13/22 15:31	01/18/22 18:03	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Bromophenyl phenyl ether	ND		9.9	0.20	ug/L		01/13/22 15:31	01/18/22 18:03	1
Butyl benzyl phthalate	ND		9.9	0.19	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Chloroaniline	ND		9.9	3.4	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		01/13/22 15:31	01/18/22 18:03	1
2-Chloronaphthalene	ND		9.9	0.14	ug/L		01/13/22 15:31	01/18/22 18:03	1
2-Chlorophenol	ND		9.9	2.2	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		01/13/22 15:31	01/18/22 18:03	1
Dibenz[a,h]acridine	ND		9.9	0.99	ug/L		01/13/22 15:31	01/18/22 18:03	1
Dibenzofuran	ND		9.9	0.17	ug/L		01/13/22 15:31	01/18/22 18:03	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		01/13/22 15:31	01/18/22 18:03	1
Diethyl phthalate	ND		9.9	0.24	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		01/13/22 15:31	01/18/22 18:03	1
Dimethyl phthalate	ND		9.9	0.17	ug/L		01/13/22 15:31	01/18/22 18:03	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		01/13/22 15:31	01/18/22 18:03	1
4,6-Dinitro-ortho-cresol	ND		9.9	1.6	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		01/13/22 15:31	01/18/22 18:03	1
Di-n-octyl phthalate	ND		9.9	0.17	ug/L		01/13/22 15:31	01/18/22 18:03	1
1,4-Dioxane	ND		9.9	0.99	ug/L		01/13/22 15:31	01/18/22 18:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		01/13/22 15:31	01/18/22 18:03	1
Hexachlorobenzene	ND		9.9	0.17	ug/L		01/13/22 15:31	01/18/22 18:03	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/13/22 15:31	01/18/22 18:03	1
Hexachloroethane	ND		9.9	4.2	ug/L		01/13/22 15:31	01/18/22 18:03	1
Indene	ND		9.9	0.99	ug/L		01/13/22 15:31	01/18/22 18:03	1
Isophorone	ND		9.9	0.14	ug/L		01/13/22 15:31	01/18/22 18:03	1
2-Methylphenol	ND		9.9	1.8	ug/L		01/13/22 15:31	01/18/22 18:03	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/13/22 15:31	01/18/22 18:03	1
2-Nitroaniline	ND		9.9	2.2	ug/L		01/13/22 15:31	01/18/22 18:03	1
3-Nitroaniline	ND		9.9	1.8	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Nitroaniline	ND		9.9	1.5	ug/L		01/13/22 15:31	01/18/22 18:03	1
Nitrobenzene	ND		9.9	0.13	ug/L		01/13/22 15:31	01/18/22 18:03	1
2-Nitrophenol	ND		9.9	5.2	ug/L		01/13/22 15:31	01/18/22 18:03	1
4-Nitrophenol	ND		9.9	2.1	ug/L		01/13/22 15:31	01/18/22 18:03	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		01/13/22 15:31	01/18/22 18:03	1

Client Sample Results

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

Job ID: 400-213909-1

Client Sample ID: ROST4PZG-ROX-011022

Lab Sample ID: 400-213909-12

Date Collected: 01/10/22 13:45
Date Received: 01/12/22 08:49

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		01/13/22 15:31	01/18/22 18:03	1
N-Nitrosodiphenylamine	ND		9.9	0.18	ug/L		01/13/22 15:31	01/18/22 18:03	1
Pentachlorophenol	ND		20	1.4	ug/L		01/13/22 15:31	01/18/22 18:03	1
Phenol	ND		9.9	2.6	ug/L		01/13/22 15:31	01/18/22 18:03	1
Pyridine	ND	ws	9.9	3.2	ug/L		01/13/22 15:31	01/18/22 18:03	1
Quinoline	ND		9.9	4.5	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		01/13/22 15:31	01/18/22 18:03	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		01/13/22 15:31	01/18/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*46 - 124*	*01/13/22 15:31*	*01/18/22 18:03*	*1*
2-Fluorophenol	*45*		*13 - 113*	*01/13/22 15:31*	*01/18/22 18:03*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/13/22 15:31*	*01/18/22 18:03*	*1*
Phenol-d5	*57*		*17 - 127*	*01/13/22 15:31*	*01/18/22 18:03*	*1*
Terphenyl-d14	*107*		*44 - 149*	*01/13/22 15:31*	*01/18/22 18:03*	*1*
2,4,6-Tribromophenol	*121*		*26 - 150*	*01/13/22 15:31*	*01/18/22 18:03*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.017	ug/L		01/18/22 14:52	01/19/22 15:48	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*		*51 - 149*	*01/18/22 14:52*	*01/19/22 15:48*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-213909-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-213909-1	TB-ROX-011022-8260-A	96	104	77
400-213909-3	P93C-ROX-011022-EB	97	104	75
400-213909-4	P93C-ROX-011022	100	104	73
400-213909-4 MS	P93C-ROX-011022	91	95	75
400-213909-4 MSD	P93C-ROX-011022	96	97	75
400-213909-5	MW13-ROX-011022	98	105	74
400-213909-6	P114R-ROX-011022	97	105	75
400-213909-8	TB-ROX-011022-8260-B	98	105	76
400-213909-9	P54-ROX-011022	97	108	73
400-213909-10	MW3-ROX-011022	98	108	77
400-213909-11	MW22-ROX-011022	97	107	76
400-213909-12	ROST4PZG-ROX-011022	95	104	78
LCS 400-563094/1003	Lab Control Sample	96	91	75
MB 400-563094/5	Method Blank	94	104	75

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-213909-3	P93C-ROX-011022-EB	86	45	68	54	107	110
400-213909-3 - RE	P93C-ROX-011022-EB	56	49	60	55	74	46
400-213909-4	P93C-ROX-011022	86	41	63	53	97	119
400-213909-4 MS	P93C-ROX-011022	89	47	78	60	109	126
400-213909-4 MSD	P93C-ROX-011022	90	49	85	63	105	129
400-213909-5	MW13-ROX-011022	92	49	65	55	88	127
400-213909-6	P114R-ROX-011022	88	53	65	56	71	118
400-213909-9	P54-ROX-011022	83	41	66	42	77	96
400-213909-10	MW3-ROX-011022	89	47	66	55	68	112
400-213909-11	MW22-ROX-011022	85	38	66	50	88	110
400-213909-12	ROST4PZG-ROX-011022	91	45	70	57	107	121
LCS 400-563163/2-A	Lab Control Sample	88	49	68	59	109	114
LCS 400-563163/4-A	Lab Control Sample	90	28	81	48	114	100
LCS 400-563773/2-A - RE	Lab Control Sample	63	36	62	60	93	90
LCSD 400-563163/3-A	Lab Control Sample Dup	87	39	67	52	109	81
LCSD 400-563163/5-A	Lab Control Sample Dup	80	43	72	49	104	94
MB 400-563163/1-A	Method Blank	90	54	70	60	116	117
MB 400-563773/1-A - RE	Method Blank	61	18	66	54	94	63

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14

Surrogate Summary

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

Job ID: 400-213909-1

TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-213909-3	P93C-ROX-011022-EB	101	97	134
400-213909-4	P93C-ROX-011022	107	95	111
400-213909-4 MS	P93C-ROX-011022	95	119	118
400-213909-4 MSD	P93C-ROX-011022	102	113	120
400-213909-5	MW13-ROX-011022	95	103	104
400-213909-6	P114R-ROX-011022	100	91	87
400-213909-9	P54-ROX-011022	97	97	93
400-213909-10	MW3-ROX-011022	103	101	80
400-213909-11	MW22-ROX-011022	110	103	104
400-213909-12	ROST4PZG-ROX-011022	110	108	135
LCS 400-563163/4-A	Lab Control Sample	98	109	120
LCSD 400-563163/5-A	Lab Control Sample Dup	91	99	102
MB 400-563163/1-A	Method Blank	110	100	131

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)
400-213909-2	TB-ROX-011022-8011-A	72
400-213909-3	P93C-ROX-011022-EB	79
400-213909-4	P93C-ROX-011022	74
400-213909-4 DU	P93C-ROX-011022	84
400-213909-4 MS	P93C-ROX-011022	85
400-213909-5	MW13-ROX-011022	72
400-213909-6	P114R-ROX-011022	67
400-213909-7	TB-ROX-011022-8011-B	75
400-213909-9	P54-ROX-011022	85
400-213909-10	MW3-ROX-011022	89
400-213909-11	MW22-ROX-011022	84
400-213909-12	ROST4PZG-ROX-011022	74
LCS 400-563584/2-A	Lab Control Sample	133
MB 400-563584/1-A	Method Blank	137

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-213909-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-011022-8260-A

Lab Sample ID: 400-213909-1

Date Collected: 01/10/22 00:00
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 16:55	BEP	TAL PEN

Client Sample ID: TB-ROX-011022-8011-A

Lab Sample ID: 400-213909-2

Date Collected: 01/10/22 00:00
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.3 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 12:45	DS	TAL PEN

Client Sample ID: P93C-ROX-011022-EB

Lab Sample ID: 400-213909-3

Date Collected: 01/10/22 08:55
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 17:21	BEP	TAL PEN
Total/NA	Prep	3520C	RE		252.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563937	01/21/22 15:41	VC1	TAL PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 15:10	S1B	TAL PEN
Total/NA	Prep	3520C			246.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 16:09	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 13:05	DS	TAL PEN

Client Sample ID: P93C-ROX-011022

Lab Sample ID: 400-213909-4

Date Collected: 01/10/22 10:35
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 15:10	BEP	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 15:35	S1B	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 16:26	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 12:25	DS	TAL PEN

Client Sample ID: MW13-ROX-011022

Lab Sample ID: 400-213909-5

Date Collected: 01/10/22 12:30
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 18:40	BEP	TAL PEN

Client Sample ID: MW13-ROX-011022

Lab Sample ID: 400-213909-5

Date Collected: 01/10/22 12:30
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			264.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 15:59	S1B	TAL PEN
Total/NA	Prep	3520C			264.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 16:43	PP1	TAL PEN
Total/NA	Prep	8011			35.6 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 13:26	DS	TAL PEN

Client Sample ID: P114R-ROX-011022

Lab Sample ID: 400-213909-6

Date Collected: 01/10/22 13:15
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 19:06	BEP	TAL PEN
Total/NA	Prep	3520C			267 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 16:24	S1B	TAL PEN
Total/NA	Prep	3520C			267 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 17:00	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 13:46	DS	TAL PEN

Client Sample ID: TB-ROX-011022-8011-B

Lab Sample ID: 400-213909-7

Date Collected: 01/10/22 00:00
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.3 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 14:06	DS	TAL PEN

Client Sample ID: TB-ROX-011022-8260-B

Lab Sample ID: 400-213909-8

Date Collected: 01/10/22 00:00
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 17:47	BEP	TAL PEN

Client Sample ID: P54-ROX-011022

Lab Sample ID: 400-213909-9

Date Collected: 01/10/22 09:40
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 19:32	BEP	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 16:49	S1B	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 17:18	PP1	TAL PEN

Client Sample ID: P54-ROX-011022

Date Collected: 01/10/22 09:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.4 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 14:26	DS	TAL PEN

Client Sample ID: MW3-ROX-011022

Date Collected: 01/10/22 10:40
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 19:58	BEP	TAL PEN
Total/NA	Prep	3520C			238.8 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 17:13	S1B	TAL PEN
Total/NA	Prep	3520C			238.8 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 17:35	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 14:47	DS	TAL PEN

Client Sample ID: MW22-ROX-011022

Date Collected: 01/10/22 12:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 20:24	BEP	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 17:38	S1B	TAL PEN
Total/NA	Prep	3520C			244.6 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 17:52	PP1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 15:28	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-011022

Date Collected: 01/10/22 13:45
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 20:50	BEP	TAL PEN
Total/NA	Prep	3520C			251.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 18:03	S1B	TAL PEN
Total/NA	Prep	3520C			251.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 18:09	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 15:48	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563094/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 14:44	BEP	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563163/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 13:06	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 14:44	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563584/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:24	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563773/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563937	01/21/22 13:58	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563094/1003
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 13:45	BEP	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563163/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 13:31	S1B	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-563163/4-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563272	01/14/22 17:01	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 15:01	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-563584/2-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	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:44	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-563773/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RE		250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D	RE	1			563937	01/21/22 14:18	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563163/3-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 13:56	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563163/5-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	563272	01/14/22 17:25	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 15:18	PP1	TAL PEN

Client Sample ID: P93C-ROX-011022

Lab Sample ID: 400-213909-4 MS

Date Collected: 01/10/22 10:35
Matrix: Water
Date Received: 01/12/22 08:49

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563094	01/13/22 15:36	BEP	TAL PEN

Lab Chronicle

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

Job ID: 400-213909-1

Client Sample ID: P93C-ROX-011022

Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4 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	Prep	3520C			255.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	563522	01/18/22 14:21	S1B	TAL PEN
Total/NA	Prep	3520C			255.4 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 15:35	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 12:04	DS	TAL PEN

Client Sample ID: P93C-ROX-011022

Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4 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	8260B		1	5 mL	5 mL	563094	01/13/22 16:02	BEP	TAL PEN
Total/NA	Prep	3520C			266.8 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	563522	01/18/22 14:45	S1B	TAL PEN
Total/NA	Prep	3520C			266.8 mL	1 mL	563163	01/13/22 15:31	RS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 15:52	PP1	TAL PEN

Client Sample ID: P93C-ROX-011022

Date Collected: 01/10/22 10:35
Date Received: 01/12/22 08:49

Lab Sample ID: 400-213909-4 DU

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.9 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 11:44	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 563094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-1	TB-ROX-011022-8260-A	Total/NA	Water	8260B	
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	8260B	
400-213909-4	P93C-ROX-011022	Total/NA	Water	8260B	
400-213909-5	MW13-ROX-011022	Total/NA	Water	8260B	
400-213909-6	P114R-ROX-011022	Total/NA	Water	8260B	
400-213909-8	TB-ROX-011022-8260-B	Total/NA	Water	8260B	
400-213909-9	P54-ROX-011022	Total/NA	Water	8260B	
400-213909-10	MW3-ROX-011022	Total/NA	Water	8260B	
400-213909-11	MW22-ROX-011022	Total/NA	Water	8260B	
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	8260B	
MB 400-563094/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563094/1003	Lab Control Sample	Total/NA	Water	8260B	
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	8260B	
400-213909-4 MSD	P93C-ROX-011022	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 563163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	3520C	
400-213909-4	P93C-ROX-011022	Total/NA	Water	3520C	
400-213909-5	MW13-ROX-011022	Total/NA	Water	3520C	
400-213909-6	P114R-ROX-011022	Total/NA	Water	3520C	
400-213909-9	P54-ROX-011022	Total/NA	Water	3520C	
400-213909-10	MW3-ROX-011022	Total/NA	Water	3520C	
400-213909-11	MW22-ROX-011022	Total/NA	Water	3520C	
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	3520C	
MB 400-563163/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563163/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563163/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563163/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-563163/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	3520C	
400-213909-4 MSD	P93C-ROX-011022	Total/NA	Water	3520C	

Analysis Batch: 563272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-563163/4-A	Lab Control Sample	Total/NA	Water	8270D	563163
LCSD 400-563163/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	563163

Analysis Batch: 563522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	8270D	563163
400-213909-4	P93C-ROX-011022	Total/NA	Water	8270D	563163
400-213909-5	MW13-ROX-011022	Total/NA	Water	8270D	563163
400-213909-6	P114R-ROX-011022	Total/NA	Water	8270D	563163
400-213909-9	P54-ROX-011022	Total/NA	Water	8270D	563163
400-213909-10	MW3-ROX-011022	Total/NA	Water	8270D	563163
400-213909-11	MW22-ROX-011022	Total/NA	Water	8270D	563163
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	8270D	563163
MB 400-563163/1-A	Method Blank	Total/NA	Water	8270D	563163

GC/MS Semi VOA (Continued)

Analysis Batch: 563522 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-563163/2-A	Lab Control Sample	Total/NA	Water	8270D	563163
LCSD 400-563163/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	563163
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	8270D	563163
400-213909-4 MSD	P93C-ROX-011022	Total/NA	Water	8270D	563163

Analysis Batch: 563567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	8270D LL	563163
400-213909-4	P93C-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-5	MW13-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-6	P114R-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-9	P54-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-10	MW3-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-11	MW22-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	8270D LL	563163
MB 400-563163/1-A	Method Blank	Total/NA	Water	8270D LL	563163
LCS 400-563163/4-A	Lab Control Sample	Total/NA	Water	8270D LL	563163
LCSD 400-563163/5-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	563163
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	8270D LL	563163
400-213909-4 MSD	P93C-ROX-011022	Total/NA	Water	8270D LL	563163

Prep Batch: 563773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-3 - RE	P93C-ROX-011022-EB	Total/NA	Water	3520C	
MB 400-563773/1-A - RE	Method Blank	Total/NA	Water	3520C	
LCS 400-563773/2-A - RE	Lab Control Sample	Total/NA	Water	3520C	

Analysis Batch: 563937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-3 - RE	P93C-ROX-011022-EB	Total/NA	Water	8270D	563773
MB 400-563773/1-A - RE	Method Blank	Total/NA	Water	8270D	563773
LCS 400-563773/2-A - RE	Lab Control Sample	Total/NA	Water	8270D	563773

GC Semi VOA

Prep Batch: 563584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-2	TB-ROX-011022-8011-A	Total/NA	Water	8011	
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	8011	
400-213909-4	P93C-ROX-011022	Total/NA	Water	8011	
400-213909-5	MW13-ROX-011022	Total/NA	Water	8011	
400-213909-6	P114R-ROX-011022	Total/NA	Water	8011	
400-213909-7	TB-ROX-011022-8011-B	Total/NA	Water	8011	
400-213909-9	P54-ROX-011022	Total/NA	Water	8011	
400-213909-10	MW3-ROX-011022	Total/NA	Water	8011	
400-213909-11	MW22-ROX-011022	Total/NA	Water	8011	
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	8011	
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	8011	
400-213909-4 DU	P93C-ROX-011022	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-213909-1

GC Semi VOA

Analysis Batch: 563662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213909-2	TB-ROX-011022-8011-A	Total/NA	Water	8011	563584
400-213909-3	P93C-ROX-011022-EB	Total/NA	Water	8011	563584
400-213909-4	P93C-ROX-011022	Total/NA	Water	8011	563584
400-213909-5	MW13-ROX-011022	Total/NA	Water	8011	563584
400-213909-6	P114R-ROX-011022	Total/NA	Water	8011	563584
400-213909-7	TB-ROX-011022-8011-B	Total/NA	Water	8011	563584
400-213909-9	P54-ROX-011022	Total/NA	Water	8011	563584
400-213909-10	MW3-ROX-011022	Total/NA	Water	8011	563584
400-213909-11	MW22-ROX-011022	Total/NA	Water	8011	563584
400-213909-12	ROST4PZG-ROX-011022	Total/NA	Water	8011	563584
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	563584
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	563584
400-213909-4 MS	P93C-ROX-011022	Total/NA	Water	8011	563584
400-213909-4 DU	P93C-ROX-011022	Total/NA	Water	8011	563584

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563094/5
Matrix: Water
Analysis Batch: 563094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/13/22 14:44	1
Acrolein	ND		20	3.3	ug/L			01/13/22 14:44	1
Acrylonitrile	ND		10	2.8	ug/L			01/13/22 14:44	1
Benzene	ND		1.0	0.13	ug/L			01/13/22 14:44	1
Bromobenzene	ND		1.0	0.54	ug/L			01/13/22 14:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/13/22 14:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Bromoform	ND		5.0	0.25	ug/L			01/13/22 14:44	1
Bromomethane	ND		1.0	0.98	ug/L			01/13/22 14:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/13/22 14:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/13/22 14:44	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/13/22 14:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/13/22 14:44	1
Chloroethane	ND		1.0	0.76	ug/L			01/13/22 14:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/13/22 14:44	1
Chloroform	ND		1.0	0.60	ug/L			01/13/22 14:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/13/22 14:44	1
Chloromethane	ND		1.0	0.32	ug/L			01/13/22 14:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/13/22 14:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/13/22 14:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/13/22 14:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/13/22 14:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/13/22 14:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/13/22 14:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/13/22 14:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/13/22 14:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/13/22 14:44	1
2-Hexanone	ND		25	1.4	ug/L			01/13/22 14:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/13/22 14:44	1
Methylene bromide	ND		5.0	0.22	ug/L			01/13/22 14:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/13/22 14:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/13/22 14:44	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/13/22 14:44	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/13/22 14:44	1
Naphthalene	ND		1.0	1.0	ug/L			01/13/22 14:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/13/22 14:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/13/22 14:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/13/22 14:44	1
o-Xylene	ND		5.0	0.60	ug/L			01/13/22 14:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/13/22 14:44	1

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

Lab Sample ID: MB 400-563094/5
Matrix: Water
Analysis Batch: 563094

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/13/22 14:44	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/13/22 14:44	1
Styrene	ND		1.0	1.0	ug/L			01/13/22 14:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/13/22 14:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/13/22 14:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/13/22 14:44	1
Toluene	ND		1.0	0.41	ug/L			01/13/22 14:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/13/22 14:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/13/22 14:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/13/22 14:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/13/22 14:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/13/22 14:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/13/22 14:44	1
Trichloroethene	ND		1.0	0.15	ug/L			01/13/22 14:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/13/22 14:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/13/22 14:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/13/22 14:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/13/22 14:44	1
Vinyl acetate	ND		25	0.93	ug/L			01/13/22 14:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/13/22 14:44	1
Xylenes, Total	ND		10	1.6	ug/L			01/13/22 14:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/13/22 14:44*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/13/22 14:44*	*1*
Toluene-d8 (Surr)	*75*		*64 - 132*		*01/13/22 14:44*	*1*

Lab Sample ID: LCS 400-563094/1003
Matrix: Water
Analysis Batch: 563094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	157		ug/L		79	43 - 160
Acrolein	250	295		ug/L		118	38 - 160
Acrylonitrile	500	913	*+	ug/L		183	64 - 142
Benzene	50.0	54.1		ug/L		108	70 - 130
Bromobenzene	50.0	52.5		ug/L		105	70 - 132
Bromochloromethane	50.0	73.7	*+	ug/L		147	70 - 130
Bromodichloromethane	50.0	59.3		ug/L		119	67 - 133
Bromoform	50.0	62.5		ug/L		125	57 - 140
Bromomethane	25.0	31.9		ug/L		128	10 - 160
2-Butanone (MEK)	200	135		ug/L		68	61 - 145
Carbon disulfide	50.0	66.9		ug/L		134	61 - 137
Carbon tetrachloride	50.0	56.6		ug/L		113	61 - 137
Chlorobenzene	50.0	52.2		ug/L		104	70 - 130
Dibromochloromethane	50.0	50.1		ug/L		100	67 - 135
Chloroethane	25.0	24.3		ug/L		97	55 - 141

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

Lab Sample ID: LCS 400-563094/1003
Matrix: Water
Analysis Batch: 563094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloroethyl vinyl ether	25.0	30.9		ug/L		123	10 - 160
Chloroform	50.0	46.7		ug/L		93	69 - 130
1-Chlorohexane	50.0	62.2		ug/L		124	69 - 130
Chloromethane	25.0	44.6	*+	ug/L		178	58 - 137
cis-1,2-Dichloroethene	50.0	53.8		ug/L		108	68 - 130
cis-1,3-Dichloropropene	50.0	61.4		ug/L		123	69 - 132
1,2-Dichlorobenzene	50.0	53.7		ug/L		107	67 - 130
1,3-Dichlorobenzene	50.0	55.3		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	54.7		ug/L		109	70 - 130
Dichlorodifluoromethane	25.0	23.9		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	52.1		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	53.8		ug/L		108	69 - 130
1,1-Dichloroethene	50.0	69.9	*+	ug/L		140	63 - 134
1,2-Dichloropropane	50.0	58.6		ug/L		117	70 - 130
1,3-Dichloropropane	50.0	43.4		ug/L		87	70 - 130
2,2-Dichloropropane	50.0	52.6		ug/L		105	52 - 135
1,1-Dichloropropene	50.0	52.0		ug/L		104	70 - 130
Ethylbenzene	50.0	53.1		ug/L		106	70 - 130
Ethyl methacrylate	50.0	52.5		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	55.5		ug/L		111	53 - 140
2-Hexanone	200	205		ug/L		102	65 - 137
Isopropylbenzene	50.0	62.2		ug/L		124	70 - 130
Methylene bromide	50.0	55.9		ug/L		112	70 - 130
Methylene Chloride	50.0	68.3	*+	ug/L		137	66 - 135
4-Methyl-2-pentanone (MIBK)	200	421	*+	ug/L		211	69 - 138
Methyl tert-butyl ether	50.0	50.3		ug/L		101	66 - 130
m-Xylene & p-Xylene	50.0	56.0		ug/L		112	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	50.1		ug/L		100	67 - 130
N-Propylbenzene	50.0	51.2		ug/L		102	70 - 130
o-Chlorotoluene	50.0	48.1		ug/L		96	70 - 130
o-Xylene	50.0	56.6		ug/L		113	70 - 130
p-Chlorotoluene	50.0	51.5		ug/L		103	70 - 130
p-Isopropyltoluene	50.0	53.0		ug/L		106	65 - 130
sec-Butylbenzene	50.0	53.7		ug/L		107	66 - 130
Styrene	50.0	59.3		ug/L		119	70 - 130
tert-Butylbenzene	50.0	51.4		ug/L		103	64 - 139
1,1,1,2-Tetrachloroethane	50.0	54.6		ug/L		109	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.8		ug/L		100	70 - 131
Tetrachloroethene	50.0	46.6		ug/L		93	65 - 130
Toluene	50.0	44.1		ug/L		88	70 - 130
trans-1,2-Dichloroethene	50.0	43.6		ug/L		87	70 - 130
trans-1,3-Dichloropropene	50.0	42.8		ug/L		86	63 - 130
1,2,3-Trichlorobenzene	50.0	51.8		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.9		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	56.4		ug/L		113	68 - 130
1,1,2-Trichloroethane	50.0	42.7		ug/L		85	70 - 130
Trichloroethene	50.0	62.0		ug/L		124	70 - 130
Trichlorofluoromethane	25.0	31.1		ug/L		124	65 - 138

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

Lab Sample ID: LCS 400-563094/1003
Matrix: Water
Analysis Batch: 563094

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	51.9		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	50.0	53.4		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	53.0		ug/L		106	69 - 130
Vinyl acetate	50.0	42.4		ug/L		85	26 - 160
Vinyl chloride	25.0	33.5		ug/L		134	59 - 136
Xylenes, Total	100	113		ug/L		113	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*91*		*75 - 126*
Toluene-d8 (Surr)	*75*		*64 - 132*

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563094

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	157		ug/L		79	43 - 150
Acrolein	ND		500	325		ug/L		65	38 - 150
Acrylonitrile	ND	F1 *+	500	940	F1	ug/L		188	62 - 149
Benzene	ND		50.0	52.4		ug/L		105	56 - 142
Bromobenzene	ND		50.0	46.9		ug/L		94	59 - 136
Bromochloromethane	ND	F1 *+	50.0	77.0	F1	ug/L		154	64 - 140
Bromodichloromethane	ND		50.0	55.9		ug/L		112	59 - 143
Bromoform	ND		50.0	60.1		ug/L		120	50 - 140
Bromomethane	ND		50.0	33.3		ug/L		67	10 - 150
2-Butanone (MEK)	ND		200	131		ug/L		65	55 - 150
Carbon disulfide	ND		50.0	68.7		ug/L		137	48 - 150
Carbon tetrachloride	ND		50.0	54.0		ug/L		108	55 - 145
Chlorobenzene	ND		50.0	49.1		ug/L		98	64 - 130
Dibromochloromethane	ND		50.0	46.0		ug/L		92	56 - 143
Chloroethane	ND		50.0	25.7		ug/L		51	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	45.4		ug/L		91	60 - 141
1-Chlorohexane	ND		50.0	58.1		ug/L		116	56 - 136
Chloromethane	ND	*+	50.0	43.6		ug/L		87	49 - 148
cis-1,2-Dichloroethene	ND		50.0	52.0		ug/L		104	59 - 143
cis-1,3-Dichloropropene	ND		50.0	54.2		ug/L		108	57 - 140
1,2-Dichlorobenzene	ND		50.0	51.3		ug/L		103	52 - 137
1,3-Dichlorobenzene	ND		50.0	52.0		ug/L		104	54 - 135
1,4-Dichlorobenzene	ND		50.0	50.7		ug/L		101	53 - 135
Dichlorodifluoromethane	ND		50.0	22.6		ug/L		45	16 - 150
1,1-Dichloroethane	ND		50.0	49.4		ug/L		99	61 - 144
1,2-Dichloroethane	ND		50.0	53.6		ug/L		107	60 - 141
1,1-Dichloroethene	ND	*+	50.0	72.8		ug/L		146	54 - 147
1,2-Dichloropropane	ND		50.0	58.0		ug/L		116	66 - 137
1,3-Dichloropropane	ND		50.0	40.9		ug/L		82	66 - 133
2,2-Dichloropropane	ND		50.0	49.4		ug/L		99	42 - 144

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

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563094

Client Sample ID: P93C-ROX-011022
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	48.7		ug/L		97	65 - 136
Ethylbenzene	ND		50.0	50.7		ug/L		101	58 - 131
Ethyl methacrylate	ND		50.0	49.6		ug/L		99	64 - 130
Hexachlorobutadiene	ND		50.0	52.2		ug/L		104	31 - 149
2-Hexanone	ND		200	207		ug/L		103	65 - 140
Isopropylbenzene	ND		50.0	60.8		ug/L		122	56 - 133
Methylene bromide	ND		50.0	54.9		ug/L		110	63 - 138
Methylene Chloride	ND	*+	50.0	72.5		ug/L		145	60 - 146
4-Methyl-2-pentanone (MIBK)	ND	F1 *+	200	434	F1	ug/L		217	63 - 146
Methyl tert-butyl ether	6.3		50.0	50.4		ug/L		88	59 - 137
m-Xylene & p-Xylene	ND		50.0	53.5		ug/L		107	57 - 130
Naphthalene	ND		50.0	45.8		ug/L		92	25 - 150
n-Butylbenzene	ND		50.0	47.8		ug/L		96	41 - 142
N-Propylbenzene	ND		50.0	46.3		ug/L		93	51 - 138
o-Chlorotoluene	ND		50.0	44.8		ug/L		90	53 - 134
o-Xylene	ND		50.0	56.4		ug/L		113	61 - 130
p-Chlorotoluene	ND		50.0	47.3		ug/L		95	54 - 133
p-Isopropyltoluene	ND		50.0	50.6		ug/L		101	48 - 139
sec-Butylbenzene	ND		50.0	50.1		ug/L		100	50 - 138
Styrene	ND		50.0	57.6		ug/L		115	58 - 131
tert-Butylbenzene	ND		50.0	48.3		ug/L		97	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	50.7		ug/L		101	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	45.5		ug/L		91	66 - 135
Tetrachloroethene	ND		50.0	41.0		ug/L		82	52 - 133
Toluene	ND		50.0	39.8		ug/L		80	65 - 130
trans-1,2-Dichloroethene	ND		50.0	42.2		ug/L		84	61 - 143
trans-1,3-Dichloropropene	ND		50.0	37.7		ug/L		75	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	48.4		ug/L		97	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	47.9		ug/L		96	39 - 148
1,1,1-Trichloroethane	ND		50.0	53.6		ug/L		107	57 - 142
1,1,2-Trichloroethane	ND		50.0	39.0		ug/L		78	66 - 131
Trichloroethene	ND		50.0	57.5		ug/L		115	64 - 136
Trichlorofluoromethane	ND		50.0	34.1		ug/L		68	54 - 150
1,2,3-Trichloropropane	ND		50.0	48.8		ug/L		98	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	49.5		ug/L		99	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	48.9		ug/L		98	52 - 135
Vinyl acetate	ND		100	39.2		ug/L		39	26 - 150
Vinyl chloride	ND		50.0	32.4		ug/L		65	46 - 150
Xylenes, Total	ND		100	110		ug/L		110	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 119*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*75*		*64 - 132*

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

Lab Sample ID: 400-213909-4 MSD
Matrix: Water
Analysis Batch: 563094

Client Sample ID: P93C-ROX-011022
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	144		ug/L		72	43 - 150	9	30
Acrolein	ND		500	383		ug/L		77	38 - 150	17	31
Acrylonitrile	ND	F1 *+	500	875	F1	ug/L		175	62 - 149	7	30
Benzene	ND		50.0	46.3		ug/L		93	56 - 142	12	30
Bromobenzene	ND		50.0	41.1		ug/L		82	59 - 136	13	30
Bromochloromethane	ND	F1 *+	50.0	66.0		ug/L		132	64 - 140	15	30
Bromodichloromethane	ND		50.0	52.1		ug/L		104	59 - 143	7	30
Bromoform	ND		50.0	56.3		ug/L		113	50 - 140	7	30
Bromomethane	ND		50.0	34.4		ug/L		69	10 - 150	3	50
2-Butanone (MEK)	ND		200	125		ug/L		63	55 - 150	4	30
Carbon disulfide	ND		50.0	60.4		ug/L		121	48 - 150	13	30
Carbon tetrachloride	ND		50.0	49.0		ug/L		98	55 - 145	10	30
Chlorobenzene	ND		50.0	42.3		ug/L		85	64 - 130	15	30
Dibromochloromethane	ND		50.0	43.6		ug/L		87	56 - 143	5	30
Chloroethane	ND		50.0	29.5		ug/L		59	50 - 150	14	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	42.6		ug/L		85	60 - 141	6	30
1-Chlorohexane	ND		50.0	47.3		ug/L		95	56 - 136	21	30
Chloromethane	ND	*+	50.0	52.1		ug/L		104	49 - 148	18	31
cis-1,2-Dichloroethene	ND		50.0	49.4		ug/L		99	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	51.5		ug/L		103	57 - 140	5	30
1,2-Dichlorobenzene	ND		50.0	44.1		ug/L		88	52 - 137	15	30
1,3-Dichlorobenzene	ND		50.0	43.2		ug/L		86	54 - 135	19	30
1,4-Dichlorobenzene	ND		50.0	42.5		ug/L		85	53 - 135	17	30
Dichlorodifluoromethane	ND		50.0	25.9		ug/L		52	16 - 150	14	31
1,1-Dichloroethane	ND		50.0	47.2		ug/L		94	61 - 144	5	30
1,2-Dichloroethane	ND		50.0	49.1		ug/L		98	60 - 141	9	30
1,1-Dichloroethene	ND	*+	50.0	65.3		ug/L		131	54 - 147	11	30
1,2-Dichloropropane	ND		50.0	52.4		ug/L		105	66 - 137	10	30
1,3-Dichloropropane	ND		50.0	38.6		ug/L		77	66 - 133	6	30
2,2-Dichloropropane	ND		50.0	45.6		ug/L		91	42 - 144	8	31
1,1-Dichloropropene	ND		50.0	44.7		ug/L		89	65 - 136	9	30
Ethylbenzene	ND		50.0	42.1		ug/L		84	58 - 131	18	30
Ethyl methacrylate	ND		50.0	47.6		ug/L		95	64 - 130	4	30
Hexachlorobutadiene	ND		50.0	39.7		ug/L		79	31 - 149	27	36
2-Hexanone	ND		200	199		ug/L		100	65 - 140	4	30
Isopropylbenzene	ND		50.0	48.2		ug/L		96	56 - 133	23	30
Methylene bromide	ND		50.0	52.0		ug/L		104	63 - 138	5	30
Methylene Chloride	ND	*+	50.0	64.2		ug/L		128	60 - 146	12	32
4-Methyl-2-pentanone (MIBK)	ND	F1 *+	200	408	F1	ug/L		204	63 - 146	6	30
Methyl tert-butyl ether	6.3		50.0	50.5		ug/L		89	59 - 137	0	30
m-Xylene & p-Xylene	ND		50.0	43.7		ug/L		87	57 - 130	20	30
Naphthalene	ND		50.0	46.9		ug/L		94	25 - 150	2	30
n-Butylbenzene	ND		50.0	37.8		ug/L		76	41 - 142	23	31
N-Propylbenzene	ND		50.0	37.5		ug/L		75	51 - 138	21	30
o-Chlorotoluene	ND		50.0	38.0		ug/L		76	53 - 134	17	30
o-Xylene	ND		50.0	46.4		ug/L		93	61 - 130	20	30
p-Chlorotoluene	ND		50.0	39.3		ug/L		79	54 - 133	19	30

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

Lab Sample ID: 400-213909-4 MSD
Matrix: Water
Analysis Batch: 563094

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	39.4		ug/L		79	48 - 139	25	30
sec-Butylbenzene	ND		50.0	40.2		ug/L		80	50 - 138	22	30
Styrene	ND		50.0	48.5		ug/L		97	58 - 131	17	30
tert-Butylbenzene	ND		50.0	39.9		ug/L		80	54 - 146	19	30
1,1,1,2-Tetrachloroethane	ND		50.0	44.2		ug/L		88	59 - 137	14	30
1,1,2,2-Tetrachloroethane	ND		50.0	44.1		ug/L		88	66 - 135	3	30
Tetrachloroethene	ND		50.0	36.2		ug/L		72	52 - 133	13	30
Toluene	ND		50.0	35.1		ug/L		70	65 - 130	13	30
trans-1,2-Dichloroethene	ND		50.0	38.9		ug/L		78	61 - 143	8	30
trans-1,3-Dichloropropene	ND		50.0	35.7		ug/L		71	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	42.8		ug/L		86	43 - 145	12	30
1,2,4-Trichlorobenzene	ND		50.0	41.3		ug/L		83	39 - 148	15	30
1,1,1-Trichloroethane	ND		50.0	49.7		ug/L		99	57 - 142	7	30
1,1,2-Trichloroethane	ND		50.0	38.0		ug/L		76	66 - 131	3	30
Trichloroethene	ND		50.0	50.7		ug/L		101	64 - 136	13	30
Trichlorofluoromethane	ND		50.0	38.2		ug/L		76	54 - 150	11	30
1,2,3-Trichloropropane	ND		50.0	49.1		ug/L		98	65 - 133	1	30
1,2,4-Trimethylbenzene	ND		50.0	40.9		ug/L		82	50 - 139	19	30
1,3,5-Trimethylbenzene	ND		50.0	40.0		ug/L		80	52 - 135	20	30
Vinyl acetate	ND		100	48.6		ug/L		49	26 - 150	21	33
Vinyl chloride	ND		50.0	37.6		ug/L		75	46 - 150	15	30
Xylenes, Total	ND		100	90.0		ug/L		90	59 - 130	20	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*97*		*75 - 126*
Toluene-d8 (Surr)	*75*		*64 - 132*

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

Lab Sample ID: MB 400-563163/1-A
Matrix: Water
Analysis Batch: 563522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/13/22 15:31	01/18/22 13:06	1
Benzenethiol	ND		10	1.7	ug/L		01/13/22 15:31	01/18/22 13:06	1
Benzoic acid	ND		30	7.3	ug/L		01/13/22 15:31	01/18/22 13:06	1
Benzyl alcohol	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 13:06	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 13:06	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/13/22 15:31	01/18/22 13:06	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/13/22 15:31	01/18/22 13:06	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/13/22 15:31	01/18/22 13:06	1
4-Chloroaniline	ND		10	3.4	ug/L		01/13/22 15:31	01/18/22 13:06	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/13/22 15:31	01/18/22 13:06	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 13:06	1
2-Chlorophenol	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 13:06	1

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

Lab Sample ID: MB 400-563163/1-A
Matrix: Water
Analysis Batch: 563522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Dibenzofuran	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 13:06	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Diethyl phthalate	ND		10	0.24	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 13:06	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 13:06	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/13/22 15:31	01/18/22 13:06	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/13/22 15:31	01/18/22 13:06	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 13:06	1
1,4-Dioxane	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/13/22 15:31	01/18/22 13:06	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/13/22 15:31	01/18/22 13:06	1
Hexachloroethane	ND		10	4.2	ug/L		01/13/22 15:31	01/18/22 13:06	1
Indene	ND		10	1.0	ug/L		01/13/22 15:31	01/18/22 13:06	1
Isophorone	ND		10	0.14	ug/L		01/13/22 15:31	01/18/22 13:06	1
2-Methylphenol	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 13:06	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/13/22 15:31	01/18/22 13:06	1
2-Nitroaniline	ND		10	2.2	ug/L		01/13/22 15:31	01/18/22 13:06	1
3-Nitroaniline	ND		10	1.8	ug/L		01/13/22 15:31	01/18/22 13:06	1
4-Nitroaniline	ND		10	1.5	ug/L		01/13/22 15:31	01/18/22 13:06	1
Nitrobenzene	ND		10	0.13	ug/L		01/13/22 15:31	01/18/22 13:06	1
2-Nitrophenol	ND		10	5.2	ug/L		01/13/22 15:31	01/18/22 13:06	1
4-Nitrophenol	ND		10	2.1	ug/L		01/13/22 15:31	01/18/22 13:06	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 13:06	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/13/22 15:31	01/18/22 13:06	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/13/22 15:31	01/18/22 13:06	1
Pentachlorophenol	ND		20	1.4	ug/L		01/13/22 15:31	01/18/22 13:06	1
Phenol	ND		10	2.6	ug/L		01/13/22 15:31	01/18/22 13:06	1
Pyridine	ND		10	3.2	ug/L		01/13/22 15:31	01/18/22 13:06	1
Quinoline	ND		10	4.5	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/13/22 15:31	01/18/22 13:06	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/13/22 15:31	01/18/22 13:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*90*		*46 - 124*	*01/13/22 15:31*	*01/18/22 13:06*	*1*
2-Fluorophenol	*54*		*13 - 113*	*01/13/22 15:31*	*01/18/22 13:06*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/13/22 15:31*	*01/18/22 13:06*	*1*
Phenol-d5	*60*		*17 - 127*	*01/13/22 15:31*	*01/18/22 13:06*	*1*
Terphenyl-d14	*116*		*44 - 149*	*01/13/22 15:31*	*01/18/22 13:06*	*1*
2,4,6-Tribromophenol	*117*		*26 - 150*	*01/13/22 15:31*	*01/18/22 13:06*	*1*

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

Lab Sample ID: LCS 400-563163/2-A
Matrix: Water
Analysis Batch: 563522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	ND	*-	ug/L		1	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*88*		*46 - 124*
2-Fluorophenol	*49*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*109*		*44 - 149*
2,4,6-Tribromophenol	*114*		*26 - 150*

Lab Sample ID: LCS 400-563163/4-A
Matrix: Water
Analysis Batch: 563272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	50.6		ug/L		42	21 - 120
Benzoic acid	498	343		ug/L		69	10 - 144
Benzyl alcohol	120	69.6		ug/L		58	28 - 120
Bis(2-chloroethoxy)methane	120	72.3		ug/L		60	47 - 120
Bis(2-chloroethyl)ether	120	78.5		ug/L		65	44 - 120
bis (2-chloroisopropyl) ether	120	69.1		ug/L		58	33 - 121
Bis(2-ethylhexyl) phthalate	120	89.7		ug/L		75	52 - 147
4-Bromophenyl phenyl ether	120	105		ug/L		87	54 - 122
Butyl benzyl phthalate	120	98.6		ug/L		82	54 - 133
4-Chloroaniline	120	64.2		ug/L		53	26 - 120
4-Chloro-3-methylphenol	120	80.7		ug/L		67	48 - 131
2-Chloronaphthalene	120	91.3		ug/L		76	52 - 121
2-Chlorophenol	120	51.0		ug/L		42	40 - 120
4-Chlorophenyl phenyl ether	120	107		ug/L		89	56 - 125
Dibenz[a,h]acridine	120	102		ug/L		85	31 - 150
Dibenzofuran	120	94.2		ug/L		78	56 - 122
3,3'-Dichlorobenzidine	240	159		ug/L		66	36 - 132
2,4-Dichlorophenol	120	78.3		ug/L		65	49 - 120
Diethyl phthalate	120	101		ug/L		84	50 - 137
2,4-Dimethylphenol	120	82.2		ug/L		69	48 - 120
Dimethyl phthalate	120	94.7		ug/L		79	57 - 124
Di-n-butyl phthalate	120	94.5		ug/L		79	58 - 126
4,6-Dinitro-ortho-cresol	240	168		ug/L		70	23 - 148
2,4-Dinitrophenol	240	133		ug/L		56	10 - 150
2,4-Dinitrotoluene	120	99.3		ug/L		83	54 - 142
2,6-Dinitrotoluene	120	94.4		ug/L		79	55 - 130
Di-n-octyl phthalate	120	85.7		ug/L		71	57 - 138
1,4-Dioxane	120	53.3		ug/L		44	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	78.3		ug/L		65	45 - 124
Hexachlorobenzene	120	107		ug/L		89	52 - 129
Hexachlorocyclopentadiene	120	40.7		ug/L		34	10 - 134
Hexachloroethane	120	82.1		ug/L		68	20 - 120

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

Lab Sample ID: LCS 400-563163/4-A
Matrix: Water
Analysis Batch: 563272

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	120	88.8		ug/L		74	49 - 120
Isophorone	120	74.4		ug/L		62	48 - 120
2-Methylphenol	120	79.9		ug/L		67	46 - 124
3 & 4 Methylphenol	120	70.9		ug/L		59	45 - 120
2-Nitroaniline	120	80.8		ug/L		67	51 - 145
3-Nitroaniline	120	65.3		ug/L		54	37 - 127
4-Nitroaniline	120	72.2		ug/L		60	36 - 137
Nitrobenzene	120	76.4		ug/L		64	45 - 120
2-Nitrophenol	120	73.2		ug/L		61	40 - 124
4-Nitrophenol	240	173		ug/L		72	23 - 146
N-Nitrosodimethylamine	120	91.3		ug/L		76	29 - 137
N-Nitrosodi-n-propylamine	120	88.7		ug/L		74	45 - 120
N-Nitrosodiphenylamine	119	90.4		ug/L		76	54 - 120
Pentachlorophenol	240	216		ug/L		90	31 - 130
Phenol	120	55.4		ug/L		46	11 - 120
Pyridine	240	92.5		ug/L		39	16 - 120
Quinoline	120	98.1		ug/L		82	49 - 130
2,4,5-Trichlorophenol	120	105		ug/L		88	51 - 136
2,4,6-Trichlorophenol	120	97.3		ug/L		81	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*28*		*13 - 113*
Nitrobenzene-d5	*81*		*36 - 126*
Phenol-d5	*48*		*17 - 127*
Terphenyl-d14	*114*		*44 - 149*
2,4,6-Tribromophenol	*100*		*26 - 150*

Lab Sample ID: LCSD 400-563163/3-A
Matrix: Water
Analysis Batch: 563522

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	2.47	J *- *1	ug/L		2	10 - 120	54	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*87*		*46 - 124*
2-Fluorophenol	*39*		*13 - 113*
Nitrobenzene-d5	*67*		*36 - 126*
Phenol-d5	*52*		*17 - 127*
Terphenyl-d14	*109*		*44 - 149*
2,4,6-Tribromophenol	*81*		*26 - 150*

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

Lab Sample ID: LCSD 400-563163/5-A
Matrix: Water
Analysis Batch: 563272

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	59.4		ug/L		49	21 - 120	16	30
Benzoic acid	498	306		ug/L		62	10 - 144	11	30
Benzyl alcohol	120	66.1		ug/L		55	28 - 120	5	30
Bis(2-chloroethoxy)methane	120	67.1		ug/L		56	47 - 120	8	30
Bis(2-chloroethyl)ether	120	59.8		ug/L		50	44 - 120	27	30
bis (2-chloroisopropyl) ether	120	57.2		ug/L		48	33 - 121	19	30
Bis(2-ethylhexyl) phthalate	120	87.8		ug/L		73	52 - 147	2	30
4-Bromophenyl phenyl ether	120	103		ug/L		86	54 - 122	2	30
Butyl benzyl phthalate	120	90.7		ug/L		76	54 - 133	8	30
4-Chloroaniline	120	66.8		ug/L		56	26 - 120	4	30
4-Chloro-3-methylphenol	120	80.2		ug/L		67	48 - 131	1	30
2-Chloronaphthalene	120	81.2		ug/L		68	52 - 121	12	30
2-Chlorophenol	120	62.5		ug/L		52	40 - 120	20	30
4-Chlorophenyl phenyl ether	120	101		ug/L		84	56 - 125	6	30
Dibenz[a,h]acridine	120	115		ug/L		96	31 - 150	12	30
Dibenzofuran	120	88.2		ug/L		74	56 - 122	6	30
3,3'-Dichlorobenzidine	240	182		ug/L		76	36 - 132	14	30
2,4-Dichlorophenol	120	81.9		ug/L		68	49 - 120	4	30
Diethyl phthalate	120	93.8		ug/L		78	50 - 137	7	30
2,4-Dimethylphenol	120	78.1		ug/L		65	48 - 120	5	30
Dimethyl phthalate	120	86.1		ug/L		72	57 - 124	10	30
Di-n-butyl phthalate	120	93.5		ug/L		78	58 - 126	1	30
4,6-Dinitro-ortho-cresol	240	180		ug/L		75	23 - 148	7	30
2,4-Dinitrophenol	240	150		ug/L		63	10 - 150	12	30
2,4-Dinitrotoluene	120	97.0		ug/L		81	54 - 142	2	30
2,6-Dinitrotoluene	120	87.0		ug/L		73	55 - 130	8	30
Di-n-octyl phthalate	120	81.1		ug/L		68	57 - 138	6	30
1,4-Dioxane	120	45.8		ug/L		38	31 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)	120	73.8		ug/L		61	45 - 124	6	30
Hexachlorobenzene	120	102		ug/L		85	52 - 129	5	30
Hexachlorocyclopentadiene	120	42.2		ug/L		35	10 - 134	4	30
Hexachloroethane	120	76.0		ug/L		63	20 - 120	8	30
Indene	120	81.8		ug/L		68	49 - 120	8	30
Isophorone	120	73.2		ug/L		61	48 - 120	2	30
2-Methylphenol	120	74.8		ug/L		62	46 - 124	7	30
3 & 4 Methylphenol	120	69.1		ug/L		58	45 - 120	3	30
2-Nitroaniline	120	74.6		ug/L		62	51 - 145	8	30
3-Nitroaniline	120	68.5		ug/L		57	37 - 127	5	30
4-Nitroaniline	120	75.2		ug/L		63	36 - 137	4	30
Nitrobenzene	120	68.1		ug/L		57	45 - 120	11	30
2-Nitrophenol	120	82.8		ug/L		69	40 - 124	12	30
4-Nitrophenol	240	179		ug/L		75	23 - 146	4	30
N-Nitrosodimethylamine	120	89.6		ug/L		75	29 - 137	2	30
N-Nitrosodi-n-propylamine	120	79.8		ug/L		66	45 - 120	11	30
N-Nitrosodiphenylamine	119	84.7		ug/L		71	54 - 120	7	30
Pentachlorophenol	240	230		ug/L		96	31 - 130	6	30
Phenol	120	59.9		ug/L		50	11 - 120	8	30
Pyridine	240	92.1		ug/L		38	16 - 120	0	30

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

Lab Sample ID: LCSD 400-563163/5-A
Matrix: Water
Analysis Batch: 563272

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Quinoline	120	97.1		ug/L		81	49 - 130	1	30
2,4,5-Trichlorophenol	120	98.7		ug/L		82	51 - 136	6	30
2,4,6-Trichlorophenol	120	93.3		ug/L		78	50 - 127	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*80*		*46 - 124*
2-Fluorophenol	*43*		*13 - 113*
Nitrobenzene-d5	*72*		*36 - 126*
Phenol-d5	*49*		*17 - 127*
Terphenyl-d14	*104*		*44 - 149*
2,4,6-Tribromophenol	*94*		*26 - 150*

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563522

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		117	71.2		ug/L		61	10 - 120
Benzoic acid	ND		487	462		ug/L		95	10 - 149
Benzyl alcohol	ND		117	82.7		ug/L		70	33 - 120
Bis(2-chloroethoxy)methane	ND		117	67.1		ug/L		57	26 - 120
Bis(2-chloroethyl)ether	ND		117	59.7		ug/L		51	42 - 120
bis (2-chloroisopropyl) ether	ND		117	58.8		ug/L		50	28 - 120
Bis(2-ethylhexyl) phthalate	ND		117	85.4		ug/L		73	39 - 120
4-Bromophenyl phenyl ether	ND		117	114		ug/L		97	40 - 120
Butyl benzyl phthalate	ND		117	87.2		ug/L		74	45 - 120
4-Chloroaniline	ND		117	58.3		ug/L		50	10 - 120
4-Chloro-3-methylphenol	ND		117	91.5		ug/L		78	34 - 120
2-Chloronaphthalene	ND		117	89.7		ug/L		76	39 - 120
2-Chlorophenol	ND		117	70.8		ug/L		60	25 - 120
4-Chlorophenyl phenyl ether	ND		117	110		ug/L		94	44 - 120
Dibenz[a,h]acridine	ND		117	108		ug/L		92	50 - 150
Dibenzofuran	ND		117	95.8		ug/L		82	25 - 130
3,3'-Dichlorobenzidine	ND		235	120		ug/L		51	10 - 120
2,4-Dichlorophenol	ND		117	91.2		ug/L		78	31 - 120
Diethyl phthalate	ND		117	107		ug/L		91	46 - 120
2,4-Dimethylphenol	ND		117	88.1		ug/L		75	21 - 120
Dimethyl phthalate	ND		117	97.4		ug/L		83	38 - 120
Di-n-butyl phthalate	ND		117	94.2		ug/L		80	49 - 120
4,6-Dinitro-ortho-cresol	ND		235	261		ug/L		111	25 - 120
2,4-Dinitrophenol	ND		235	241		ug/L		102	15 - 140
2,4-Dinitrotoluene	ND		117	108		ug/L		92	53 - 120
2,6-Dinitrotoluene	ND		117	99.1		ug/L		84	43 - 120
Di-n-octyl phthalate	ND		117	84.2		ug/L		72	35 - 121
1,4-Dioxane	ND	F1	117	54.2	F1	ug/L		46	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		117	79.6		ug/L		68	50 - 150
Hexachlorobenzene	ND		117	121		ug/L		103	38 - 122
Hexachlorocyclopentadiene	ND		117	72.7		ug/L		62	10 - 120

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

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563522

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachloroethane	ND		117	72.3		ug/L		62	10 - 150
Indene	ND		117	87.8		ug/L		75	50 - 150
Isophorone	ND		117	73.9		ug/L		63	42 - 120
2-Methylphenol	ND		117	83.5		ug/L		71	28 - 120
3 & 4 Methylphenol	ND		117	93.6		ug/L		80	31 - 120
2-Nitroaniline	ND		117	74.1		ug/L		63	45 - 120
3-Nitroaniline	ND		117	63.5		ug/L		54	10 - 130
4-Nitroaniline	ND		117	83.8		ug/L		71	10 - 132
Nitrobenzene	ND		117	74.1		ug/L		63	39 - 120
2-Nitrophenol	ND		117	96.9		ug/L		82	33 - 120
4-Nitrophenol	ND		235	241		ug/L		103	10 - 120
N-Nitrosodimethylamine	ND		117	91.5		ug/L		78	10 - 139
N-Nitrosodi-n-propylamine	ND		117	91.5		ug/L		78	37 - 124
N-Nitrosodiphenylamine	ND		117	93.3		ug/L		80	10 - 150
Pentachlorophenol	ND		235	264		ug/L		113	29 - 130
Phenol	ND		117	67.7		ug/L		58	10 - 150
Pyridine	ND		235	94.0		ug/L		40	10 - 120
Quinoline	ND		117	104		ug/L		89	51 - 120
2,4,5-Trichlorophenol	ND		117	115		ug/L		98	34 - 120
2,4,6-Trichlorophenol	ND		117	110		ug/L		94	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*89*		*46 - 124*
2-Fluorophenol	*47*		*13 - 113*
Nitrobenzene-d5	*78*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*109*		*44 - 149*
2,4,6-Tribromophenol	*126*		*26 - 150*

Lab Sample ID: 400-213909-4 MSD
Matrix: Water
Analysis Batch: 563522

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		112	70.5		ug/L		63	10 - 120	1	63
Benzoic acid	ND		466	468		ug/L		100	10 - 149	1	49
Benzyl alcohol	ND		112	82.4		ug/L		73	33 - 120	0	37
Bis(2-chloroethoxy)methane	ND		112	71.5		ug/L		64	26 - 120	6	70
Bis(2-chloroethyl)ether	ND		112	63.8		ug/L		57	42 - 120	7	42
bis (2-chloroisopropyl) ether	ND		112	66.9		ug/L		60	28 - 120	13	41
Bis(2-ethylhexyl) phthalate	ND		112	83.9		ug/L		75	39 - 120	2	35
4-Bromophenyl phenyl ether	ND		112	109		ug/L		97	40 - 120	4	30
Butyl benzyl phthalate	ND		112	87.2		ug/L		78	45 - 120	0	32
4-Chloroaniline	ND		112	59.6		ug/L		53	10 - 120	2	94
4-Chloro-3-methylphenol	ND		112	97.1		ug/L		86	34 - 120	6	40
2-Chloronaphthalene	ND		112	92.4		ug/L		82	39 - 120	3	29
2-Chlorophenol	ND		112	69.1		ug/L		61	25 - 120	2	42
4-Chlorophenyl phenyl ether	ND		112	113		ug/L		100	44 - 120	2	27

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

Lab Sample ID: 400-213909-4 MSD
Matrix: Water
Analysis Batch: 563522

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenz[a,h]acridine	ND		112	106		ug/L		94	50 - 150	2	40
Dibenzofuran	ND		112	98.4		ug/L		88	25 - 130	3	29
3,3'-Dichlorobenzidine	ND		225	118		ug/L		53	10 - 120	1	58
2,4-Dichlorophenol	ND		112	95.9		ug/L		85	31 - 120	5	43
Diethyl phthalate	ND		112	108		ug/L		96	46 - 120	1	40
2,4-Dimethylphenol	ND		112	93.1		ug/L		83	21 - 120	5	47
Dimethyl phthalate	ND		112	98.4		ug/L		88	38 - 120	1	36
Di-n-butyl phthalate	ND		112	94.9		ug/L		84	49 - 120	1	32
4,6-Dinitro-ortho-cresol	ND		225	264		ug/L		117	25 - 120	1	42
2,4-Dinitrophenol	ND		225	265		ug/L		118	15 - 140	10	36
2,4-Dinitrotoluene	ND		112	108		ug/L		96	53 - 120	0	28
2,6-Dinitrotoluene	ND		112	95.8		ug/L		85	43 - 120	3	28
Di-n-octyl phthalate	ND		112	85.5		ug/L		76	35 - 121	1	35
1,4-Dioxane	ND	F1	112	52.7	F1	ug/L		47	50 - 150	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		112	80.6		ug/L		72	50 - 150	1	40
Hexachlorobenzene	ND		112	111		ug/L		99	38 - 122	9	33
Hexachlorocyclopentadiene	ND		112	79.2		ug/L		70	10 - 120	9	50
Hexachloroethane	ND		112	77.0		ug/L		69	10 - 150	6	41
Indene	ND		112	89.3		ug/L		79	50 - 150	2	40
Isophorone	ND		112	76.7		ug/L		68	42 - 120	4	33
2-Methylphenol	ND		112	83.3		ug/L		74	28 - 120	0	47
3 & 4 Methylphenol	ND		112	95.7		ug/L		85	31 - 120	2	47
2-Nitroaniline	ND		112	85.1		ug/L		76	45 - 120	14	33
3-Nitroaniline	ND		112	65.3		ug/L		58	10 - 130	3	39
4-Nitroaniline	ND		112	90.1		ug/L		80	10 - 132	7	50
Nitrobenzene	ND		112	76.7		ug/L		68	39 - 120	3	35
2-Nitrophenol	ND		112	99.8		ug/L		89	33 - 120	3	43
4-Nitrophenol	ND		225	244		ug/L		109	10 - 120	1	82
N-Nitrosodimethylamine	ND		112	104		ug/L		93	10 - 139	13	62
N-Nitrosodi-n-propylamine	ND		112	93.6		ug/L		83	37 - 124	2	36
N-Nitrosodiphenylamine	ND		112	90.4		ug/L		81	10 - 150	3	34
Pentachlorophenol	ND		225	263		ug/L		117	29 - 130	0	42
Phenol	ND		112	70.3		ug/L		62	10 - 150	4	52
Pyridine	ND		225	96.8		ug/L		43	10 - 120	3	55
Quinoline	ND		112	104		ug/L		93	51 - 120	1	40
2,4,5-Trichlorophenol	ND		112	116		ug/L		103	34 - 120	0	42
2,4,6-Trichlorophenol	ND		112	114		ug/L		102	33 - 120	4	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*90*		*46 - 124*
2-Fluorophenol	*49*		*13 - 113*
Nitrobenzene-d5	*85*		*36 - 126*
Phenol-d5	*63*		*17 - 127*
Terphenyl-d14	*105*		*44 - 149*
2,4,6-Tribromophenol	*129*		*26 - 150*

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

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate - RE	ND		10	5.0	ug/L		01/20/22 08:27	01/21/22 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl - RE	*61*		*46 - 124*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
2-Fluorophenol - RE	*18*		*13 - 113*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
Nitrobenzene-d5 - RE	*66*		*36 - 126*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
Phenol-d5 - RE	*54*		*17 - 127*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
Terphenyl-d14 - RE	*94*		*44 - 149*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
2,4,6-Tribromophenol - RE	*63*		*26 - 150*	*01/20/22 08:27*	*01/21/22 13:58*	*1*

Lab Sample ID: LCS 400-563773/2-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-ethylhexyl) phthalate - RE	120	96.1		ug/L		80	52 - 147

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl - RE	*63*		*46 - 124*
2-Fluorophenol - RE	*36*		*13 - 113*
Nitrobenzene-d5 - RE	*62*		*36 - 126*
Phenol-d5 - RE	*60*		*17 - 127*
Terphenyl-d14 - RE	*93*		*44 - 149*
2,4,6-Tribromophenol - RE	*90*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-563163/1-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 14:44	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/13/22 15:31	01/18/22 14:44	1
Anthracene	ND		0.20	0.032	ug/L		01/13/22 15:31	01/18/22 14:44	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/13/22 15:31	01/18/22 14:44	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/13/22 15:31	01/18/22 14:44	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/13/22 15:31	01/18/22 14:44	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/13/22 15:31	01/18/22 14:44	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/13/22 15:31	01/18/22 14:44	1
Chrysene	ND		0.20	0.074	ug/L		01/13/22 15:31	01/18/22 14:44	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/13/22 15:31	01/18/22 14:44	1
Fluoranthene	ND		0.20	0.068	ug/L		01/13/22 15:31	01/18/22 14:44	1
Fluorene	ND		0.20	0.11	ug/L		01/13/22 15:31	01/18/22 14:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/13/22 15:31	01/18/22 14:44	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/13/22 15:31	01/18/22 14:44	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/13/22 15:31	01/18/22 14:44	1
Phenanthrene	ND		0.20	0.036	ug/L		01/13/22 15:31	01/18/22 14:44	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-563163/1-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		0.20	0.040	ug/L		01/13/22 15:31	01/18/22 14:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*110*		*15 - 122*	*01/13/22 15:31*	*01/18/22 14:44*	*1*
Nitrobenzene-d5	*100*		*19 - 130*	*01/13/22 15:31*	*01/18/22 14:44*	*1*
Terphenyl-d14	*131*		*33 - 138*	*01/13/22 15:31*	*01/18/22 14:44*	*1*

Lab Sample ID: LCS 400-563163/4-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	117		ug/L		97	41 - 120
Acenaphthylene	120	111		ug/L		93	44 - 120
Anthracene	120	108		ug/L		90	49 - 120
Benzo[a]anthracene	120	115		ug/L		96	61 - 135
Benzo[a]pyrene	120	117		ug/L		97	52 - 120
Benzo[b]fluoranthene	120	121		ug/L		101	53 - 134
Benzo[g,h,i]perylene	120	112		ug/L		94	47 - 133
Benzo[k]fluoranthene	120	121		ug/L		101	57 - 134
Chrysene	120	120		ug/L		100	55 - 122
Dibenz(a,h)anthracene	120	128		ug/L		107	48 - 146
Fluoranthene	120	126		ug/L		105	54 - 128
Fluorene	120	128		ug/L		107	45 - 125
Indeno[1,2,3-cd]pyrene	120	124		ug/L		104	43 - 142
1-Methylnaphthalene	120	108		ug/L		90	41 - 120
2-Methylnaphthalene	120	102		ug/L		85	32 - 124
Phenanthrene	120	119		ug/L		99	48 - 120
Pyrene	120	121		ug/L		101	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*98*		*15 - 122*
Nitrobenzene-d5	*109*		*19 - 130*
Terphenyl-d14	*120*		*33 - 138*

Lab Sample ID: LCSD 400-563163/5-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	107		ug/L		89	41 - 120	9	56
Acenaphthylene	120	96.1		ug/L		80	44 - 120	15	56
Anthracene	120	118		ug/L		98	49 - 120	8	51
Benzo[a]anthracene	120	113		ug/L		94	61 - 135	2	49
Benzo[a]pyrene	120	108		ug/L		90	52 - 120	8	50
Benzo[b]fluoranthene	120	111		ug/L		93	53 - 134	8	54
Benzo[g,h,i]perylene	120	113		ug/L		94	47 - 133	1	50
Benzo[k]fluoranthene	120	119		ug/L		99	57 - 134	2	52

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-563163/5-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chrysene	120	107		ug/L		89	55 - 122	12	50
Dibenz(a,h)anthracene	120	127		ug/L		106	48 - 146	1	50
Fluoranthene	120	127		ug/L		106	54 - 128	1	52
Fluorene	120	112		ug/L		93	45 - 125	13	56
Indeno[1,2,3-cd]pyrene	120	127		ug/L		105	43 - 142	2	51
1-Methylnaphthalene	120	97.8		ug/L		82	41 - 120	10	55
2-Methylnaphthalene	120	94.0		ug/L		78	32 - 124	8	57
Phenanthrene	120	116		ug/L		97	48 - 120	2	56
Pyrene	120	109		ug/L		91	48 - 132	10	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*91*		*15 - 122*
Nitrobenzene-d5	*99*		*19 - 130*
Terphenyl-d14	*102*		*33 - 138*

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563567

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		117	110		ug/L		94	35 - 113
Acenaphthylene	ND		117	107		ug/L		91	41 - 118
Anthracene	ND		117	111		ug/L		95	45 - 122
Benzo[a]anthracene	ND		117	115		ug/L		98	55 - 133
Benzo[a]pyrene	ND		117	108		ug/L		92	50 - 108
Benzo[b]fluoranthene	ND		117	118		ug/L		100	50 - 128
Benzo[g,h,i]perylene	ND		117	104		ug/L		89	46 - 133
Benzo[k]fluoranthene	ND		117	114		ug/L		97	52 - 128
Chrysene	ND		117	114		ug/L		97	52 - 116
Dibenz(a,h)anthracene	ND		117	114		ug/L		97	52 - 143
Fluoranthene	ND		117	118		ug/L		100	32 - 150
Fluorene	ND		117	121		ug/L		103	15 - 150
Indeno[1,2,3-cd]pyrene	ND		117	120		ug/L		102	41 - 141
1-Methylnaphthalene	ND		117	111		ug/L		95	10 - 150
2-Methylnaphthalene	ND		117	101		ug/L		86	10 - 150
Phenanthrene	ND		117	113		ug/L		97	36 - 125
Pyrene	ND		117	116		ug/L		99	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*15 - 122*
Nitrobenzene-d5	*119*		*19 - 130*
Terphenyl-d14	*118*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-213909-4 MSD
Matrix: Water
Analysis Batch: 563567

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		112	115		ug/L		103	35 - 113	5	49
Acenaphthylene	ND		112	110		ug/L		97	41 - 118	2	48
Anthracene	ND		112	110		ug/L		98	45 - 122	2	56
Benzo[a]anthracene	ND		112	117		ug/L		104	55 - 133	2	57
Benzo[a]pyrene	ND		112	106		ug/L		95	50 - 108	2	59
Benzo[b]fluoranthene	ND		112	109		ug/L		97	50 - 128	8	62
Benzo[g,h,i]perylene	ND		112	104		ug/L		93	46 - 133	0	58
Benzo[k]fluoranthene	ND		112	104		ug/L		92	52 - 128	10	58
Chrysene	ND		112	118		ug/L		105	52 - 116	3	59
Dibenz(a,h)anthracene	ND		112	116		ug/L		103	52 - 143	1	60
Fluoranthene	ND		112	115		ug/L		102	32 - 150	2	59
Fluorene	ND		112	122		ug/L		108	15 - 150	0	49
Indeno[1,2,3-cd]pyrene	ND		112	113		ug/L		101	41 - 141	6	58
1-Methylnaphthalene	ND		112	103		ug/L		92	10 - 150	8	66
2-Methylnaphthalene	ND		112	100		ug/L		89	10 - 150	1	66
Phenanthrene	ND		112	113		ug/L		101	36 - 125	0	69
Pyrene	ND		112	115		ug/L		102	41 - 127	2	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*102*		*15 - 122*
Nitrobenzene-d5	*113*		*19 - 130*
Terphenyl-d14	*120*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-563584/1-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/18/22 14:52	01/19/22 10:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*137*		*51 - 149*	*01/18/22 14:52*	*01/19/22 10:24*	*1*

Lab Sample ID: LCS 400-563584/2-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563584

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.101	0.191	*+	ug/L		190	60 - 140
1,2-Dibromoethane			0.101	0.110		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*133*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-213909-4 MS
Matrix: Water
Analysis Batch: 563662

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563584

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	*+	0.101	0.102		ug/L		101	10 - 150
1,2-Dibromoethane	ND		0.101	0.101		ug/L		100	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*85*		*51 - 149*

Lab Sample ID: 400-213909-4 DU
Matrix: Water
Analysis Batch: 563662

Client Sample ID: P93C-ROX-011022
Prep Type: Total/NA
Prep Batch: 563584

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND	*+		ND	*+	ug/L				NC	40
1,2-Dibromoethane	ND			ND		ug/L				NC	40

Surrogate	*DU %Recovery*	*DU Qualifier*	*Limits*
4-Bromofluorobenzene	*84*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name: Melissa Remiger

PO #: 60674381 – 3.1.2

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/10/2022

PAGE: 1 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Oner ID

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

SAMPLER NAME(S) (Print): J. Mayer, B. Howell

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

FOR LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA – RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60674381 – 3.1.2

400-213909 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-011022-8260-A	1/10/2022	0000	Water	X					2	X				
	TB-ROX-011022-8011-A	1/10/2022	0000	Water	X					2		X			
	P93C-ROX-011022-EB	1/10/2022	0855	Water	X			X		8	X	X	X	X	
	P93C-ROX-011022	1/10/2022	1035	Water	X			X		8	X	X	X	X	
	P93C-ROX-011022-MS	1/10/2022	1035	Water	X			X		8	X	X	X	X	
	P93C-ROX-011022-MSD	1/10/2022	1035	Water	X			X		8	X	X	X	X	
	MW13-ROX-011022	1/10/2022	1230	Water	X			X		8	X	X	X	X	
	P114R-ROX-011022	1/10/2022	1315	Water	X			X		8	X	X	X	X	

Relinquished by: (Signature) Joe Mayer — Received by: (Signature) FEDEX: 1482 3811 4933, 1482 3811 4922 — Date: 1/10/2022 — Time: 16:00

Relinquished by: (Signature) — Received by: (Signature) Avery — Date: 1-12-22 — Time: 08:49

Relinquished by: (Signature) — Received by: (Signature) — Date: — Time:

CUSTODY SEALS: 1854706, 1854707, 1854708, 1854709

2.5°C / 0.0°C IR9

Version: 2Apr21

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES		

Print Bill To Contact Name:	**PlaNet Site or Project ID**
Melissa Remiger	25278
PO #	**GSAP Project ID**
60674381 – 3.1.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/10/2022

PAGE: 2 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

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 60674381 – 3.1.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID:

SAMPLER NAME(S) (Print): MD'Angelo LBadmus

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
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Please provide sample receipt upon login.
Please send EQuiS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS: 60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011022-8011-B	1/10/2022	0000	Water	2					2		X		
	TB-ROX-011022-8260-B	1/10/2022	0000	Water	2					2	X			
	P54-ROX-011022	1/10/2022	0940	Water	6			2		8	X	X	X	X
	MW3-ROX-011022	1/10/2022	1040	Water	6			2		8	X	X	X	X
	MW22-ROX-011022	1/10/2022	1245	Water	6			2		8	X	X	X	X
	ROST4PZG-ROX-011022	1/10/2022	1345	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

MD 1/10/22

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY D'ANGELO	FEDEX: See page 1	1/10/2022	1600
		1-12-22	08:49

CUSTODY SEALS: See page 1

0.0°C / 2.5°C IR9

Version: 2Apr21

1/21/2022

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213909-1

Login Number: 213909
List Number: 1
Creator: Johnson, Avery D

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	1854708 /1854706
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.5°C / 0.0°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-213909-1
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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-213993-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/24/2022

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

Sample Identification	Sample Identification
TB-ROX-011122-8011-B	TB-ROX-011122-8260-B
MW26-ROX-011122	MW2-ROX-011122
ROST4PZC-ROX-011122	TB-ROX-011122-8260-A
TB-ROX-011122-8011-A	MW4-ROX-011122
MW25-ROX-011122	MW8-ROX-011122
MW7-ROX-011122	MW7-ROX-011122-Dup

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated several SVOC and VOC by 8011 LCS/LCSD recoveries, and/or LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in sample MW4-ROX-011122 and method blanks. The MSD recovery for 2-chloroethyl vinyl ether was outside evaluation criteria in sample MW26-ROX-011122. The difference in 1-methylnaphthalene results for the field duplicate pair MW7-ROX-011122/MW7-ROX-011122-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (**UJ**/**J**). Several samples were diluted to bring target and non-target analytes into calibration range of the instrument. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2,4-Dichlorophenol	**48**/63	**27**	49-120/30
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2-Nitrophenol	43/62	**37**	40-124/30
LCS/LCSD 400-563401/4-A/5-A	SVOCs	Benzenethiol	17/**7**	**87**	10-120/30
LCS 400-563584/2-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**190**	NA	60-140

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol in LCS/LCSD 400-563401/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW26-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW2-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW2-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZC-ROX-011122	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW4-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW4-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW25-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW25-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW8-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW8-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW7-ROX-011122	SVOCs	Benzenethiol	**UJ**
MW7-ROX-011122	SVOCs	2,4-Dichlorophenol	**UJ**
MW7-ROX-011122-Dup	SVOCs	Benzenethiol	**UJ**
MW7-ROX-011122-Dup	SVOCs	2,4-Dichlorophenol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW4-ROX-011122	SVOCs	2-Fluorophenol	**9**	13-113

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-563401/1-A	SVOCs	2-Fluorophenol	**4**	13-113
MB 400-563401/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

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

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample MW26-ROX-011122 was spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW26-ROX-011122	VOCs	2-Chloroethyl vinyl ether	21/**0**	NC	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-011122	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW7-ROX-011122	MW7-ROX-011122-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
MW7-ROX-011122	MW7-ROX-011122-Dup	PAHs	1-Methylnaphthalene	**> 2X RL**	**UJ/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted with the exception of non-detect VOCs in field duplicate pair MW7-ROX-011122/MW7-ROX-011122-Dup, to bring benzene into calibration range of the instrument. VOCs were non-detect at a dilution factor of 500X, with raised reporting limits of between 500 and 13,000 µg/L. Due to historical detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes were outside evaluation criteria, biased low. 1,1-Dichloroethene in field duplicate pair MW7-ROX-011122/MW7-ROX-011122-Dup is qualified below in Section 12.0 of this data review due to sample dilution; no further qualification was required. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW26-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
MW2-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
ROST4PZC-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
MW4-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
MW25-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
MW8-ROX-011122	VOCs	1,1-Dichloroethene	**UJ**
MW26-ROX-011122	SVOCs	Aniline	**UJ**
MW26-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
MW26-ROX-011122	SVOCs	2,6-Dinitrotoluene	**UJ**
MW26-ROX-011122	SVOCs	Quinoline	**UJ**
MW2-ROX-011122	SVOCs	Aniline	**UJ**
MW2-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
MW2-ROX-011122	SVOCs	2,6-Dinitrotoluene	**UJ**
MW2-ROX-011122	SVOCs	Quinoline	**UJ**
ROST4PZC-ROX-011122	SVOCs	Aniline	**UJ**
ROST4PZC-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
ROST4PZC-ROX-011122	SVOCs	2,6-Dinitrotoluene	**UJ**
ROST4PZC-ROX-011122	SVOCs	Quinoline	**UJ**
MW4-ROX-011122	SVOCs	Aniline	**UJ**
MW4-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
MW4-ROX-011122	SVOCs	2,6-Dinitrotoluene	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-011122	SVOCs	Quinoline	UJ
MW25-ROX-011122	SVOCs	Aniline	UJ
MW25-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW25-ROX-011122	SVOCs	2,6-Dinitrotoluene	UJ
MW25-ROX-011122	SVOCs	Quinoline	UJ
MW8-ROX-011122	SVOCs	Aniline	UJ
MW8-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW8-ROX-011122	SVOCs	2,6-Dinitrotoluene	UJ
MW8-ROX-011122	SVOCs	Quinoline	UJ
MW7-ROX-011122	SVOCs	Aniline	UJ
MW7-ROX-011122	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW7-ROX-011122	SVOCs	2,6-Dinitrotoluene	UJ
MW7-ROX-011122	SVOCs	Quinoline	UJ
MW7-ROX-011122-Dup	SVOCs	Aniline	UJ
MW7-ROX-011122-Dup	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW7-ROX-011122-Dup	SVOCs	2,6-Dinitrotoluene	UJ
MW7-ROX-011122-Dup	SVOCs	Quinoline	UJ

Additionally, analytes in field duplicate pair MW7-ROX-011122/MW7-ROX-011122-Dup were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-011122	VOCs	All non-detects	UJ
MW7-ROX-011122-Dup	VOCs	All non-detects	UJ

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-213993-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Authorized for release by:
1/21/2022 6:41:21 PM

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

Reviewed 2/24/2022 MR

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

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

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

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Job ID: 400-213993-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-213993-1

Comments
No additional comments.

Receipt
The samples were received on 1/13/2022 9:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 0.0° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563318 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene. 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 8260B: The following sample was diluted due to the abundance of non-target analytes: MW2-ROX-011122 (400-213993-4). Elevated reporting limits (RLs) are provided.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-011122 (400-213993-10), MW7-ROX-011122 (400-213993-11) and MW7-ROX-011122-DUP (400-213993-12). Elevated reporting limits (RLs) are provided.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-563318 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-563318 because the recovery was below the reporting limit for the MSD due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-011122-8260-B (400-213993-2), MW26-ROX-011122 (400-213993-3), MW2-ROX-011122 (400-213993-4), ROST4PZC-ROX-011122 (400-213993-5), TB-ROX-011122-8260-A (400-213993-6), MW4-ROX-011122 (400-213993-8), MW25-ROX-011122 (400-213993-9), MW8-ROX-011122 (400-213993-10), MW7-ROX-011122 (400-213993-11) and MW7-ROX-011122-DUP (400-213993-12). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-563401 and analytical batch 400-563495: 2,4-Dichlorophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analytes: 2-Nitrophenol.

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563495 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the

Job ID: 400-213993-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563495 recovered outside acceptance criteria, low biased, for 2,6-Dinitrotoluene, Bis(2-chloroethoxy)methane, Aniline and Quinoline. 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 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW4-ROX-011122 (400-213993-8) and (MB 400-563401/1-A). These results have been reported and qualified.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-563401/1-A). These results have been reported and qualified.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-563662 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) for preparation batch 400-563584 and analytical batch 400-563662 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: Spike compounds were inadvertently omitted during the extraction process for the matrix spike duplicate (MSD). The associated matrix spike (MS) and laboratory control sample (LCS) have been reported for preparation batch 400-563584 and analytical batch 400-563662.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-563930 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-213993-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-213993-1	TB-ROX-011122-8011-B	Water	01/11/22 00:00	01/13/22 09:40
400-213993-2	TB-ROX-011122-8260-B	Water	01/11/22 00:00	01/13/22 09:40
400-213993-3	MW26-ROX-011122	Water	01/11/22 09:45	01/13/22 09:40
400-213993-4	MW2-ROX-011122	Water	01/11/22 10:45	01/13/22 09:40
400-213993-5	ROST4PZC-ROX-011122	Water	01/11/22 12:05	01/13/22 09:40
400-213993-6	TB-ROX-011122-8260-A	Water	01/11/22 00:00	01/13/22 09:40
400-213993-7	TB-ROX-011122-8011-A	Water	01/11/22 00:00	01/13/22 09:40
400-213993-8	MW4-ROX-011122	Water	01/11/22 10:30	01/13/22 09:40
400-213993-9	MW25-ROX-011122	Water	01/11/22 11:40	01/13/22 09:40
400-213993-10	MW8-ROX-011122	Water	01/11/22 12:40	01/13/22 09:40
400-213993-11	MW7-ROX-011122	Water	01/11/22 13:50	01/13/22 09:40
400-213993-12	MW7-ROX-011122-DUP	Water	01/11/22 13:50	01/13/22 09:40

Detection Summary

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8011-B — Lab Sample ID: 400-213993-1

No Detections.

Client Sample ID: TB-ROX-011122-8260-B — Lab Sample ID: 400-213993-2

No Detections.

Client Sample ID: MW26-ROX-011122 — Lab Sample ID: 400-213993-3

No Detections.

Client Sample ID: MW2-ROX-011122 — Lab Sample ID: 400-213993-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	140		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	57		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	62		25	3.2	ug/L	5		8260B	Total/NA
Naphthalene	19		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	86		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	6.9	J	25	3.0	ug/L	5		8260B	Total/NA
p-Isopropyltoluene	5.9		5.0	3.6	ug/L	5		8260B	Total/NA
sec-Butylbenzene	6.1		5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	5.0		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	13		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	27		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	69		50	8.0	ug/L	5		8260B	Total/NA
1-Methylnaphthalene	9.6		0.19	0.070	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	15		0.19	0.057	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST4PZC-ROX-011122 — Lab Sample ID: 400-213993-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.94	J	1.0	0.13	ug/L	1		8260B	Total/NA
Ethylbenzene	0.89	J	1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	5.7		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	9.3		5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene	8.0		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	9.5		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.0		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	0.70	J	1.0	0.70	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	9.1		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	0.87	J	1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	9.9	J	10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	1.5		0.19	0.031	ug/L	1		8270D LL	Total/NA
Acenaphthylene	0.27		0.19	0.043	ug/L	1		8270D LL	Total/NA
Anthracene	0.32		0.19	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	1.1		0.19	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	32		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.9		0.19	0.058	ug/L	1		8270D LL	Total/NA
Phenanthrene	3.1		0.19	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.084	J	0.19	0.038	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.46	J	9.6	0.16	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-011122-8260-A — Lab Sample ID: 400-213993-6

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8011-A

Lab Sample ID: 400-213993-7

No Detections.

Client Sample ID: MW4-ROX-011122

Lab Sample ID: 400-213993-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.54	J	1.0	0.22	ug/L	1		8260B	Total/NA
Toluene	0.49	J	1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: MW25-ROX-011122

Lab Sample ID: 400-213993-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	20		1.0	0.13	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.39	J	1.0	0.22	ug/L	1		8260B	Total/NA

Client Sample ID: MW8-ROX-011122

Lab Sample ID: 400-213993-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	160	J	200	100	ug/L	200		8260B	Total/NA
m-Xylene & p-Xylene	350	J	1000	130	ug/L	200		8260B	Total/NA
Toluene	110	J	200	82	ug/L	200		8260B	Total/NA
Xylenes, Total	450	J	2000	320	ug/L	200		8260B	Total/NA
Benzene - DL	260000		1000	130	ug/L	1000		8260B	Total/NA
Acenaphthene	0.27		0.19	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	0.49		0.19	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	18		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	4.5		0.19	0.057	ug/L	1		8270D LL	Total/NA
Phenol - DL	390		48	12	ug/L	5		8270D	Total/NA

Client Sample ID: MW7-ROX-011122

Lab Sample ID: 400-213993-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	850000		5000	650	ug/L	5000		8260B	Total/NA
2-Methylnaphthalene	3.1		0.19	0.058	ug/L	1		8270D LL	Total/NA
Benzoic acid	31		29	7.0	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	0.89	J	19	0.37	ug/L	1		8270D	Total/NA
Phenol	140		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: MW7-ROX-011122-DUP

Lab Sample ID: 400-213993-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	740000		5000	650	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	2.9	J	0.19	0.070	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	3.4		0.19	0.057	ug/L	1		8270D LL	Total/NA
Benzoic acid	31		28	6.9	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	0.97	J	19	0.37	ug/L	1		8270D	Total/NA
Phenol	120		9.5	2.5	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8011-B
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 17:50	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/18/22 14:52*	*01/19/22 17:50*	*1*

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8260-B
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 09:32	1
Acrolein	ND		20	3.3	ug/L			01/15/22 09:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 09:32	1
Benzene	ND		1.0	0.13	ug/L			01/15/22 09:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 09:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 09:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 09:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 09:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 09:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 09:32	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 09:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 09:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 09:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 09:32	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 09:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 09:32	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 09:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 09:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 09:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 09:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 09:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 09:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 09:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 09:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 09:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 09:32	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 09:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 09:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 09:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 09:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 09:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/22 09:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 09:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 09:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 09:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 09:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 09:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 09:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 09:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 09:32	1

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8260-B
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 09:32	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 09:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 09:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 09:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 09:32	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 09:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 09:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 09:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 09:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 09:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 09:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 09:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 09:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 09:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 09:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 09:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 09:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 09:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 09:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/15/22 09:32*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/15/22 09:32*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/15/22 09:32*	*1*

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

Job ID: 400-213993-1

Client Sample ID: MW26-ROX-011122
Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 10:17	1
Acrolein	ND		20	3.3	ug/L			01/15/22 10:17	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 10:17	1
Benzene	ND		1.0	0.13	ug/L			01/15/22 10:17	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 10:17	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 10:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 10:17	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 10:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 10:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 10:17	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 10:17	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 10:17	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 10:17	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/15/22 10:17	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 10:17	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 10:17	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 10:17	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 10:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 10:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 10:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 10:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 10:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 10:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 10:17	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			01/15/22 10:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 10:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 10:17	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 10:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 10:17	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 10:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 10:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 10:17	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/22 10:17	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 10:17	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 10:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 10:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 10:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 10:17	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 10:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 10:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 10:17	1

Client Sample ID: MW26-ROX-011122
Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 10:17	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 10:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 10:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 10:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 10:17	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 10:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 10:17	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 10:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 10:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 10:17	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 10:17	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 10:17	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 10:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 10:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 10:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 10:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 10:17	1
Vinyl acetate	ND	F2	25	0.93	ug/L			01/15/22 10:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 10:17	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 10:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 119*		*01/15/22 10:17*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*01/15/22 10:17*	*1*
Toluene-d8 (Surr)	*104*		*64 - 132*		*01/15/22 10:17*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 19:17	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 19:17	1
Anthracene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 19:17	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/22 11:09	01/18/22 19:17	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 19:17	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/17/22 11:09	01/18/22 19:17	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 19:17	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/22 11:09	01/18/22 19:17	1
Chrysene	ND		0.20	0.075	ug/L		01/17/22 11:09	01/18/22 19:17	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/17/22 11:09	01/18/22 19:17	1
Fluoranthene	ND		0.20	0.069	ug/L		01/17/22 11:09	01/18/22 19:17	1
Fluorene	ND		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 19:17	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/17/22 11:09	01/18/22 19:17	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		01/17/22 11:09	01/18/22 19:17	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		01/17/22 11:09	01/18/22 19:17	1
Phenanthrene	ND		0.20	0.036	ug/L		01/17/22 11:09	01/18/22 19:17	1
Pyrene	ND		0.20	0.040	ug/L		01/17/22 11:09	01/18/22 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/17/22 11:09*	*01/18/22 19:17*	*1*
Nitrobenzene-d5	*109*		*19 - 130*	*01/17/22 11:09*	*01/18/22 19:17*	*1*

Client Sample ID: MW26-ROX-011122
Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*135*		*33 - 138*	*01/17/22 11:09*	*01/18/22 19:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	3.8	ug/L		01/17/22 11:09	01/18/22 18:10	1
Benzenethiol	ND	*- *1 UJ	10	1.7	ug/L		01/17/22 11:09	01/18/22 18:10	1
Benzoic acid	ND		30	7.4	ug/L		01/17/22 11:09	01/18/22 18:10	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Bis(2-chloroethoxy)methane	ND	UJ	10	0.16	ug/L		01/17/22 11:09	01/18/22 18:10	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 18:10	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 18:10	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/17/22 11:09	01/18/22 18:10	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 18:10	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 18:10	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Dibenzofuran	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 18:10	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4-Dichlorophenol	ND	*- UJ	10	3.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Diethyl phthalate	ND		10	0.24	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 18:10	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 18:10	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 18:10	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/17/22 11:09	01/18/22 18:10	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 18:10	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 18:10	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/22 11:09	01/18/22 18:10	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/22 11:09	01/18/22 18:10	1
Indene	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 18:10	1
Isophorone	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 18:10	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 18:10	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/17/22 11:09	01/18/22 18:10	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 18:10	1
3-Nitroaniline	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Nitroaniline	ND		10	1.5	ug/L		01/17/22 11:09	01/18/22 18:10	1
Nitrobenzene	ND		10	0.13	ug/L		01/17/22 11:09	01/18/22 18:10	1
2-Nitrophenol	ND	*1	10	5.2	ug/L		01/17/22 11:09	01/18/22 18:10	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/22 11:09	01/18/22 18:10	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 18:10	1

Client Sample ID: MW26-ROX-011122
Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/22 11:09	01/18/22 18:10	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/17/22 11:09	01/18/22 18:10	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 18:10	1
Phenol	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 18:10	1
Pyridine	ND		10	3.2	ug/L		01/17/22 11:09	01/18/22 18:10	1
Quinoline	ND	UJ	10	4.5	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/22 11:09	01/18/22 18:10	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*46 - 124*	*01/17/22 11:09*	*01/18/22 18:10*	*1*
2-Fluorophenol	*23*		*13 - 113*	*01/17/22 11:09*	*01/18/22 18:10*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*01/17/22 11:09*	*01/18/22 18:10*	*1*
Phenol-d5	*43*		*17 - 127*	*01/17/22 11:09*	*01/18/22 18:10*	*1*
Terphenyl-d14	*83*		*44 - 149*	*01/17/22 11:09*	*01/18/22 18:10*	*1*
2,4,6-Tribromophenol	*56*		*26 - 150*	*01/17/22 11:09*	*01/18/22 18:10*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.029	0.016	ug/L		01/18/22 14:52	01/19/22 18:11	1
1,2-Dibromoethane	ND		0.019	0.014	ug/L		01/18/22 14:52	01/19/22 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*51 - 149*	*01/18/22 14:52*	*01/19/22 18:11*	*1*

Client Sample ID: MW2-ROX-011122
Date Collected: 01/11/22 10:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			01/15/22 11:04	5
Acrolein	ND		100	17	ug/L			01/15/22 11:04	5
Acrylonitrile	ND		50	14	ug/L			01/15/22 11:04	5
Benzene	ND		5.0	0.65	ug/L			01/15/22 11:04	5
Bromobenzene	ND		5.0	2.7	ug/L			01/15/22 11:04	5
Bromochloromethane	ND		5.0	1.1	ug/L			01/15/22 11:04	5
Bromodichloromethane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
Bromoform	ND		25	1.3	ug/L			01/15/22 11:04	5
Bromomethane	ND		5.0	4.9	ug/L			01/15/22 11:04	5
2-Butanone (MEK)	ND		130	13	ug/L			01/15/22 11:04	5
Carbon disulfide	ND		5.0	2.5	ug/L			01/15/22 11:04	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			01/15/22 11:04	5
Chlorobenzene	ND		5.0	0.75	ug/L			01/15/22 11:04	5
Dibromochloromethane	ND		5.0	1.2	ug/L			01/15/22 11:04	5
Chloroethane	ND		5.0	3.8	ug/L			01/15/22 11:04	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			01/15/22 11:04	5
Chloroform	ND		5.0	3.0	ug/L			01/15/22 11:04	5
1-Chlorohexane	ND		5.0	1.6	ug/L			01/15/22 11:04	5
Chloromethane	ND		5.0	1.6	ug/L			01/15/22 11:04	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			01/15/22 11:04	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			01/15/22 11:04	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			01/15/22 11:04	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			01/15/22 11:04	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			01/15/22 11:04	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			01/15/22 11:04	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			01/15/22 11:04	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			01/15/22 11:04	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			01/15/22 11:04	5
Ethylbenzene	**140**		5.0	2.5	ug/L			01/15/22 11:04	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			01/15/22 11:04	5
Hexachlorobutadiene	ND		25	4.5	ug/L			01/15/22 11:04	5
2-Hexanone	ND		130	7.0	ug/L			01/15/22 11:04	5
Isopropylbenzene	**57**		5.0	2.7	ug/L			01/15/22 11:04	5
Methylene bromide	ND		25	1.1	ug/L			01/15/22 11:04	5
Methylene Chloride	ND		25	15	ug/L			01/15/22 11:04	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			01/15/22 11:04	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			01/15/22 11:04	5
m-Xylene & p-Xylene	**62**		25	3.2	ug/L			01/15/22 11:04	5
Naphthalene	**19**		5.0	5.0	ug/L			01/15/22 11:04	5
n-Butylbenzene	ND		5.0	3.8	ug/L			01/15/22 11:04	5
N-Propylbenzene	**86**		5.0	3.5	ug/L			01/15/22 11:04	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			01/15/22 11:04	5
o-Xylene	**6.9**	J	25	3.0	ug/L			01/15/22 11:04	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			01/15/22 11:04	5
p-Isopropyltoluene	**5.9**		5.0	3.6	ug/L			01/15/22 11:04	5

Client Sample ID: MW2-ROX-011122
Date Collected: 01/11/22 10:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**6.1**		5.0	3.5	ug/L			01/15/22 11:04	5
Styrene	ND		5.0	5.0	ug/L			01/15/22 11:04	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			01/15/22 11:04	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			01/15/22 11:04	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			01/15/22 11:04	5
Tetrachloroethene	ND		5.0	0.60	ug/L			01/15/22 11:04	5
Toluene	**5.0**		5.0	2.1	ug/L			01/15/22 11:04	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/15/22 11:04	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			01/15/22 11:04	5
1,2,3-Trichlorobenzene	ND		5.0	0.95	ug/L			01/15/22 11:04	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			01/15/22 11:04	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			01/15/22 11:04	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			01/15/22 11:04	5
Trichloroethene	ND		5.0	0.75	ug/L			01/15/22 11:04	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			01/15/22 11:04	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			01/15/22 11:04	5
1,2,4-Trimethylbenzene	**13**		5.0	4.1	ug/L			01/15/22 11:04	5
1,3,5-Trimethylbenzene	**27**		5.0	2.8	ug/L			01/15/22 11:04	5
Vinyl acetate	ND		130	4.7	ug/L			01/15/22 11:04	5
Vinyl chloride	ND		5.0	2.5	ug/L			01/15/22 11:04	5
Xylenes, Total	**69**		50	8.0	ug/L			01/15/22 11:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/15/22 11:04*	*5*
Dibromofluoromethane	*99*		*75 - 126*		*01/15/22 11:04*	*5*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/15/22 11:04*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 19:34	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 19:34	1
Anthracene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 19:34	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 19:34	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 19:34	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/17/22 11:09	01/18/22 19:34	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 19:34	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/17/22 11:09	01/18/22 19:34	1
Chrysene	ND		0.19	0.070	ug/L		01/17/22 11:09	01/18/22 19:34	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/17/22 11:09	01/18/22 19:34	1
Fluoranthene	ND		0.19	0.064	ug/L		01/17/22 11:09	01/18/22 19:34	1
Fluorene	ND		0.19	0.10	ug/L		01/17/22 11:09	01/18/22 19:34	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 19:34	1
1-Methylnaphthalene	**9.6**		0.19	0.070	ug/L		01/17/22 11:09	01/18/22 19:34	1
2-Methylnaphthalene	**15**		0.19	0.057	ug/L		01/17/22 11:09	01/18/22 19:34	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/22 11:09	01/18/22 19:34	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*15 - 122*	*01/17/22 11:09*	*01/18/22 19:34*	*1*
Nitrobenzene-d5	*104*		*19 - 130*	*01/17/22 11:09*	*01/18/22 19:34*	*1*

Client Sample ID: MW2-ROX-011122
Date Collected: 01/11/22 10:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*105*		*33 - 138*	*01/17/22 11:09*	*01/18/22 19:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	3.6	ug/L		01/17/22 11:09	01/18/22 18:31	1
Benzenethiol	ND	*- *1 UJ	9.5	1.6	ug/L		01/17/22 11:09	01/18/22 18:31	1
Benzoic acid	ND		28	6.9	ug/L		01/17/22 11:09	01/18/22 18:31	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 18:31	1
Bis(2-chloroethoxy)methane	ND	UJ	9.5	0.15	ug/L		01/17/22 11:09	01/18/22 18:31	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 18:31	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/17/22 11:09	01/18/22 18:31	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/17/22 11:09	01/18/22 18:31	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/17/22 11:09	01/18/22 18:31	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 18:31	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 18:31	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 18:31	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 18:31	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4-Dichlorophenol	ND	*- UJ	9.5	2.8	ug/L		01/17/22 11:09	01/18/22 18:31	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 18:31	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 18:31	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 18:31	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/17/22 11:09	01/18/22 18:31	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 18:31	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 18:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 18:31	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 18:31	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 18:31	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/17/22 11:09	01/18/22 18:31	1
Indene	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 18:31	1
Isophorone	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 18:31	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 18:31	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/17/22 11:09	01/18/22 18:31	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 18:31	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/17/22 11:09	01/18/22 18:31	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/17/22 11:09	01/18/22 18:31	1
2-Nitrophenol	ND	*1	9.5	4.9	ug/L		01/17/22 11:09	01/18/22 18:31	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/17/22 11:09	01/18/22 18:31	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 18:31	1

Client Sample ID: MW2-ROX-011122
Date Collected: 01/11/22 10:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/17/22 11:09	01/18/22 18:31	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/17/22 11:09	01/18/22 18:31	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 18:31	1
Phenol	ND		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 18:31	1
Pyridine	ND	UJ	9.5	3.0	ug/L		01/17/22 11:09	01/18/22 18:31	1
Quinoline	ND		9.5	4.3	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/17/22 11:09	01/18/22 18:31	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*01/17/22 11:09*	*01/18/22 18:31*	*1*
2-Fluorophenol	*16*		*13 - 113*	*01/17/22 11:09*	*01/18/22 18:31*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*01/17/22 11:09*	*01/18/22 18:31*	*1*
Phenol-d5	*42*		*17 - 127*	*01/17/22 11:09*	*01/18/22 18:31*	*1*
Terphenyl-d14	*80*		*44 - 149*	*01/17/22 11:09*	*01/18/22 18:31*	*1*
2,4,6-Tribromophenol	*69*		*26 - 150*	*01/17/22 11:09*	*01/18/22 18:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 18:31	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*01/18/22 14:52*	*01/19/22 18:31*	*1*

Client Sample ID: ROST4PZC-ROX-011122
Date Collected: 01/11/22 12:05
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 10:41	1
Acrolein	ND		20	3.3	ug/L			01/15/22 10:41	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 10:41	1
Benzene	**0.94**	**J**	1.0	0.13	ug/L			01/15/22 10:41	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 10:41	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 10:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 10:41	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 10:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 10:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 10:41	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 10:41	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 10:41	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 10:41	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 10:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 10:41	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 10:41	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 10:41	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 10:41	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 10:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 10:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 10:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 10:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 10:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 10:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 10:41	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			01/15/22 10:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 10:41	1
Ethylbenzene	**0.89**	**J**	1.0	0.50	ug/L			01/15/22 10:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 10:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 10:41	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 10:41	1
Isopropylbenzene	**5.7**		1.0	0.53	ug/L			01/15/22 10:41	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 10:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 10:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 10:41	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/22 10:41	1
m-Xylene & p-Xylene	**9.3**		5.0	0.63	ug/L			01/15/22 10:41	1
Naphthalene	**8.0**		1.0	1.0	ug/L			01/15/22 10:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 10:41	1
N-Propylbenzene	**9.5**		1.0	0.69	ug/L			01/15/22 10:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 10:41	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 10:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 10:41	1
p-Isopropyltoluene	**1.0**		1.0	0.71	ug/L			01/15/22 10:41	1

Client Sample ID: ROST4PZC-ROX-011122
Date Collected: 01/11/22 12:05
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	0.70	J	1.0	0.70	ug/L			01/15/22 10:41	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 10:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 10:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 10:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 10:41	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 10:41	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 10:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 10:41	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 10:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 10:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 10:41	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 10:41	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 10:41	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 10:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 10:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 10:41	1
1,2,4-Trimethylbenzene	9.1		1.0	0.82	ug/L			01/15/22 10:41	1
1,3,5-Trimethylbenzene	0.87	J	1.0	0.56	ug/L			01/15/22 10:41	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 10:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 10:41	1
Xylenes, Total	9.9	J	10	1.6	ug/L			01/15/22 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/15/22 10:41*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/15/22 10:41*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/15/22 10:41*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.5		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 19:51	1
Acenaphthylene	0.27		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 19:51	1
Anthracene	0.32		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 19:51	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 19:51	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 19:51	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 19:51	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/17/22 11:09	01/18/22 19:51	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 19:51	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 19:51	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 19:51	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 19:51	1
Fluorene	1.1		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 19:51	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 19:51	1
1-Methylnaphthalene	32		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 19:51	1
2-Methylnaphthalene	2.9		0.19	0.058	ug/L		01/17/22 11:09	01/18/22 19:51	1
Phenanthrene	3.1		0.19	0.035	ug/L		01/17/22 11:09	01/18/22 19:51	1
Pyrene	0.084	J	0.19	0.038	ug/L		01/17/22 11:09	01/18/22 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*100*		*15 - 122*	*01/17/22 11:09*	*01/18/22 19:51*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*01/17/22 11:09*	*01/18/22 19:51*	*1*

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

Job ID: 400-213993-1

Client Sample ID: ROST4PZC-ROX-011122
Date Collected: 01/11/22 12:05
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	125		33 - 138	01/17/22 11:09	01/18/22 19:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 18:51	1
Benzenethiol	ND	*- *1	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 18:51	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 18:51	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 18:51	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 18:51	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 18:51	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 18:51	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 18:51	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 18:51	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:51	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 18:51	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:51	1
Dibenzofuran	0.46	J	9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:51	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4-Dichlorophenol	ND	*-	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 18:51	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:51	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:51	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 18:51	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 18:51	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:51	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:51	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:51	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:51	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 18:51	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 18:51	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:51	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:51	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 18:51	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/17/22 11:09	01/18/22 18:51	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 18:51	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 18:51	1
Nitrobenzene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:51	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 18:51	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 18:51	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:51	1

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

Job ID: 400-213993-1

Client Sample ID: ROST4PZC-ROX-011122
Date Collected: 01/11/22 12:05
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 18:51	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 18:51	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 18:51	1
Phenol	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 18:51	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 18:51	1
Quinoline	ND		9.6	4.3	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 18:51	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/17/22 11:09*	*01/18/22 18:51*	*1*
2-Fluorophenol	*29*		*13 - 113*	*01/17/22 11:09*	*01/18/22 18:51*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/17/22 11:09*	*01/18/22 18:51*	*1*
Phenol-d5	*55*		*17 - 127*	*01/17/22 11:09*	*01/18/22 18:51*	*1*
Terphenyl-d14	*85*		*44 - 149*	*01/17/22 11:09*	*01/18/22 18:51*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*01/17/22 11:09*	*01/18/22 18:51*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND	*+	0.030	0.017	ug/L		01/18/22 14:52	01/19/22 19:12	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*73*		*51 - 149*	*01/18/22 14:52*	*01/19/22 19:12*	*1*

Client Sample ID: TB-ROX-011122-8260-A
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 09:54	1
Acrolein	ND		20	3.3	ug/L			01/15/22 09:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 09:54	1
Benzene	ND		1.0	0.13	ug/L			01/15/22 09:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 09:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 09:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 09:54	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 09:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 09:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 09:54	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 09:54	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 09:54	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 09:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 09:54	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 09:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 09:54	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 09:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 09:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 09:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 09:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 09:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 09:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 09:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 09:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 09:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 09:54	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 09:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 09:54	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 09:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 09:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 09:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/22 09:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 09:54	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 09:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 09:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 09:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 09:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 09:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 09:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 09:54	1

Client Sample ID: TB-ROX-011122-8260-A
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 09:54	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 09:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 09:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 09:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 09:54	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 09:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 09:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 09:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 09:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 09:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 09:54	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 09:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 09:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 09:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 09:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 09:54	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 09:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 09:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/15/22 09:54*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*01/15/22 09:54*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/15/22 09:54*	*1*

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

Job ID: 400-213993-1

Client Sample ID: TB-ROX-011122-8011-A
Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-7
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 15:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*01/21/22 11:31*	*01/21/22 15:34*	*1*

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

Job ID: 400-213993-1

Client Sample ID: MW4-ROX-011122
Date Collected: 01/11/22 10:30
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 14:35	1
Acrolein	ND		20	3.3	ug/L			01/15/22 14:35	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 14:35	1
Benzene	ND		1.0	0.13	ug/L			01/15/22 14:35	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 14:35	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 14:35	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 14:35	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 14:35	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 14:35	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 14:35	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 14:35	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 14:35	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 14:35	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 14:35	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 14:35	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 14:35	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 14:35	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 14:35	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 14:35	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 14:35	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 14:35	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 14:35	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 14:35	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 14:35	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			01/15/22 14:35	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 14:35	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 14:35	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 14:35	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 14:35	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 14:35	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 14:35	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 14:35	1
Methyl tert-butyl ether	0.54	J	1.0	0.22	ug/L			01/15/22 14:35	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 14:35	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 14:35	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 14:35	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 14:35	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 14:35	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 14:35	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 14:35	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 14:35	1

Client Sample ID: MW4-ROX-011122
Date Collected: 01/11/22 10:30
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 14:35	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 14:35	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 14:35	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 14:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 14:35	1
Toluene	0.49	J	1.0	0.41	ug/L			01/15/22 14:35	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 14:35	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 14:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 14:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 14:35	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 14:35	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 14:35	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 14:35	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 14:35	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 14:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 14:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 14:35	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 14:35	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 14:35	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 14:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/15/22 14:35*	*1*
Dibromofluoromethane	*96*		*75 - 126*		*01/15/22 14:35*	*1*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/15/22 14:35*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 20:08	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 20:08	1
Anthracene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 20:08	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 20:08	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 20:08	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/17/22 11:09	01/18/22 20:08	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 20:08	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/17/22 11:09	01/18/22 20:08	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:08	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 20:08	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 20:08	1
Fluorene	ND		0.19	0.10	ug/L		01/17/22 11:09	01/18/22 20:08	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 20:08	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:08	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/17/22 11:09	01/18/22 20:08	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/22 11:09	01/18/22 20:08	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*15 - 122*	*01/17/22 11:09*	*01/18/22 20:08*	*1*
Nitrobenzene-d5	*100*		*19 - 130*	*01/17/22 11:09*	*01/18/22 20:08*	*1*

Client Sample ID: MW4-ROX-011122
Date Collected: 01/11/22 10:30
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-8
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	115		33 - 138	01/17/22 11:09	01/18/22 20:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/17/22 11:09	01/18/22 19:12	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		01/17/22 11:09	01/18/22 19:12	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 19:12	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 19:12	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/17/22 11:09	01/18/22 19:12	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 19:12	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/17/22 11:09	01/18/22 19:12	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/17/22 11:09	01/18/22 19:12	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/17/22 11:09	01/18/22 19:12	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 19:12	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 19:12	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 19:12	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 19:12	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4-Dichlorophenol	ND	*-	9.5	2.9	ug/L		01/17/22 11:09	01/18/22 19:12	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 19:12	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 19:12	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 19:12	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/22 11:09	01/18/22 19:12	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 19:12	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 19:12	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 19:12	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 19:12	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 19:12	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/17/22 11:09	01/18/22 19:12	1
Indene	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 19:12	1
Isophorone	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 19:12	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 19:12	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/17/22 11:09	01/18/22 19:12	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 19:12	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/17/22 11:09	01/18/22 19:12	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/17/22 11:09	01/18/22 19:12	1
2-Nitrophenol	ND	*1	9.5	5.0	ug/L		01/17/22 11:09	01/18/22 19:12	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/17/22 11:09	01/18/22 19:12	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 19:12	1

Client Sample ID: MW4-ROX-011122
Date Collected: 01/11/22 10:30
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/17/22 11:09	01/18/22 19:12	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/17/22 11:09	01/18/22 19:12	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 19:12	1
Phenol	ND		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 19:12	1
Pyridine	ND		9.5	3.0	ug/L		01/17/22 11:09	01/18/22 19:12	1
Quinoline	ND	U5	9.5	4.3	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/17/22 11:09	01/18/22 19:12	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/17/22 11:09*	*01/18/22 19:12*	*1*
2-Fluorophenol	*9*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 19:12*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*01/17/22 11:09*	*01/18/22 19:12*	*1*
Phenol-d5	*40*		*17 - 127*	*01/17/22 11:09*	*01/18/22 19:12*	*1*
Terphenyl-d14	*86*		*44 - 149*	*01/17/22 11:09*	*01/18/22 19:12*	*1*
2,4,6-Tribromophenol	*73*		*26 - 150*	*01/17/22 11:09*	*01/18/22 19:12*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/21/22 11:31	01/21/22 15:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 15:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/21/22 11:31*	*01/21/22 15:54*	*1*

Client Sample ID: MW25-ROX-011122
Date Collected: 01/11/22 11:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 15:00	1
Acrolein	ND		20	3.3	ug/L			01/15/22 15:00	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 15:00	1
Benzene	20		1.0	0.13	ug/L			01/15/22 15:00	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 15:00	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 15:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 15:00	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 15:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 15:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 15:00	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 15:00	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 15:00	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 15:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 15:00	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 15:00	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 15:00	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 15:00	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 15:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 15:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 15:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 15:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 15:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 15:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 15:00	1
1,1-Dichloroethene	ND	UJ	1.0	0.50	ug/L			01/15/22 15:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 15:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 15:00	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 15:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 15:00	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 15:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 15:00	1
Methyl tert-butyl ether	0.39	J	1.0	0.22	ug/L			01/15/22 15:00	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 15:00	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 15:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 15:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 15:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 15:00	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 15:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 15:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 15:00	1

Client Sample ID: MW25-ROX-011122
Date Collected: 01/11/22 11:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 15:00	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 15:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 15:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 15:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 15:00	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 15:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 15:00	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 15:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 15:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 15:00	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 15:00	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 15:00	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 15:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 15:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 15:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 15:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 15:00	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 15:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 15:00	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/15/22 15:00*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/15/22 15:00*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/15/22 15:00*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:25	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 20:25	1
Anthracene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:25	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 20:25	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 20:25	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 20:25	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 20:25	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 20:25	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:25	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 20:25	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 20:25	1
Fluorene	ND		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 20:25	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 20:25	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:25	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/17/22 11:09	01/18/22 20:25	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/22 11:09	01/18/22 20:25	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*98*		*15 - 122*	*01/17/22 11:09*	*01/18/22 20:25*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*01/17/22 11:09*	*01/18/22 20:25*	*1*

Client Sample ID: MW25-ROX-011122
Date Collected: 01/11/22 11:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-9
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	86		33 - 138	01/17/22 11:09	01/18/22 20:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.6	ug/L		01/17/22 11:09	01/18/22 19:32	1
Benzenethiol	ND	*- *1 UJ	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 19:32	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 19:32	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 19:32	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.15	ug/L		01/17/22 11:09	01/18/22 19:32	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 19:32	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 19:32	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 19:32	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 19:32	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 19:32	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 19:32	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:32	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:32	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4-Dichlorophenol	ND	*- UJ	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 19:32	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:32	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:32	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 19:32	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/17/22 11:09	01/18/22 19:32	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:32	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:32	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:32	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 19:32	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 19:32	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:32	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 19:32	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 19:32	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/17/22 11:09	01/18/22 19:32	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 19:32	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 19:32	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/17/22 11:09	01/18/22 19:32	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 19:32	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 19:32	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:32	1

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

Job ID: 400-213993-1

Client Sample ID: MW25-ROX-011122
Date Collected: 01/11/22 11:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 19:32	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 19:32	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 19:32	1
Phenol	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 19:32	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 19:32	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/17/22 11:09	01/18/22 19:32	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*46 - 124*	*01/17/22 11:09*	*01/18/22 19:32*	*1*
2-Fluorophenol	*39*		*13 - 113*	*01/17/22 11:09*	*01/18/22 19:32*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/17/22 11:09*	*01/18/22 19:32*	*1*
Phenol-d5	*59*		*17 - 127*	*01/17/22 11:09*	*01/18/22 19:32*	*1*
Terphenyl-d14	*57*		*44 - 149*	*01/17/22 11:09*	*01/18/22 19:32*	*1*
2,4,6-Tribromophenol	*78*		*26 - 150*	*01/17/22 11:09*	*01/18/22 19:32*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 16:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*01/21/22 11:31*	*01/21/22 16:14*	*1*

Client Sample ID: MW8-ROX-011122
Date Collected: 01/11/22 12:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		5000	2000	ug/L			01/15/22 11:49	200
Acrolein	ND		4000	660	ug/L			01/15/22 11:49	200
Acrylonitrile	ND		2000	560	ug/L			01/15/22 11:49	200
Bromobenzene	ND		200	110	ug/L			01/15/22 11:49	200
Bromochloromethane	ND		200	42	ug/L			01/15/22 11:49	200
Bromodichloromethane	ND		200	100	ug/L			01/15/22 11:49	200
Bromoform	ND		1000	50	ug/L			01/15/22 11:49	200
Bromomethane	ND		200	200	ug/L			01/15/22 11:49	200
2-Butanone (MEK)	ND		5000	520	ug/L			01/15/22 11:49	200
Carbon disulfide	ND		200	100	ug/L			01/15/22 11:49	200
Carbon tetrachloride	ND		200	38	ug/L			01/15/22 11:49	200
Chlorobenzene	ND		200	30	ug/L			01/15/22 11:49	200
Dibromochloromethane	ND		200	48	ug/L			01/15/22 11:49	200
Chloroethane	ND		200	150	ug/L			01/15/22 11:49	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			01/15/22 11:49	200
Chloroform	ND		200	120	ug/L			01/15/22 11:49	200
1-Chlorohexane	ND		200	64	ug/L			01/15/22 11:49	200
Chloromethane	ND		200	64	ug/L			01/15/22 11:49	200
cis-1,2-Dichloroethene	ND		200	40	ug/L			01/15/22 11:49	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			01/15/22 11:49	200
1,2-Dichlorobenzene	ND		200	100	ug/L			01/15/22 11:49	200
1,3-Dichlorobenzene	ND		200	110	ug/L			01/15/22 11:49	200
1,4-Dichlorobenzene	ND		200	130	ug/L			01/15/22 11:49	200
Dichlorodifluoromethane	ND		200	170	ug/L			01/15/22 11:49	200
1,1-Dichloroethane	ND		200	100	ug/L			01/15/22 11:49	200
1,2-Dichloroethane	ND		200	38	ug/L			01/15/22 11:49	200
1,1-Dichloroethene	ND	UJ	200	100	ug/L			01/15/22 11:49	200
1,2-Dichloropropane	ND		200	100	ug/L			01/15/22 11:49	200
1,3-Dichloropropane	ND		200	100	ug/L			01/15/22 11:49	200
2,2-Dichloropropane	ND		200	100	ug/L			01/15/22 11:49	200
1,1-Dichloropropene	ND		200	100	ug/L			01/15/22 11:49	200
Ethylbenzene	**160**	**J**	200	100	ug/L			01/15/22 11:49	200
Ethyl methacrylate	ND		200	120	ug/L			01/15/22 11:49	200
Hexachlorobutadiene	ND		1000	180	ug/L			01/15/22 11:49	200
2-Hexanone	ND		5000	280	ug/L			01/15/22 11:49	200
Isopropylbenzene	ND		200	110	ug/L			01/15/22 11:49	200
Methylene bromide	ND		1000	44	ug/L			01/15/22 11:49	200
Methylene Chloride	ND		1000	600	ug/L			01/15/22 11:49	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			01/15/22 11:49	200
Methyl tert-butyl ether	ND		200	44	ug/L			01/15/22 11:49	200
m-Xylene & p-Xylene	**350**	**J**	1000	130	ug/L			01/15/22 11:49	200
Naphthalene	ND		200	200	ug/L			01/15/22 11:49	200
n-Butylbenzene	ND		200	150	ug/L			01/15/22 11:49	200
N-Propylbenzene	ND		200	140	ug/L			01/15/22 11:49	200
o-Chlorotoluene	ND		200	110	ug/L			01/15/22 11:49	200
o-Xylene	ND		1000	120	ug/L			01/15/22 11:49	200
p-Chlorotoluene	ND		200	110	ug/L			01/15/22 11:49	200
p-Isopropyltoluene	ND		200	140	ug/L			01/15/22 11:49	200
sec-Butylbenzene	ND		200	140	ug/L			01/15/22 11:49	200

Client Sample ID: MW8-ROX-011122
Date Collected: 01/11/22 12:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		200	200	ug/L			01/15/22 11:49	200
tert-Butylbenzene	ND		200	130	ug/L			01/15/22 11:49	200
1,1,1,2-Tetrachloroethane	ND		200	32	ug/L			01/15/22 11:49	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			01/15/22 11:49	200
Tetrachloroethene	ND		200	24	ug/L			01/15/22 11:49	200
Toluene	110	J	200	82	ug/L			01/15/22 11:49	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			01/15/22 11:49	200
trans-1,3-Dichloropropene	ND		1000	40	ug/L			01/15/22 11:49	200
1,2,3-Trichlorobenzene	ND		200	38	ug/L			01/15/22 11:49	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			01/15/22 11:49	200
1,1,1-Trichloroethane	ND		200	36	ug/L			01/15/22 11:49	200
1,1,2-Trichloroethane	ND		1000	42	ug/L			01/15/22 11:49	200
Trichloroethene	ND		200	30	ug/L			01/15/22 11:49	200
Trichlorofluoromethane	ND		200	100	ug/L			01/15/22 11:49	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			01/15/22 11:49	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			01/15/22 11:49	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			01/15/22 11:49	200
Vinyl acetate	ND		5000	190	ug/L			01/15/22 11:49	200
Vinyl chloride	ND		200	100	ug/L			01/15/22 11:49	200
Xylenes, Total	450	J	2000	320	ug/L			01/15/22 11:49	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*72 - 119*		*01/15/22 11:49*	*200*
Dibromofluoromethane	*107*		*75 - 126*		*01/15/22 11:49*	*200*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/15/22 11:49*	*200*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	260000		1000	130	ug/L			01/15/22 15:27	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 119*		*01/15/22 15:27*	*1000*
Dibromofluoromethane	*107*		*75 - 126*		*01/15/22 15:27*	*1000*
Toluene-d8 (Surr)	*104*		*64 - 132*		*01/15/22 15:27*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.27		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:42	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 20:42	1
Anthracene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:42	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 20:42	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 20:42	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 20:42	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 20:42	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 20:42	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:42	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 20:42	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 20:42	1
Fluorene	0.49		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 20:42	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 20:42	1

Client Sample ID: MW8-ROX-011122
Date Collected: 01/11/22 12:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	18		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:42	1
2-Methylnaphthalene	4.5		0.19	0.057	ug/L		01/17/22 11:09	01/18/22 20:42	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/22 11:09	01/18/22 20:42	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*15 - 122*	*01/17/22 11:09*	*01/18/22 20:42*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*01/17/22 11:09*	*01/18/22 20:42*	*1*
Terphenyl-d14	*95*		*33 - 138*	*01/17/22 11:09*	*01/18/22 20:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.6	ug/L		01/17/22 11:09	01/18/22 19:53	1
Benzenethiol	ND	*- *1 UJ	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 19:53	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 19:53	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 19:53	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.15	ug/L		01/17/22 11:09	01/18/22 19:53	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 19:53	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 19:53	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 19:53	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 19:53	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 19:53	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 19:53	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:53	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:53	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4-Dichlorophenol	ND	*- UJ	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 19:53	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:53	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 19:53	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/17/22 11:09	01/18/22 19:53	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:53	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:53	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:53	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 19:53	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 19:53	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 19:53	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 19:53	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 19:53	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 19:53	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/17/22 11:09	01/18/22 19:53	1

Client Sample ID: MW8-ROX-011122
Date Collected: 01/11/22 12:40
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 19:53	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 19:53	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/17/22 11:09	01/18/22 19:53	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 19:53	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 19:53	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 19:53	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 19:53	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 19:53	1
Quinoline	ND	uj	9.6	4.3	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/17/22 11:09	01/18/22 19:53	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*01/17/22 11:09*	*01/18/22 19:53*	*1*
2-Fluorophenol	*75*		*13 - 113*	*01/17/22 11:09*	*01/18/22 19:53*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/17/22 11:09*	*01/18/22 19:53*	*1*
Phenol-d5	*73*		*17 - 127*	*01/17/22 11:09*	*01/18/22 19:53*	*1*
Terphenyl-d14	*71*		*44 - 149*	*01/17/22 11:09*	*01/18/22 19:53*	*1*
2,4,6-Tribromophenol	*91*		*26 - 150*	*01/17/22 11:09*	*01/18/22 19:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	390		48	12	ug/L		01/17/22 11:09	01/19/22 19:24	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 16:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*01/21/22 11:31*	*01/21/22 16:34*	*1*

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

Job ID: 400-213993-1

Client Sample ID: MW7-ROX-011122
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	UJ	13000	5000	ug/L			01/15/22 12:12	500
Acrolein	ND		10000	1700	ug/L			01/15/22 12:12	500
Acrylonitrile	ND		5000	1400	ug/L			01/15/22 12:12	500
Bromobenzene	ND		500	270	ug/L			01/15/22 12:12	500
Bromochloromethane	ND		500	110	ug/L			01/15/22 12:12	500
Bromodichloromethane	ND		500	250	ug/L			01/15/22 12:12	500
Bromoform	ND		2500	130	ug/L			01/15/22 12:12	500
Bromomethane	ND		500	490	ug/L			01/15/22 12:12	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/15/22 12:12	500
Carbon disulfide	ND		500	250	ug/L			01/15/22 12:12	500
Carbon tetrachloride	ND		500	95	ug/L			01/15/22 12:12	500
Chlorobenzene	ND		500	75	ug/L			01/15/22 12:12	500
Dibromochloromethane	ND		500	120	ug/L			01/15/22 12:12	500
Chloroethane	ND		500	380	ug/L			01/15/22 12:12	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/15/22 12:12	500
Chloroform	ND		500	300	ug/L			01/15/22 12:12	500
1-Chlorohexane	ND		500	160	ug/L			01/15/22 12:12	500
Chloromethane	ND		500	160	ug/L			01/15/22 12:12	500
cis-1,2-Dichloroethene	ND		500	100	ug/L			01/15/22 12:12	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/15/22 12:12	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/15/22 12:12	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/15/22 12:12	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/15/22 12:12	500
Dichlorodifluoromethane	ND		500	430	ug/L			01/15/22 12:12	500
1,1-Dichloroethane	ND		500	250	ug/L			01/15/22 12:12	500
1,2-Dichloroethane	ND		500	95	ug/L			01/15/22 12:12	500
1,1-Dichloroethene	ND		500	250	ug/L			01/15/22 12:12	500
1,2-Dichloropropane	ND		500	250	ug/L			01/15/22 12:12	500
1,3-Dichloropropane	ND		500	250	ug/L			01/15/22 12:12	500
2,2-Dichloropropane	ND		500	250	ug/L			01/15/22 12:12	500
1,1-Dichloropropene	ND		500	250	ug/L			01/15/22 12:12	500
Ethylbenzene	ND		500	250	ug/L			01/15/22 12:12	500
Ethyl methacrylate	ND		500	300	ug/L			01/15/22 12:12	500
Hexachlorobutadiene	ND		2500	450	ug/L			01/15/22 12:12	500
2-Hexanone	ND		13000	700	ug/L			01/15/22 12:12	500
Isopropylbenzene	ND		500	270	ug/L			01/15/22 12:12	500
Methylene bromide	ND		2500	110	ug/L			01/15/22 12:12	500
Methylene Chloride	ND		2500	1500	ug/L			01/15/22 12:12	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/15/22 12:12	500
Methyl tert-butyl ether	ND		500	110	ug/L			01/15/22 12:12	500
m-Xylene & p-Xylene	ND		2500	320	ug/L			01/15/22 12:12	500
Naphthalene	ND		500	500	ug/L			01/15/22 12:12	500
n-Butylbenzene	ND		500	380	ug/L			01/15/22 12:12	500
N-Propylbenzene	ND		500	350	ug/L			01/15/22 12:12	500
o-Chlorotoluene	ND		500	290	ug/L			01/15/22 12:12	500
o-Xylene	ND		2500	300	ug/L			01/15/22 12:12	500
p-Chlorotoluene	ND		500	280	ug/L			01/15/22 12:12	500
p-Isopropyltoluene	ND		500	360	ug/L			01/15/22 12:12	500
sec-Butylbenzene	ND		500	350	ug/L			01/15/22 12:12	500

Client Sample ID: MW7-ROX-011122
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	U	500	500	ug/L			01/15/22 12:12	500
tert-Butylbenzene	ND		500	320	ug/L			01/15/22 12:12	500
1,1,1,2-Tetrachloroethane	ND		500	80	ug/L			01/15/22 12:12	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/15/22 12:12	500
Tetrachloroethene	ND		500	60	ug/L			01/15/22 12:12	500
Toluene	ND		500	210	ug/L			01/15/22 12:12	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/15/22 12:12	500
trans-1,3-Dichloropropene	ND		2500	100	ug/L			01/15/22 12:12	500
1,2,3-Trichlorobenzene	ND		500	95	ug/L			01/15/22 12:12	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/15/22 12:12	500
1,1,1-Trichloroethane	ND		500	90	ug/L			01/15/22 12:12	500
1,1,2-Trichloroethane	ND		2500	110	ug/L			01/15/22 12:12	500
Trichloroethene	ND		500	75	ug/L			01/15/22 12:12	500
Trichlorofluoromethane	ND		500	260	ug/L			01/15/22 12:12	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/15/22 12:12	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/15/22 12:12	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/15/22 12:12	500
Vinyl acetate	ND		13000	470	ug/L			01/15/22 12:12	500
Vinyl chloride	ND		500	250	ug/L			01/15/22 12:12	500
Xylenes, Total	ND		5000	800	ug/L			01/15/22 12:12	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*72 - 119*		*01/15/22 12:12*	*500*
Dibromofluoromethane	*106*		*75 - 126*		*01/15/22 12:12*	*500*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/15/22 12:12*	*500*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	850000		5000	650	ug/L			01/15/22 15:52	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/15/22 15:52*	*5000*
Dibromofluoromethane	*104*		*75 - 126*		*01/15/22 15:52*	*5000*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/15/22 15:52*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:59	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 20:59	1
Anthracene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 20:59	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 20:59	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 20:59	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 20:59	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 20:59	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 20:59	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:59	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 20:59	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 20:59	1
Fluorene	ND		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 20:59	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 20:59	1

Client Sample ID: MW7-ROX-011122
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND	UJ	0.19	0.071	ug/L		01/17/22 11:09	01/18/22 20:59	1
2-Methylnaphthalene	3.1		0.19	0.058	ug/L		01/17/22 11:09	01/18/22 20:59	1
Phenanthrene	ND		0.19	0.035	ug/L		01/17/22 11:09	01/18/22 20:59	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*15 - 122*	*01/17/22 11:09*	*01/18/22 20:59*	*1*
Nitrobenzene-d5	*92*		*19 - 130*	*01/17/22 11:09*	*01/18/22 20:59*	*1*
Terphenyl-d14	*80*		*33 - 138*	*01/17/22 11:09*	*01/18/22 20:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.7	ug/L		01/17/22 11:09	01/18/22 20:13	1
Benzenethiol	ND	*-*1 UJ	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 20:13	1
Benzoic acid	31		29	7.0	ug/L		01/17/22 11:09	01/18/22 20:13	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 20:13	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.15	ug/L		01/17/22 11:09	01/18/22 20:13	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 20:13	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 20:13	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 20:13	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 20:13	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 20:13	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 20:13	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:13	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:13	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4-Dichlorophenol	ND	*- UJ	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 20:13	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:13	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:13	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 20:13	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/17/22 11:09	01/18/22 20:13	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:13	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:13	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:13	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 20:13	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 20:13	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:13	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 20:13	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 20:13	1
3 & 4 Methylphenol	0.89	J	19	0.37	ug/L		01/17/22 11:09	01/18/22 20:13	1

Client Sample ID: MW7-ROX-011122
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 20:13	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 20:13	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/17/22 11:09	01/18/22 20:13	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 20:13	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 20:13	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:13	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 20:13	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 20:13	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 20:13	1
Phenol	140		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 20:13	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 20:13	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 20:13	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*01/17/22 11:09*	*01/18/22 20:13*	*1*
2-Fluorophenol	*54*		*13 - 113*	*01/17/22 11:09*	*01/18/22 20:13*	*1*
Nitrobenzene-d5	*62*		*36 - 126*	*01/17/22 11:09*	*01/18/22 20:13*	*1*
Phenol-d5	*64*		*17 - 127*	*01/17/22 11:09*	*01/18/22 20:13*	*1*
Terphenyl-d14	*62*		*44 - 149*	*01/17/22 11:09*	*01/18/22 20:13*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*01/17/22 11:09*	*01/18/22 20:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 16:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/21/22 11:31*	*01/21/22 16:54*	*1*

Client Sample ID: MW7-ROX-011122-DUP
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	U	13000	5000	ug/L			01/15/22 12:35	500
Acrolein	ND		10000	1700	ug/L			01/15/22 12:35	500
Acrylonitrile	ND		5000	1400	ug/L			01/15/22 12:35	500
Bromobenzene	ND		500	270	ug/L			01/15/22 12:35	500
Bromochloromethane	ND		500	110	ug/L			01/15/22 12:35	500
Bromodichloromethane	ND		500	250	ug/L			01/15/22 12:35	500
Bromoform	ND		2500	130	ug/L			01/15/22 12:35	500
Bromomethane	ND		500	490	ug/L			01/15/22 12:35	500
2-Butanone (MEK)	ND		13000	1300	ug/L			01/15/22 12:35	500
Carbon disulfide	ND		500	250	ug/L			01/15/22 12:35	500
Carbon tetrachloride	ND		500	95	ug/L			01/15/22 12:35	500
Chlorobenzene	ND		500	75	ug/L			01/15/22 12:35	500
Dibromochloromethane	ND		500	120	ug/L			01/15/22 12:35	500
Chloroethane	ND		500	380	ug/L			01/15/22 12:35	500
2-Chloroethyl vinyl ether	ND		2500	1000	ug/L			01/15/22 12:35	500
Chloroform	ND		500	300	ug/L			01/15/22 12:35	500
1-Chlorohexane	ND		500	160	ug/L			01/15/22 12:35	500
Chloromethane	ND		500	160	ug/L			01/15/22 12:35	500
cis-1,2-Dichloroethene	ND		500	100	ug/L			01/15/22 12:35	500
cis-1,3-Dichloropropene	ND		2500	250	ug/L			01/15/22 12:35	500
1,2-Dichlorobenzene	ND		500	250	ug/L			01/15/22 12:35	500
1,3-Dichlorobenzene	ND		500	270	ug/L			01/15/22 12:35	500
1,4-Dichlorobenzene	ND		500	320	ug/L			01/15/22 12:35	500
Dichlorodifluoromethane	ND		500	430	ug/L			01/15/22 12:35	500
1,1-Dichloroethane	ND		500	250	ug/L			01/15/22 12:35	500
1,2-Dichloroethane	ND		500	95	ug/L			01/15/22 12:35	500
1,1-Dichloroethene	ND		500	250	ug/L			01/15/22 12:35	500
1,2-Dichloropropane	ND		500	250	ug/L			01/15/22 12:35	500
1,3-Dichloropropane	ND		500	250	ug/L			01/15/22 12:35	500
2,2-Dichloropropane	ND		500	250	ug/L			01/15/22 12:35	500
1,1-Dichloropropene	ND		500	250	ug/L			01/15/22 12:35	500
Ethylbenzene	ND		500	250	ug/L			01/15/22 12:35	500
Ethyl methacrylate	ND		500	300	ug/L			01/15/22 12:35	500
Hexachlorobutadiene	ND		2500	450	ug/L			01/15/22 12:35	500
2-Hexanone	ND		13000	700	ug/L			01/15/22 12:35	500
Isopropylbenzene	ND		500	270	ug/L			01/15/22 12:35	500
Methylene bromide	ND		2500	110	ug/L			01/15/22 12:35	500
Methylene Chloride	ND		2500	1500	ug/L			01/15/22 12:35	500
4-Methyl-2-pentanone (MIBK)	ND		13000	900	ug/L			01/15/22 12:35	500
Methyl tert-butyl ether	ND		500	110	ug/L			01/15/22 12:35	500
m-Xylene & p-Xylene	ND		2500	320	ug/L			01/15/22 12:35	500
Naphthalene	ND		500	500	ug/L			01/15/22 12:35	500
n-Butylbenzene	ND		500	380	ug/L			01/15/22 12:35	500
N-Propylbenzene	ND		500	350	ug/L			01/15/22 12:35	500
o-Chlorotoluene	ND		500	290	ug/L			01/15/22 12:35	500
o-Xylene	ND		2500	300	ug/L			01/15/22 12:35	500
p-Chlorotoluene	ND		500	280	ug/L			01/15/22 12:35	500
p-Isopropyltoluene	ND		500	360	ug/L			01/15/22 12:35	500
sec-Butylbenzene	ND		500	350	ug/L			01/15/22 12:35	500

Client Sample ID: MW7-ROX-011122-DUP
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	U	500	500	ug/L			01/15/22 12:35	500
tert-Butylbenzene	ND		500	320	ug/L			01/15/22 12:35	500
1,1,1,2-Tetrachloroethane	ND		500	80	ug/L			01/15/22 12:35	500
1,1,2,2-Tetrachloroethane	ND		500	250	ug/L			01/15/22 12:35	500
Tetrachloroethene	ND		500	60	ug/L			01/15/22 12:35	500
Toluene	ND		500	210	ug/L			01/15/22 12:35	500
trans-1,2-Dichloroethene	ND		500	250	ug/L			01/15/22 12:35	500
trans-1,3-Dichloropropene	ND		2500	100	ug/L			01/15/22 12:35	500
1,2,3-Trichlorobenzene	ND		500	95	ug/L			01/15/22 12:35	500
1,2,4-Trichlorobenzene	ND		500	410	ug/L			01/15/22 12:35	500
1,1,1-Trichloroethane	ND		500	90	ug/L			01/15/22 12:35	500
1,1,2-Trichloroethane	ND		2500	110	ug/L			01/15/22 12:35	500
Trichloroethene	ND		500	75	ug/L			01/15/22 12:35	500
Trichlorofluoromethane	ND		500	260	ug/L			01/15/22 12:35	500
1,2,3-Trichloropropane	ND		2500	420	ug/L			01/15/22 12:35	500
1,2,4-Trimethylbenzene	ND		500	410	ug/L			01/15/22 12:35	500
1,3,5-Trimethylbenzene	ND		500	280	ug/L			01/15/22 12:35	500
Vinyl acetate	ND		13000	470	ug/L			01/15/22 12:35	500
Vinyl chloride	ND		500	250	ug/L			01/15/22 12:35	500
Xylenes, Total	ND		5000	800	ug/L			01/15/22 12:35	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/15/22 12:35*	*500*
Dibromofluoromethane	*104*		*75 - 126*		*01/15/22 12:35*	*500*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/15/22 12:35*	*500*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	740000		5000	650	ug/L			01/15/22 16:14	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/15/22 16:14*	*5000*
Dibromofluoromethane	*101*		*75 - 126*		*01/15/22 16:14*	*5000*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/15/22 16:14*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 21:16	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 21:16	1
Anthracene	ND		0.19	0.030	ug/L		01/17/22 11:09	01/18/22 21:16	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 21:16	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 21:16	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/17/22 11:09	01/18/22 21:16	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 21:16	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/17/22 11:09	01/18/22 21:16	1
Chrysene	ND		0.19	0.070	ug/L		01/17/22 11:09	01/18/22 21:16	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/17/22 11:09	01/18/22 21:16	1
Fluoranthene	ND		0.19	0.064	ug/L		01/17/22 11:09	01/18/22 21:16	1
Fluorene	ND		0.19	0.10	ug/L		01/17/22 11:09	01/18/22 21:16	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 21:16	1

Client Sample ID: MW7-ROX-011122-DUP

Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	2.9	J	0.19	0.070	ug/L		01/17/22 11:09	01/18/22 21:16	1
2-Methylnaphthalene	3.4		0.19	0.057	ug/L		01/17/22 11:09	01/18/22 21:16	1
Phenanthrene	ND		0.19	0.034	ug/L		01/17/22 11:09	01/18/22 21:16	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*116*		*15 - 122*	*01/17/22 11:09*	*01/18/22 21:16*	*1*
Nitrobenzene-d5	*99*		*19 - 130*	*01/17/22 11:09*	*01/18/22 21:16*	*1*
Terphenyl-d14	*79*		*33 - 138*	*01/17/22 11:09*	*01/18/22 21:16*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	3.6	ug/L		01/17/22 11:09	01/18/22 20:34	1
Benzenethiol	ND	*-*1 UJ	9.5	1.6	ug/L		01/17/22 11:09	01/18/22 20:34	1
Benzoic acid	31		28	6.9	ug/L		01/17/22 11:09	01/18/22 20:34	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 20:34	1
Bis(2-chloroethoxy)methane	ND	UJ	9.5	0.15	ug/L		01/17/22 11:09	01/18/22 20:34	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 20:34	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/17/22 11:09	01/18/22 20:34	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/17/22 11:09	01/18/22 20:34	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/17/22 11:09	01/18/22 20:34	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 20:34	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/17/22 11:09	01/18/22 20:34	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 20:34	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 20:34	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4-Dichlorophenol	ND	*- UJ	9.5	2.8	ug/L		01/17/22 11:09	01/18/22 20:34	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 20:34	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 20:34	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/17/22 11:09	01/18/22 20:34	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/17/22 11:09	01/18/22 20:34	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 20:34	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 20:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 20:34	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/17/22 11:09	01/18/22 20:34	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 20:34	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/17/22 11:09	01/18/22 20:34	1
Indene	ND		9.5	0.95	ug/L		01/17/22 11:09	01/18/22 20:34	1
Isophorone	ND		9.5	0.13	ug/L		01/17/22 11:09	01/18/22 20:34	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 20:34	1
3 & 4 Methylphenol	0.97	J	19	0.37	ug/L		01/17/22 11:09	01/18/22 20:34	1

Client Sample ID: MW7-ROX-011122-DUP
Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.5	2.1	ug/L		01/17/22 11:09	01/18/22 20:34	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/17/22 11:09	01/18/22 20:34	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/17/22 11:09	01/18/22 20:34	1
2-Nitrophenol	ND	*1	9.5	4.9	ug/L		01/17/22 11:09	01/18/22 20:34	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/17/22 11:09	01/18/22 20:34	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 20:34	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/17/22 11:09	01/18/22 20:34	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/17/22 11:09	01/18/22 20:34	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 20:34	1
Phenol	120		9.5	2.5	ug/L		01/17/22 11:09	01/18/22 20:34	1
Pyridine	ND		9.5	3.0	ug/L		01/17/22 11:09	01/18/22 20:34	1
Quinoline	ND	UJ	9.5	4.3	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/17/22 11:09	01/18/22 20:34	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/17/22 11:09	01/18/22 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/17/22 11:09*	*01/18/22 20:34*	*1*
2-Fluorophenol	*31*		*13 - 113*	*01/17/22 11:09*	*01/18/22 20:34*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/17/22 11:09*	*01/18/22 20:34*	*1*
Phenol-d5	*57*		*17 - 127*	*01/17/22 11:09*	*01/18/22 20:34*	*1*
Terphenyl-d14	*53*		*44 - 149*	*01/17/22 11:09*	*01/18/22 20:34*	*1*
2,4,6-Tribromophenol	*88*		*26 - 150*	*01/17/22 11:09*	*01/18/22 20:34*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 17:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/21/22 11:31*	*01/21/22 17:14*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-213993-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-213993-2	TB-ROX-011122-8260-B	91	101	103
400-213993-3	MW26-ROX-011122	89	100	104
400-213993-3 MS	MW26-ROX-011122	96	95	103
400-213993-3 MSD	MW26-ROX-011122	92	96	106
400-213993-4	MW2-ROX-011122	93	99	101
400-213993-5	ROST4PZC-ROX-011122	94	102	99
400-213993-6	TB-ROX-011122-8260-A	93	96	100
400-213993-8	MW4-ROX-011122	94	96	102
400-213993-9	MW25-ROX-011122	93	102	103
400-213993-10	MW8-ROX-011122	96	107	100
400-213993-10 - DL	MW8-ROX-011122	88	107	104
400-213993-11	MW7-ROX-011122	88	106	102
400-213993-11 - DL	MW7-ROX-011122	92	104	102
400-213993-12	MW7-ROX-011122-DUP	93	104	102
400-213993-12 - DL	MW7-ROX-011122-DUP	91	101	101
LCS 400-563318/1002	Lab Control Sample	96	96	103
MB 400-563318/4	Method Blank	91	106	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-213993-3	MW26-ROX-011122	57	23	64	43	83	56
400-213993-4	MW2-ROX-011122	54	16	62	42	80	69
400-213993-5	ROST4PZC-ROX-011122	56	29	65	55	85	75
400-213993-8	MW4-ROX-011122	56	9 S1-	64	40	86	73
400-213993-9	MW25-ROX-011122	53	39	63	59	57	78
400-213993-10	MW8-ROX-011122	54	75	65	73	71	91
400-213993-11	MW7-ROX-011122	54	54	62	64	62	88
400-213993-12	MW7-ROX-011122-DUP	56	31	65	57	53	88
LCS 400-563401/2-A	Lab Control Sample	60	20	59	48	87	77
LCS 400-563401/4-A	Lab Control Sample	54	19	58	41	86	54
LCSD 400-563401/3-A	Lab Control Sample Dup	68	24	58	55	90	87
LCSD 400-563401/5-A	Lab Control Sample Dup	61	22	70	50	105	62
MB 400-563401/1-A	Method Blank	58	4 S1-	63	29	80	62

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-213993-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-213993-3	MW26-ROX-011122	103	109	135
400-213993-4	MW2-ROX-011122	95	104	105
400-213993-5	ROST4PZC-ROX-011122	100	99	125
400-213993-8	MW4-ROX-011122	98	100	115
400-213993-9	MW25-ROX-011122	98	99	86
400-213993-10	MW8-ROX-011122	104	95	95
400-213993-11	MW7-ROX-011122	101	92	80
400-213993-12	MW7-ROX-011122-DUP	116	99	79
LCS 400-563401/2-A	Lab Control Sample	94	111	115
LCSD 400-563401/3-A	Lab Control Sample Dup	112	124	116
MB 400-563401/1-A	Method Blank	108	98	140 S1+

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-213993-1	TB-ROX-011122-8011-B	79
400-213993-3	MW26-ROX-011122	83
400-213993-4	MW2-ROX-011122	86
400-213993-5	ROST4PZC-ROX-011122	73
LCS 400-563584/2-A	Lab Control Sample	133
MB 400-563584/1-A	Method Blank	137

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-213993-7	TB-ROX-011122-8011-A	97
400-213993-8	MW4-ROX-011122	96
400-213993-9	MW25-ROX-011122	114
400-213993-10	MW8-ROX-011122	93
400-213993-11	MW7-ROX-011122	103
400-213993-12	MW7-ROX-011122-DUP	103
LCS 400-563931/2-A	Lab Control Sample	100
LCSD 400-563931/3-A	Lab Control Sample Dup	96
MB 400-563931/1-A	Method Blank	95

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-213993-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Client Sample ID: TB-ROX-011122-8011-B

Lab Sample ID: 400-213993-1

Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.6 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 17:50	DS	TAL PEN

Client Sample ID: TB-ROX-011122-8260-B

Lab Sample ID: 400-213993-2

Date Collected: 01/11/22 00:00
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 09:32	WPD	TAL PEN

Client Sample ID: MW26-ROX-011122

Lab Sample ID: 400-213993-3

Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 10:17	WPD	TAL PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 18:10	S1B	TAL PEN
Total/NA	Prep	3520C			247.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 19:17	PP1	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 18:11	DS	TAL PEN

Client Sample ID: MW2-ROX-011122

Lab Sample ID: 400-213993-4

Date Collected: 01/11/22 10:45
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	563318	01/15/22 11:04	WPD	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 18:31	S1B	TAL PEN
Total/NA	Prep	3520C			264.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 19:34	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 18:31	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-011122

Lab Sample ID: 400-213993-5

Date Collected: 01/11/22 12:05
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 10:41	WPD	TAL PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 18:51	S1B	TAL PEN

Client Sample ID: ROST4PZC-ROX-011122

Lab Sample ID: 400-213993-5

Date Collected: 01/11/22 12:05
Matrix: Water
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			259.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 19:51	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 19:12	DS	TAL PEN

Client Sample ID: TB-ROX-011122-8260-A

Lab Sample ID: 400-213993-6

Date Collected: 01/11/22 00:00
Matrix: Water
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 09:54	WPD	TAL PEN

Client Sample ID: TB-ROX-011122-8011-A

Lab Sample ID: 400-213993-7

Date Collected: 01/11/22 00:00
Matrix: Water
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.2 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 15:34	DS	TAL PEN

Client Sample ID: MW4-ROX-011122

Lab Sample ID: 400-213993-8

Date Collected: 01/11/22 10:30
Matrix: Water
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 14:35	WPD	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 19:12	S1B	TAL PEN
Total/NA	Prep	3520C			262.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 20:08	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 15:54	DS	TAL PEN

Client Sample ID: MW25-ROX-011122

Lab Sample ID: 400-213993-9

Date Collected: 01/11/22 11:40
Matrix: Water
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 15:00	WPD	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 19:32	S1B	TAL PEN
Total/NA	Prep	3520C			261.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 20:25	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 16:14	DS	TAL PEN

Client Sample ID: MW8-ROX-011122

Lab Sample ID: 400-213993-10

Date Collected: 01/11/22 12:40
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		200	5 mL	5 mL	563318	01/15/22 11:49	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	1000	5 mL	5 mL	563318	01/15/22 15:27	WPD	TAL PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 19:53	S1B	TAL PEN
Total/NA	Prep	3520C	DL		261.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D	DL	5			563654	01/19/22 19:24	S1B	TAL PEN
Total/NA	Prep	3520C			261.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 20:42	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 16:34	DS	TAL PEN

Client Sample ID: MW7-ROX-011122

Lab Sample ID: 400-213993-11

Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	563318	01/15/22 12:12	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	563318	01/15/22 15:52	WPD	TAL PEN
Total/NA	Prep	3520C			260.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 20:13	S1B	TAL PEN
Total/NA	Prep	3520C			260.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 20:59	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 16:54	DS	TAL PEN

Client Sample ID: MW7-ROX-011122-DUP

Lab Sample ID: 400-213993-12

Date Collected: 01/11/22 13:50
Date Received: 01/13/22 09:40

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		500	5 mL	5 mL	563318	01/15/22 12:35	WPD	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	563318	01/15/22 16:14	WPD	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 20:34	S1B	TAL PEN
Total/NA	Prep	3520C			263.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 21:16	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 17:14	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563318/4

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 09:08	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563401/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 16:28	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 18:26	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563584/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:24	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563931/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 14:34	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563318/1002
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 08:11	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 16:48	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 18:43	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563401/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:29	S1B	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563584/2-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	563584	01/18/22 14:52	KIS	TAL PEN
Total/NA	Analysis	8011		1			563662	01/19/22 10:44	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563931/2-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	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 14:54	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-563401/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:09	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 19:00	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-563401/5-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:50	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-563931/3-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	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 15:14	DS	TAL PEN

Client Sample ID: MW26-ROX-011122 — **Lab Sample ID: 400-213993-3 MS**
Date Collected: 01/11/22 09:45 — **Matrix: Water**
Date Received: 01/13/22 09:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 13:20	WPD	TAL PEN

Lab Chronicle

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

Job ID: 400-213993-1

Client Sample ID: MW26-ROX-011122
Date Collected: 01/11/22 09:45
Date Received: 01/13/22 09:40

Lab Sample ID: 400-213993-3 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563318	01/15/22 13:45	WPD	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 563318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-2	TB-ROX-011122-8260-B	Total/NA	Water	8260B	
400-213993-3	MW26-ROX-011122	Total/NA	Water	8260B	
400-213993-4	MW2-ROX-011122	Total/NA	Water	8260B	
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	8260B	
400-213993-6	TB-ROX-011122-8260-A	Total/NA	Water	8260B	
400-213993-8	MW4-ROX-011122	Total/NA	Water	8260B	
400-213993-9	MW25-ROX-011122	Total/NA	Water	8260B	
400-213993-10	MW8-ROX-011122	Total/NA	Water	8260B	
400-213993-10 - DL	MW8-ROX-011122	Total/NA	Water	8260B	
400-213993-11	MW7-ROX-011122	Total/NA	Water	8260B	
400-213993-11 - DL	MW7-ROX-011122	Total/NA	Water	8260B	
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	8260B	
400-213993-12 - DL	MW7-ROX-011122-DUP	Total/NA	Water	8260B	
MB 400-563318/4	Method Blank	Total/NA	Water	8260B	
LCS 400-563318/1002	Lab Control Sample	Total/NA	Water	8260B	
400-213993-3 MS	MW26-ROX-011122	Total/NA	Water	8260B	
400-213993-3 MSD	MW26-ROX-011122	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 563401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-3	MW26-ROX-011122	Total/NA	Water	3520C	
400-213993-4	MW2-ROX-011122	Total/NA	Water	3520C	
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	3520C	
400-213993-8	MW4-ROX-011122	Total/NA	Water	3520C	
400-213993-9	MW25-ROX-011122	Total/NA	Water	3520C	
400-213993-10	MW8-ROX-011122	Total/NA	Water	3520C	
400-213993-10 - DL	MW8-ROX-011122	Total/NA	Water	3520C	
400-213993-11	MW7-ROX-011122	Total/NA	Water	3520C	
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	3520C	
MB 400-563401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-563401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-3	MW26-ROX-011122	Total/NA	Water	8270D	563401
400-213993-4	MW2-ROX-011122	Total/NA	Water	8270D	563401
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	8270D	563401
400-213993-8	MW4-ROX-011122	Total/NA	Water	8270D	563401
400-213993-9	MW25-ROX-011122	Total/NA	Water	8270D	563401
400-213993-10	MW8-ROX-011122	Total/NA	Water	8270D	563401
400-213993-11	MW7-ROX-011122	Total/NA	Water	8270D	563401
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	8270D	563401
MB 400-563401/1-A	Method Blank	Total/NA	Water	8270D	563401
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	8270D	563401
LCS 400-563401/4-A	Lab Control Sample	Total/NA	Water	8270D	563401
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	563401

GC/MS Semi VOA (Continued)

Analysis Batch: 563495 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-563401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	563401

Analysis Batch: 563567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-3	MW26-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-4	MW2-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-8	MW4-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-9	MW25-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-10	MW8-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-11	MW7-ROX-011122	Total/NA	Water	8270D LL	563401
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	8270D LL	563401
MB 400-563401/1-A	Method Blank	Total/NA	Water	8270D LL	563401
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	563401
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	563401

Analysis Batch: 563654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-10 - DL	MW8-ROX-011122	Total/NA	Water	8270D	563401

GC Semi VOA

Prep Batch: 563584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-1	TB-ROX-011122-8011-B	Total/NA	Water	8011	
400-213993-3	MW26-ROX-011122	Total/NA	Water	8011	
400-213993-4	MW2-ROX-011122	Total/NA	Water	8011	
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	8011	
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 563662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-1	TB-ROX-011122-8011-B	Total/NA	Water	8011	563584
400-213993-3	MW26-ROX-011122	Total/NA	Water	8011	563584
400-213993-4	MW2-ROX-011122	Total/NA	Water	8011	563584
400-213993-5	ROST4PZC-ROX-011122	Total/NA	Water	8011	563584
MB 400-563584/1-A	Method Blank	Total/NA	Water	8011	563584
LCS 400-563584/2-A	Lab Control Sample	Total/NA	Water	8011	563584

Analysis Batch: 563930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-7	TB-ROX-011122-8011-A	Total/NA	Water	8011	563931
400-213993-8	MW4-ROX-011122	Total/NA	Water	8011	563931
400-213993-9	MW25-ROX-011122	Total/NA	Water	8011	563931
400-213993-10	MW8-ROX-011122	Total/NA	Water	8011	563931
400-213993-11	MW7-ROX-011122	Total/NA	Water	8011	563931
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	8011	563931
MB 400-563931/1-A	Method Blank	Total/NA	Water	8011	563931
LCS 400-563931/2-A	Lab Control Sample	Total/NA	Water	8011	563931
LCSD 400-563931/3-A	Lab Control Sample Dup	Total/NA	Water	8011	563931

GC Semi VOA

Prep Batch: 563931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-213993-7	TB-ROX-011122-8011-A	Total/NA	Water	8011	
400-213993-8	MW4-ROX-011122	Total/NA	Water	8011	
400-213993-9	MW25-ROX-011122	Total/NA	Water	8011	
400-213993-10	MW8-ROX-011122	Total/NA	Water	8011	
400-213993-11	MW7-ROX-011122	Total/NA	Water	8011	
400-213993-12	MW7-ROX-011122-DUP	Total/NA	Water	8011	
MB 400-563931/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563931/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-563931/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563318/4
Matrix: Water
Analysis Batch: 563318

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/15/22 09:08	1
Acrolein	ND		20	3.3	ug/L			01/15/22 09:08	1
Acrylonitrile	ND		10	2.8	ug/L			01/15/22 09:08	1
Benzene	ND		1.0	0.13	ug/L			01/15/22 09:08	1
Bromobenzene	ND		1.0	0.54	ug/L			01/15/22 09:08	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/15/22 09:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Bromoform	ND		5.0	0.25	ug/L			01/15/22 09:08	1
Bromomethane	ND		1.0	0.98	ug/L			01/15/22 09:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/15/22 09:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/15/22 09:08	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/15/22 09:08	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/15/22 09:08	1
Chloroethane	ND		1.0	0.76	ug/L			01/15/22 09:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/15/22 09:08	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 09:08	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/15/22 09:08	1
Chloromethane	ND		1.0	0.32	ug/L			01/15/22 09:08	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/15/22 09:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/15/22 09:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 09:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 09:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/15/22 09:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/15/22 09:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/15/22 09:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/15/22 09:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/15/22 09:08	1
2-Hexanone	ND		25	1.4	ug/L			01/15/22 09:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/15/22 09:08	1
Methylene bromide	ND		5.0	0.22	ug/L			01/15/22 09:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/15/22 09:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/15/22 09:08	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/15/22 09:08	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/15/22 09:08	1
Naphthalene	ND		1.0	1.0	ug/L			01/15/22 09:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/15/22 09:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/15/22 09:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/15/22 09:08	1
o-Xylene	ND		5.0	0.60	ug/L			01/15/22 09:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/15/22 09:08	1

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

Lab Sample ID: MB 400-563318/4
Matrix: Water
Analysis Batch: 563318

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/15/22 09:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/15/22 09:08	1
Styrene	ND		1.0	1.0	ug/L			01/15/22 09:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/15/22 09:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/15/22 09:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/15/22 09:08	1
Toluene	ND		1.0	0.41	ug/L			01/15/22 09:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/15/22 09:08	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/15/22 09:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/15/22 09:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/15/22 09:08	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/15/22 09:08	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/15/22 09:08	1
Trichloroethene	ND		1.0	0.15	ug/L			01/15/22 09:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/15/22 09:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/15/22 09:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/15/22 09:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/15/22 09:08	1
Vinyl acetate	ND		25	0.93	ug/L			01/15/22 09:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/15/22 09:08	1
Xylenes, Total	ND		10	1.6	ug/L			01/15/22 09:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/15/22 09:08*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/15/22 09:08*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/15/22 09:08*	*1*

Lab Sample ID: LCS 400-563318/1002
Matrix: Water
Analysis Batch: 563318

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	227		ug/L		114	43 - 160
Acrolein	500	568		ug/L		114	38 - 160
Acrylonitrile	500	669		ug/L		134	64 - 142
Benzene	50.0	40.8		ug/L		82	70 - 130
Bromobenzene	50.0	50.3		ug/L		101	70 - 132
Bromochloromethane	50.0	44.3		ug/L		89	70 - 130
Bromodichloromethane	50.0	45.5		ug/L		91	67 - 133
Bromoform	50.0	52.7		ug/L		105	57 - 140
Bromomethane	50.0	41.5		ug/L		83	10 - 160
2-Butanone (MEK)	200	172		ug/L		86	61 - 145
Carbon disulfide	50.0	38.6		ug/L		77	61 - 137
Carbon tetrachloride	50.0	43.4		ug/L		87	61 - 137
Chlorobenzene	50.0	46.3		ug/L		93	70 - 130
Dibromochloromethane	50.0	50.4		ug/L		101	67 - 135
Chloroethane	50.0	46.0		ug/L		92	55 - 141

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

Lab Sample ID: LCS 400-563318/1002
Matrix: Water
Analysis Batch: 563318

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	46.7		ug/L		93	10 - 160
Chloroform	50.0	44.2		ug/L		88	69 - 130
1-Chlorohexane	50.0	64.4		ug/L		129	69 - 130
Chloromethane	50.0	51.6		ug/L		103	58 - 137
cis-1,2-Dichloroethene	50.0	53.6		ug/L		107	68 - 130
cis-1,3-Dichloropropene	50.0	43.9		ug/L		88	69 - 132
1,2-Dichlorobenzene	50.0	51.0		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
1,4-Dichlorobenzene	50.0	51.2		ug/L		102	70 - 130
Dichlorodifluoromethane	50.0	40.3		ug/L		81	41 - 146
1,1-Dichloroethane	50.0	48.9		ug/L		98	70 - 130
1,2-Dichloroethane	50.0	50.0		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	38.9		ug/L		78	63 - 134
1,2-Dichloropropane	50.0	51.7		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	49.1		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	46.1		ug/L		92	52 - 135
1,1-Dichloropropene	50.0	42.0		ug/L		84	70 - 130
Ethylbenzene	50.0	46.4		ug/L		93	70 - 130
Ethyl methacrylate	50.0	49.8		ug/L		100	68 - 130
Hexachlorobutadiene	50.0	49.1		ug/L		98	53 - 140
2-Hexanone	200	269		ug/L		134	65 - 137
Isopropylbenzene	50.0	50.8		ug/L		102	70 - 130
Methylene bromide	50.0	41.9		ug/L		84	70 - 130
Methylene Chloride	50.0	40.6		ug/L		81	66 - 135
4-Methyl-2-pentanone (MIBK)	200	254		ug/L		127	69 - 138
Methyl tert-butyl ether	50.0	46.4		ug/L		93	66 - 130
m-Xylene & p-Xylene	50.0	47.5		ug/L		95	70 - 130
Naphthalene	50.0	52.1		ug/L		104	47 - 149
n-Butylbenzene	50.0	49.5		ug/L		99	67 - 130
N-Propylbenzene	50.0	47.4		ug/L		95	70 - 130
o-Chlorotoluene	50.0	47.5		ug/L		95	70 - 130
o-Xylene	50.0	48.4		ug/L		97	70 - 130
p-Chlorotoluene	50.0	49.4		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	48.9		ug/L		98	65 - 130
sec-Butylbenzene	50.0	49.8		ug/L		100	66 - 130
Styrene	50.0	48.9		ug/L		98	70 - 130
tert-Butylbenzene	50.0	49.4		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	52.0		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.4		ug/L		99	70 - 131
Tetrachloroethene	50.0	40.4		ug/L		81	65 - 130
Toluene	50.0	45.2		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	39.4		ug/L		79	70 - 130
trans-1,3-Dichloropropene	50.0	50.2		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	51.5		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	53.6		ug/L		107	60 - 140
1,1,1-Trichloroethane	50.0	45.0		ug/L		90	68 - 130
1,1,2-Trichloroethane	50.0	48.8		ug/L		98	70 - 130
Trichloroethene	50.0	43.4		ug/L		87	70 - 130
Trichlorofluoromethane	50.0	45.2		ug/L		90	65 - 138

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

Lab Sample ID: LCS 400-563318/1002
Matrix: Water
Analysis Batch: 563318

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	53.6		ug/L		107	70 - 130
1,2,4-Trimethylbenzene	50.0	51.2		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	49.2		ug/L		98	69 - 130
Vinyl acetate	100	91.7		ug/L		92	26 - 160
Vinyl chloride	50.0	49.0		ug/L		98	59 - 136
Xylenes, Total	100	95.9		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

Lab Sample ID: 400-213993-3 MS
Matrix: Water
Analysis Batch: 563318

Client Sample ID: MW26-ROX-011122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	177		ug/L		88	43 - 150
Acrolein	ND		500	545		ug/L		109	38 - 150
Acrylonitrile	ND		500	593		ug/L		119	62 - 149
Benzene	ND		50.0	39.4		ug/L		79	56 - 142
Bromobenzene	ND		50.0	43.3		ug/L		87	59 - 136
Bromochloromethane	ND		50.0	42.6		ug/L		85	64 - 140
Bromodichloromethane	ND		50.0	43.6		ug/L		87	59 - 143
Bromoform	ND		50.0	44.6		ug/L		89	50 - 140
Bromomethane	ND		50.0	34.6		ug/L		69	10 - 150
2-Butanone (MEK)	ND		200	145		ug/L		72	55 - 150
Carbon disulfide	ND		50.0	36.9		ug/L		74	48 - 150
Carbon tetrachloride	ND		50.0	40.7		ug/L		81	55 - 145
Chlorobenzene	ND		50.0	42.7		ug/L		85	64 - 130
Dibromochloromethane	ND		50.0	46.1		ug/L		92	56 - 143
Chloroethane	ND		50.0	49.1		ug/L		98	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	10.4		ug/L		21	10 - 150
Chloroform	ND		50.0	43.7		ug/L		87	60 - 141
1-Chlorohexane	ND		50.0	55.9		ug/L		112	56 - 136
Chloromethane	ND		50.0	50.9		ug/L		102	49 - 148
cis-1,2-Dichloroethene	ND		50.0	50.5		ug/L		101	59 - 143
cis-1,3-Dichloropropene	ND		50.0	43.3		ug/L		87	57 - 140
1,2-Dichlorobenzene	ND		50.0	44.3		ug/L		89	52 - 137
1,3-Dichlorobenzene	ND		50.0	45.3		ug/L		91	54 - 135
1,4-Dichlorobenzene	ND		50.0	43.3		ug/L		87	53 - 135
Dichlorodifluoromethane	ND		50.0	36.5		ug/L		73	16 - 150
1,1-Dichloroethane	ND		50.0	49.6		ug/L		99	61 - 144
1,2-Dichloroethane	ND		50.0	48.0		ug/L		96	60 - 141
1,1-Dichloroethene	ND		50.0	38.1		ug/L		76	54 - 147
1,2-Dichloropropane	ND		50.0	50.6		ug/L		101	66 - 137
1,3-Dichloropropane	ND		50.0	46.7		ug/L		93	66 - 133
2,2-Dichloropropane	ND		50.0	42.8		ug/L		86	42 - 144

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

Lab Sample ID: 400-213993-3 MS
Matrix: Water
Analysis Batch: 563318

Client Sample ID: MW26-ROX-011122
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	40.3		ug/L		81	65 - 136
Ethylbenzene	ND		50.0	42.3		ug/L		85	58 - 131
Ethyl methacrylate	ND		50.0	46.6		ug/L		93	64 - 130
Hexachlorobutadiene	ND		50.0	37.7		ug/L		75	31 - 149
2-Hexanone	ND		200	232		ug/L		116	65 - 140
Isopropylbenzene	ND		50.0	45.5		ug/L		91	56 - 133
Methylene bromide	ND		50.0	43.4		ug/L		87	63 - 138
Methylene Chloride	ND		50.0	37.6		ug/L		75	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	225		ug/L		112	63 - 146
Methyl tert-butyl ether	ND		50.0	43.3		ug/L		87	59 - 137
m-Xylene & p-Xylene	ND		50.0	42.7		ug/L		85	57 - 130
Naphthalene	ND		50.0	44.0		ug/L		88	25 - 150
n-Butylbenzene	ND		50.0	41.4		ug/L		83	41 - 142
N-Propylbenzene	ND		50.0	43.4		ug/L		87	51 - 138
o-Chlorotoluene	ND		50.0	42.6		ug/L		85	53 - 134
o-Xylene	ND		50.0	42.9		ug/L		86	61 - 130
p-Chlorotoluene	ND		50.0	42.7		ug/L		85	54 - 133
p-Isopropyltoluene	ND		50.0	43.4		ug/L		87	48 - 139
sec-Butylbenzene	ND		50.0	44.6		ug/L		89	50 - 138
Styrene	ND		50.0	43.8		ug/L		88	58 - 131
tert-Butylbenzene	ND		50.0	44.8		ug/L		90	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.7		ug/L		91	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	44.8		ug/L		90	66 - 135
Tetrachloroethene	ND		50.0	35.7		ug/L		71	52 - 133
Toluene	ND		50.0	42.4		ug/L		85	65 - 130
trans-1,2-Dichloroethene	ND		50.0	39.2		ug/L		78	61 - 143
trans-1,3-Dichloropropene	ND		50.0	48.7		ug/L		97	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	44.1		ug/L		88	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	44.0		ug/L		88	39 - 148
1,1,1-Trichloroethane	ND		50.0	40.5		ug/L		81	57 - 142
1,1,2-Trichloroethane	ND		50.0	46.7		ug/L		93	66 - 131
Trichloroethene	ND		50.0	41.8		ug/L		84	64 - 136
Trichlorofluoromethane	ND		50.0	46.0		ug/L		92	54 - 150
1,2,3-Trichloropropane	ND		50.0	43.0		ug/L		86	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	44.4		ug/L		89	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	43.5		ug/L		87	52 - 135
Vinyl acetate	ND	F2	100	101		ug/L		101	26 - 150
Vinyl chloride	ND		50.0	47.1		ug/L		94	46 - 150
Xylenes, Total	ND		100	85.6		ug/L		86	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*103*		*64 - 132*

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

Lab Sample ID: 400-213993-3 MSD
Matrix: Water
Analysis Batch: 563318

Client Sample ID: MW26-ROX-011122
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	188		ug/L		94	43 - 150	6	30
Acrolein	ND		500	606		ug/L		121	38 - 150	10	31
Acrylonitrile	ND		500	628		ug/L		126	62 - 149	6	30
Benzene	ND		50.0	43.2		ug/L		86	56 - 142	9	30
Bromobenzene	ND		50.0	47.5		ug/L		95	59 - 136	9	30
Bromochloromethane	ND		50.0	44.9		ug/L		90	64 - 140	5	30
Bromodichloromethane	ND		50.0	45.4		ug/L		91	59 - 143	4	30
Bromoform	ND		50.0	48.2		ug/L		96	50 - 140	8	30
Bromomethane	ND		50.0	44.9		ug/L		90	10 - 150	26	50
2-Butanone (MEK)	ND		200	157		ug/L		79	55 - 150	8	30
Carbon disulfide	ND		50.0	41.7		ug/L		83	48 - 150	12	30
Carbon tetrachloride	ND		50.0	42.6		ug/L		85	55 - 145	5	30
Chlorobenzene	ND		50.0	47.0		ug/L		94	64 - 130	10	30
Dibromochloromethane	ND		50.0	51.9		ug/L		104	56 - 143	12	30
Chloroethane	ND		50.0	51.0		ug/L		102	50 - 150	4	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	44.7		ug/L		89	60 - 141	2	30
1-Chlorohexane	ND		50.0	62.9		ug/L		126	56 - 136	12	30
Chloromethane	ND		50.0	56.3		ug/L		113	49 - 148	10	31
cis-1,2-Dichloroethene	ND		50.0	52.9		ug/L		106	59 - 143	5	30
cis-1,3-Dichloropropene	ND		50.0	44.5		ug/L		89	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	47.8		ug/L		96	52 - 137	7	30
1,3-Dichlorobenzene	ND		50.0	47.9		ug/L		96	54 - 135	5	30
1,4-Dichlorobenzene	ND		50.0	48.6		ug/L		97	53 - 135	11	30
Dichlorodifluoromethane	ND		50.0	40.6		ug/L		81	16 - 150	11	31
1,1-Dichloroethane	ND		50.0	52.4		ug/L		105	61 - 144	6	30
1,2-Dichloroethane	ND		50.0	50.5		ug/L		101	60 - 141	5	30
1,1-Dichloroethene	ND		50.0	41.7		ug/L		83	54 - 147	9	30
1,2-Dichloropropane	ND		50.0	54.0		ug/L		108	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	50.8		ug/L		102	66 - 133	8	30
2,2-Dichloropropane	ND		50.0	47.7		ug/L		95	42 - 144	11	31
1,1-Dichloropropene	ND		50.0	45.5		ug/L		91	65 - 136	12	30
Ethylbenzene	ND		50.0	47.8		ug/L		96	58 - 131	12	30
Ethyl methacrylate	ND		50.0	52.1		ug/L		104	64 - 130	11	30
Hexachlorobutadiene	ND		50.0	46.1		ug/L		92	31 - 149	20	36
2-Hexanone	ND		200	242		ug/L		121	65 - 140	4	30
Isopropylbenzene	ND		50.0	51.2		ug/L		102	56 - 133	12	30
Methylene bromide	ND		50.0	44.1		ug/L		88	63 - 138	2	30
Methylene Chloride	ND		50.0	40.6		ug/L		81	60 - 146	8	32
4-Methyl-2-pentanone (MIBK)	ND		200	235		ug/L		117	63 - 146	4	30
Methyl tert-butyl ether	ND		50.0	46.5		ug/L		93	59 - 137	7	30
m-Xylene & p-Xylene	ND		50.0	48.2		ug/L		96	57 - 130	12	30
Naphthalene	ND		50.0	46.9		ug/L		94	25 - 150	6	30
n-Butylbenzene	ND		50.0	46.0		ug/L		92	41 - 142	10	31
N-Propylbenzene	ND		50.0	46.4		ug/L		93	51 - 138	7	30
o-Chlorotoluene	ND		50.0	45.3		ug/L		91	53 - 134	6	30
o-Xylene	ND		50.0	48.0		ug/L		96	61 - 130	11	30
p-Chlorotoluene	ND		50.0	47.4		ug/L		95	54 - 133	10	30

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

Lab Sample ID: 400-213993-3 MSD
Matrix: Water
Analysis Batch: 563318

Client Sample ID: MW26-ROX-011122
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	47.0		ug/L		94	48 - 139	8	30
sec-Butylbenzene	ND		50.0	48.6		ug/L		97	50 - 138	9	30
Styrene	ND		50.0	49.6		ug/L		99	58 - 131	12	30
tert-Butylbenzene	ND		50.0	47.8		ug/L		96	54 - 146	7	30
1,1,1,2-Tetrachloroethane	ND		50.0	49.8		ug/L		100	59 - 137	9	30
1,1,2,2-Tetrachloroethane	ND		50.0	47.2		ug/L		94	66 - 135	5	30
Tetrachloroethene	ND		50.0	40.0		ug/L		80	52 - 133	11	30
Toluene	ND		50.0	46.6		ug/L		93	65 - 130	9	30
trans-1,2-Dichloroethene	ND		50.0	42.6		ug/L		85	61 - 143	8	30
trans-1,3-Dichloropropene	ND		50.0	51.6		ug/L		103	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	46.6		ug/L		93	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	45.8		ug/L		92	39 - 148	4	30
1,1,1-Trichloroethane	ND		50.0	43.7		ug/L		87	57 - 142	8	30
1,1,2-Trichloroethane	ND		50.0	49.0		ug/L		98	66 - 131	5	30
Trichloroethene	ND		50.0	43.5		ug/L		87	64 - 136	4	30
Trichlorofluoromethane	ND		50.0	50.0		ug/L		100	54 - 150	8	30
1,2,3-Trichloropropane	ND		50.0	51.0		ug/L		102	65 - 133	17	30
1,2,4-Trimethylbenzene	ND		50.0	48.1		ug/L		96	50 - 139	8	30
1,3,5-Trimethylbenzene	ND		50.0	47.5		ug/L		95	52 - 135	9	30
Vinyl acetate	ND	F2	100	98.9		ug/L		99	26 - 150	2	33
Vinyl chloride	ND		50.0	54.4		ug/L		109	46 - 150	14	30
Xylenes, Total	ND		100	96.3		ug/L		96	59 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*72 - 119*
Dibromofluoromethane	*96*		*75 - 126*
Toluene-d8 (Surr)	*106*		*64 - 132*

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

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzenethiol	ND		10	1.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzoic acid	ND		30	7.3	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/17/22 11:09	01/18/22 16:28	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 16:28	1

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

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dibenzofuran	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Diethyl phthalate	ND		10	0.24	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 16:28	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
Indene	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Isophorone	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
3-Nitroaniline	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Nitroaniline	ND		10	1.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
Nitrobenzene	ND		10	0.13	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Nitrophenol	ND		10	5.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/17/22 11:09	01/18/22 16:28	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
Phenol	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
Pyridine	ND		10	3.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
Quinoline	ND		10	4.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Phenol-d5	*29*		*17 - 127*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Terphenyl-d14	*80*		*44 - 149*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*01/17/22 11:09*	*01/18/22 16:28*	*1*

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

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.3		ug/L		51	21 - 120
Benzoic acid	498	278		ug/L		56	10 - 144
Benzyl alcohol	120	88.1		ug/L		73	28 - 120
Bis(2-chloroethoxy)methane	120	61.8		ug/L		52	47 - 120
Bis(2-chloroethyl)ether	120	68.0		ug/L		57	44 - 120
bis (2-chloroisopropyl) ether	120	83.7		ug/L		70	33 - 121
Bis(2-ethylhexyl) phthalate	120	98.2		ug/L		82	52 - 147
4-Bromophenyl phenyl ether	120	89.7		ug/L		75	54 - 122
Butyl benzyl phthalate	120	92.2		ug/L		77	54 - 133
4-Chloroaniline	120	59.5		ug/L		50	26 - 120
4-Chloro-3-methylphenol	120	81.6		ug/L		68	48 - 131
2-Chloronaphthalene	120	73.2		ug/L		61	52 - 121
2-Chlorophenol	120	48.4		ug/L		40	40 - 120
4-Chlorophenyl phenyl ether	120	80.5		ug/L		67	56 - 125
Dibenz[a,h]acridine	120	119		ug/L		99	31 - 150
Dibenzofuran	120	77.6		ug/L		65	56 - 122
3,3'-Dichlorobenzidine	160	111		ug/L		70	36 - 132
2,4-Dichlorophenol	120	57.1	*-	ug/L		48	49 - 120
Diethyl phthalate	120	102		ug/L		85	50 - 137
2,4-Dimethylphenol	120	82.2		ug/L		69	48 - 120
Dimethyl phthalate	120	79.1		ug/L		66	57 - 124
Di-n-butyl phthalate	120	94.9		ug/L		79	58 - 126
4,6-Dinitro-ortho-cresol	240	291		ug/L		121	23 - 148
2,4-Dinitrophenol	240	312		ug/L		130	10 - 150
2,4-Dinitrotoluene	120	77.6		ug/L		65	54 - 142
2,6-Dinitrotoluene	120	65.6		ug/L		55	55 - 130
Di-n-octyl phthalate	120	96.4		ug/L		80	57 - 138
1,4-Dioxane	120	53.7		ug/L		45	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	81.8		ug/L		68	45 - 124
Hexachlorobenzene	120	114		ug/L		95	52 - 129
Hexachlorocyclopentadiene	120	87.9		ug/L		73	10 - 134
Hexachloroethane	120	80.7		ug/L		67	20 - 120
Indene	120	82.9		ug/L		69	49 - 120
Isophorone	120	69.1		ug/L		58	48 - 120
2-Methylphenol	120	82.6		ug/L		69	46 - 124
3 & 4 Methylphenol	120	88.7		ug/L		74	45 - 120
2-Nitroaniline	120	85.5		ug/L		71	51 - 145
3-Nitroaniline	120	74.4		ug/L		62	37 - 127
4-Nitroaniline	120	78.3		ug/L		65	36 - 137
Nitrobenzene	120	70.4		ug/L		59	45 - 120
2-Nitrophenol	120	51.4		ug/L		43	40 - 124
4-Nitrophenol	240	250		ug/L		104	23 - 146
N-Nitrosodimethylamine	120	112		ug/L		94	29 - 137
N-Nitrosodi-n-propylamine	120	95.9		ug/L		80	45 - 120
N-Nitrosodiphenylamine	119	75.3		ug/L		63	54 - 120
Pentachlorophenol	240	233		ug/L		97	31 - 130
Phenol	120	56.2		ug/L		47	11 - 120
Pyridine	240	100		ug/L		42	16 - 120

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

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	74.5		ug/L		62	49 - 130
2,4,5-Trichlorophenol	120	78.2		ug/L		65	51 - 136
2,4,6-Trichlorophenol	120	67.8		ug/L		57	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*59*		*36 - 126*
Phenol-d5	*48*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCS 400-563401/4-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	20.8		ug/L		17	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*46 - 124*
2-Fluorophenol	*19*		*13 - 113*
Nitrobenzene-d5	*58*		*36 - 126*
Phenol-d5	*41*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*54*		*26 - 150*

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	64.9		ug/L		54	21 - 120	6	30
Benzoic acid	498	278		ug/L		56	10 - 144	0	30
Benzyl alcohol	120	92.1		ug/L		77	28 - 120	5	30
Bis(2-chloroethoxy)methane	120	63.0		ug/L		53	47 - 120	2	30
Bis(2-chloroethyl)ether	120	70.6		ug/L		59	44 - 120	4	30
bis (2-chloroisopropyl) ether	120	87.6		ug/L		73	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	99.6		ug/L		83	52 - 147	1	30
4-Bromophenyl phenyl ether	120	93.9		ug/L		78	54 - 122	4	30
Butyl benzyl phthalate	120	93.5		ug/L		78	54 - 133	1	30
4-Chloroaniline	120	61.2		ug/L		51	26 - 120	3	30
4-Chloro-3-methylphenol	120	82.9		ug/L		69	48 - 131	2	30
2-Chloronaphthalene	120	82.2		ug/L		68	52 - 121	12	30
2-Chlorophenol	120	64.3		ug/L		54	40 - 120	28	30
4-Chlorophenyl phenyl ether	120	85.0		ug/L		71	56 - 125	5	30
Dibenz[a,h]acridine	120	111		ug/L		93	31 - 150	7	30
Dibenzofuran	120	82.2		ug/L		68	56 - 122	6	30

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

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	160	128		ug/L		80	36 - 132	14	30
2,4-Dichlorophenol	120	75.2		ug/L		63	49 - 120	27	30
Diethyl phthalate	120	107		ug/L		89	50 - 137	4	30
2,4-Dimethylphenol	120	86.4		ug/L		72	48 - 120	5	30
Dimethyl phthalate	120	85.5		ug/L		71	57 - 124	8	30
Di-n-butyl phthalate	120	98.1		ug/L		82	58 - 126	3	30
4,6-Dinitro-ortho-cresol	240	323		ug/L		135	23 - 148	10	30
2,4-Dinitrophenol	240	330		ug/L		137	10 - 150	6	30
2,4-Dinitrotoluene	120	81.3		ug/L		68	54 - 142	5	30
2,6-Dinitrotoluene	120	72.5		ug/L		60	55 - 130	10	30
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138	3	30
1,4-Dioxane	120	56.7		ug/L		47	31 - 120	6	30
1,2-Diphenylhydrazine (as Azobenzene)	120	84.2		ug/L		70	45 - 124	3	30
Hexachlorobenzene	120	119		ug/L		99	52 - 129	5	30
Hexachlorocyclopentadiene	120	99.0		ug/L		82	10 - 134	12	30
Hexachloroethane	120	86.3		ug/L		72	20 - 120	7	30
Indene	120	89.7		ug/L		75	49 - 120	8	30
Isophorone	120	68.7		ug/L		57	48 - 120	1	30
2-Methylphenol	120	90.4		ug/L		75	46 - 124	9	30
3 & 4 Methylphenol	120	99.0		ug/L		83	45 - 120	11	30
2-Nitroaniline	120	89.1		ug/L		74	51 - 145	4	30
3-Nitroaniline	120	76.8		ug/L		64	37 - 127	3	30
4-Nitroaniline	120	85.4		ug/L		71	36 - 137	9	30
Nitrobenzene	120	70.1		ug/L		58	45 - 120	0	30
2-Nitrophenol	120	74.6	*1	ug/L		62	40 - 124	37	30
4-Nitrophenol	240	271		ug/L		113	23 - 146	8	30
N-Nitrosodimethylamine	120	118		ug/L		99	29 - 137	5	30
N-Nitrosodi-n-propylamine	120	101		ug/L		84	45 - 120	6	30
N-Nitrosodiphenylamine	119	78.8		ug/L		66	54 - 120	4	30
Pentachlorophenol	240	253		ug/L		105	31 - 130	8	30
Phenol	120	64.0		ug/L		53	11 - 120	13	30
Pyridine	240	111		ug/L		46	16 - 120	10	30
Quinoline	120	75.5		ug/L		63	49 - 130	1	30
2,4,5-Trichlorophenol	120	100		ug/L		84	51 - 136	25	30
2,4,6-Trichlorophenol	120	90.7		ug/L		76	50 - 127	29	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*46 - 124*
2-Fluorophenol	*24*		*13 - 113*
Nitrobenzene-d5	*58*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*87*		*26 - 150*

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

Lab Sample ID: LCSD 400-563401/5-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	8.18	J *- *1	ug/L		7	10 - 120	87	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*50*		*17 - 127*
Terphenyl-d14	*105*		*44 - 149*
2,4,6-Tribromophenol	*62*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 18:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 18:26	1
Anthracene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/22 11:09	01/18/22 18:26	1
Chrysene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 18:26	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/17/22 11:09	01/18/22 18:26	1
Fluoranthene	ND		0.20	0.068	ug/L		01/17/22 11:09	01/18/22 18:26	1
Fluorene	ND		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 18:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/17/22 11:09	01/18/22 18:26	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 18:26	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/17/22 11:09	01/18/22 18:26	1
Phenanthrene	ND		0.20	0.036	ug/L		01/17/22 11:09	01/18/22 18:26	1
Pyrene	ND		0.20	0.040	ug/L		01/17/22 11:09	01/18/22 18:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*15 - 122*	*01/17/22 11:09*	*01/18/22 18:26*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/17/22 11:09*	*01/18/22 18:26*	*1*
Terphenyl-d14	*140*	*S1+*	*33 - 138*	*01/17/22 11:09*	*01/18/22 18:26*	*1*

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	120		ug/L		100	41 - 120
Acenaphthylene	120	107		ug/L		89	44 - 120
Anthracene	120	113		ug/L		94	49 - 120

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	120	131		ug/L		109	61 - 135
Benzo[a]pyrene	120	117		ug/L		97	52 - 120
Benzo[b]fluoranthene	120	125		ug/L		104	53 - 134
Benzo[g,h,i]perylene	120	114		ug/L		95	47 - 133
Benzo[k]fluoranthene	120	131		ug/L		109	57 - 134
Chrysene	120	121		ug/L		101	55 - 122
Dibenz(a,h)anthracene	120	127		ug/L		106	48 - 146
Fluoranthene	120	125		ug/L		104	54 - 128
Fluorene	120	131		ug/L		109	45 - 125
Indeno[1,2,3-cd]pyrene	120	118		ug/L		98	43 - 142
1-Methylnaphthalene	120	117		ug/L		98	41 - 120
2-Methylnaphthalene	120	106		ug/L		88	32 - 124
Phenanthrene	120	112		ug/L		94	48 - 120
Pyrene	120	125		ug/L		105	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*15 - 122*
Nitrobenzene-d5	*111*		*19 - 130*
Terphenyl-d14	*115*		*33 - 138*

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	131		ug/L		109	41 - 120	8	56
Acenaphthylene	120	123		ug/L		103	44 - 120	14	56
Anthracene	120	131		ug/L		109	49 - 120	15	51
Benzo[a]anthracene	120	134		ug/L		112	61 - 135	2	49
Benzo[a]pyrene	120	122		ug/L		101	52 - 120	4	50
Benzo[b]fluoranthene	120	126		ug/L		105	53 - 134	1	54
Benzo[g,h,i]perylene	120	116		ug/L		97	47 - 133	2	50
Benzo[k]fluoranthene	120	131		ug/L		109	57 - 134	0	52
Chrysene	120	130		ug/L		109	55 - 122	8	50
Dibenz(a,h)anthracene	120	133		ug/L		111	48 - 146	5	50
Fluoranthene	120	132		ug/L		110	54 - 128	6	52
Fluorene	120	145		ug/L		121	45 - 125	11	56
Indeno[1,2,3-cd]pyrene	120	124		ug/L		103	43 - 142	5	51
1-Methylnaphthalene	120	130		ug/L		109	41 - 120	11	55
2-Methylnaphthalene	120	119		ug/L		99	32 - 124	11	57
Phenanthrene	120	129		ug/L		108	48 - 120	14	56
Pyrene	120	134		ug/L		112	48 - 132	7	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*112*		*15 - 122*
Nitrobenzene-d5	*124*		*19 - 130*
Terphenyl-d14	*116*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-563584/1-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/18/22 14:52	01/19/22 10:24	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/18/22 14:52	01/19/22 10:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*137*		*51 - 149*	*01/18/22 14:52*	*01/19/22 10:24*	*1*

Lab Sample ID: LCS 400-563584/2-A
Matrix: Water
Analysis Batch: 563662

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.191	*+	ug/L		190	60 - 140
1,2-Dibromoethane	0.101	0.110		ug/L		109	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*133*		*51 - 149*

Lab Sample ID: MB 400-563931/1-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 14:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*01/21/22 11:31*	*01/21/22 14:34*	*1*

Lab Sample ID: LCS 400-563931/2-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563931

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0879		ug/L		87	60 - 140
1,2-Dibromoethane	0.101	0.104		ug/L		103	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*51 - 149*

Lab Sample ID: LCSD 400-563931/3-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563931

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0789		ug/L		78	60 - 140	11	30
1,2-Dibromoethane	0.101	0.0961		ug/L		95	60 - 140	8	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-563931/3-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563931

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/11/2022
PO #	GSAP Project ID	PAGE: 1 of 2
60674381 – 3.1.2	USPC00114/R02	

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

TELEPHONE: 314-429-0100 — FAX: 314-429-0402 — 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 60674381 – 3.1.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID: -

SAMPLER NAME(S) (Print): MD'Angelo LBadmus

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@secomshell.com; andrei.zamfir@secom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011122-8011-B	1/11/2022	0000	Water	2					2		X		
	TB-ROX-011122-8260-B	1/11/2022	0000	Water	2					2	X			
	MW26-ROX-011122	1/11/2022	0945	Water	6			2		8	X	X	X	X
	MW2-ROX-011122	1/11/2022	1045	Water	6			2		8	X	X	X	X
	ROST4PZC-ROX-011122	1/11/2022	1205	Water	6			2		8	X	X	X	X

400-213993 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

0.2 IR9

0.0°C

Container PID Readings or Laboratory Notes

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
MARY D'ANGELO	FEDEX: 1482 3811 4900, 1482 3811 4911	1/11/2022	1600
		1-13-22	940

CUSTODY SEALS: 1854705, 1854704, 1854703, 1854702

Version: 2Apr21

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL
☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES
☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES
Melissa Remiger	25278	DATE: 1/11/2022
PO #	GSAP Project ID	PAGE: 2 of 2
60674381 – 3.1.2	USPC/00114/R/02	

SAMPLING COMPANY: AECOM
LOG CODE:
SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions
PHONE NO: 314-802-1207; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, bob.billman@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger
SAMPLER NAME(S) (Print): J. Mayer, T. Jones
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :
Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@secomshell.com; andreLzamfir@secom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60674381 – 3.1.2

400-213993 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°
0.02 IR9
0.0°C
Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011122-8260-A	1/11/2022	0000	Water	X					2	X			
	TB-ROX-011122-8011-A	1/11/2022	0000	Water	X					2		X		
	MW4-ROX-011122	1/11/2022	1030	Water	X			X		8	X	X	X	X
	MW25-ROX-011122	1/11/2022	1140	Water	X			X		8	X	X	X	X
	MW8-ROX-011122	1/11/2022	1240	Water	X			X		8	X	X	X	X
	MW7-ROX-011122	1/11/2022	1350	Water	X			X		8	X	X	X	X
	MW7-ROX-011122-DUP	1/11/2022	1350	Water	X			X		8	X	X	X	X

	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature) Joe Mayer	FEDEX: see page 1	1/11/2022	16:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 1-13-22	Time: 940

CUSTODY SEALS: see page 1

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-213993-1

Login Number: 213993
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-213993-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-214110-1-Rev.1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/25/2022

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

Sample Identification	Sample Identification
TB-ROX-011222-8011-B	TB-ROX-011222-8260-B
P56-ROX-011222	P56-ROX-011222-Dup
P93A-ROX-011222	MW28-ROX-011222
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup
TB-ROX-011222-8260-A	TB-ROX-011222-8011-A
MW1-ROX-011222-EB	MW1-ROX-011222
MW12-ROX-011222	MW27-ROX-011222
MW10-ROX-011222-EB	MW10-ROX-011222

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated indeno[1,2,3-cd]pyrene was detected in the method blank, and 2-butanone (MEK) was detected in the equipment blanks. Several VOC and SVOC LCS/LCSD recoveries, and/or LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several investigative and quality control samples. Several VOC MS/MSD recoveries were outside evaluation criteria in sample P56-ROX-011222 and equipment blank MW1-ROX-011222-EB. Although not indicated in the laboratory case narrative, the difference in fluorene results in field duplicate pair P56-ROX-011222/P56-ROX-011222-Dup, and acetone in ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup, was greater than two times (2X) the reporting level. 1-Methlynapthalene and 2-methlynapthalene in field duplicate pair P56-ROX-011222/P56-ROX-011222-Dup were qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**UJ/J**). Field duplicate pair ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup was diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for acrolein in sample ROST4PZE-ROX-011222-Dup, which was identified as a false positive.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW1-ROX-011222-EB	VOCs	2-Butanone (MEK)	3.3 µg/L
MW10-ROX-011222-EB	VOCs	2-Butanone (MEK) - RA	5.2 µg/L
MB 400-563528/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.16 µg/L

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

Sample ID	Parameter	Analyte	New Reporting Limit (RL)	Qualification
MW12-ROX-011222	PAHs	Indeno[1,2,3-cd]pyrene	-	**U**

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-563826/1002	VOCs	Bromomethane	**182**	NA	10-160
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2,4-Dichlorophenol	**48**/63	**27**	49-120/30
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2-Nitrophenol	43/62	**37**	40-124/30
LCS/LCSD 400-563401/4-A/5-A	SVOCs	Benzenethiol	17/**7**	**87**	10-120/30
LCS/LCSD 400-563528/6-A/7-A	SVOCs	Benzenethiol	**4/4**	18	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-011222	SVOCs	Benzenethiol	**UJ**
P56-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
P56-ROX-011222-Dup	SVOCs	Benzenethiol	**UJ**
P56-ROX-011222-Dup	SVOCs	2,4-Dichlorophenol	**UJ**
P93A-ROX-011222	SVOCs	Benzenethiol	**UJ**
P93A-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
MW28-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW28-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	2,4-Dichlorophenol	**UJ**
MW1-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW12-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW27-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW10-ROX-011222	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW28-ROX-011222	SVOCs	2-Fluorophenol	**1**	13-113
ROST4PZE-ROX-011222	SVOCs	2-Fluorobiphenyl	**31**	46-124
ROST4PZE-ROX-011222	SVOCs	2-Fluorophenol	**2**	13-113
ROST4PZE-ROX-011222	SVOCs	Phenol-d_5	**14**	17-127
ROST4PZE-ROX-011222-Dup	SVOCs	2-Fluorophenol	**10**	13-113
MW12-ROX-011222	SVOCs	2-Fluorophenol	**11**	13-113
MW10-ROX-011222-EB	PAHs	Terphenyl-d_{14}	**141**	33-138
MW10-ROX-011222	PAHs	Terphenyl-d_{14}	**139**	33-138
MB 400-563401/1-A	SVOCs	2-Fluorophenol	**4**	13-113
MB 400-563401/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

Analytical data that required qualification based on surrogate data are included in the table below. Qualifications due to surrogate recoveries were not required if only one of three acid or base/neutral SVOC surrogate recoveries were outside evaluation criteria. Method blanks and equipment blanks are quality control samples and do not require qualification. 2,4-Dichlorophenol in sample ROST4PZE-ROX-011222 was previously qualified in Section 5.0 of this data review due to LCS recovery outside evaluation criteria; no additional qualification was required.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-011222	SVOCs	Benzoic acid	**UJ**
ROST4PZE-ROX-011222	SVOCs	4-Chloro-3-methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Chlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dimethylphenol	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-011222	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dinitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	3&4-Methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Nitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	4-Nitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Pentachlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Phenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4,5-Trichlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4,6-Trichlorophenol	**UJ**

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample P56-ROX-011222 and equipment blank MW1-ROX-011222-EB were spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P56-ROX-011222	VOCs	Bromomethane	**200/181**	10	10-150/50
P56-ROX-011222	VOCs	Chloroethane	**151**/124	20	10-150/30
P56-ROX-011222	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW1-ROX-011222-EB	VOCs	Acrylonitrile	**56**/62	10	62-149/30
MW1-ROX-011222-EB	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW1-ROX-011222-EB	VOCs	2-Hexanone	**55/61**	11	65-140/30
MW1-ROX-011222-EB	VOCs	4-Methyl-2-pentanone (MIBK)	**53/60**	11	63-146/30
MW1-ROX-011222-EB	VOCs	1,1,2,2-Tetrachloroethane	**65**/72	10	66-135/30

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Analyte	Qualification
P56-ROX-011222	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P56-ROX-011222	P56-ROX-011222-Dup
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	Fluorene	**> 2X RL**	**UJ/J**
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	1-Methylnaphthalene	**26**	**J/J**
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	2-Methylnaphthalene	**35**	**J/J**
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup	VOCs	Acetone	**> 2X RL**	**J/J**
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup	PAHs	Fluorene	**26**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-011222-Dup	VOCs	Vinyl chloride	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	bis(2-Chloroethyl)ether	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	I,4-Dioxane	**UJ**

Sample ID	Parameter	Analyte	Qualification
ROST4PZE-ROX-011222-Dup	SVOCs	Hexachlorocyclopentadiene	UJ
ROST4PZE-ROX-011222-Dup	SVOCs	Pyridine	UJ
P56-ROX-011222	SVOCs	Aniline	UJ
P56-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
P56-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
P56-ROX-011222	SVOCs	Quinoline	UJ
P56-ROX-011222-Dup	SVOCs	Aniline	UJ
P56-ROX-011222-Dup	SVOCs	bis(2-Chloroethoxy)methane	UJ
P56-ROX-011222-Dup	SVOCs	2,6-Dinitrotoluene	UJ
P56-ROX-011222-Dup	SVOCs	Quinoline	UJ
P93A-ROX-011222	SVOCs	Aniline	UJ
P93A-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
P93A-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
P93A-ROX-011222	SVOCs	Quinoline	UJ
MW28-ROX-011222	SVOCs	Aniline	UJ
MW28-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW28-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW28-ROX-011222	SVOCs	Quinoline	UJ
ROST4PZE-ROX-011222	SVOCs	Aniline	UJ
ROST4PZE-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
ROST4PZE-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
ROST4PZE-ROX-011222	SVOCs	Quinoline	UJ
MW1-ROX-011222	SVOCs	Aniline	UJ
MW1-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW1-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW1-ROX-011222	SVOCs	Pyridine	UJ
MW1-ROX-011222	SVOCs	Quinoline	UJ
MW12-ROX-011222	SVOCs	Aniline	UJ
MW12-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW12-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW12-ROX-011222	SVOCs	Pyridine	UJ
MW12-ROX-011222	SVOCs	Quinoline	UJ
MW27-ROX-011222	SVOCs	Aniline	UJ
MW27-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW27-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW27-ROX-011222	SVOCs	Pyridine	UJ
MW27-ROX-011222	SVOCs	Quinoline	UJ
MW10-ROX-011222	SVOCs	Aniline	UJ
MW10-ROX-011222	SVOCs	bis(2-Chloroethoxy)methane	UJ
MW10-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW10-ROX-011222	SVOCs	Pyridine	UJ
MW10-ROX-011222	SVOCs	Quinoline	UJ

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-214110-1-R2

This section describes the validation for eight investigative groundwater samples, two field duplicate samples, two equipment blanks, and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-214110-1-R2. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-011222-8011-B	TB-ROX-011222-8011-A
P56-ROX-011222	P56-ROX-011222-Dup
P93A-ROX-011222	MW28-ROX-011222
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup
MW1-ROX-011222-EB	MW1-ROX-011222
MW12-ROX-011222	MW27-ROX-011222
MW10-ROX-011222-EB	MW10-ROX-011222

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

Criteria evaluated included the following method performance criteria:

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

1.1 Data Package Completeness

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

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated the CCV recovery for 1,2-dibromo-3-chloropropane was outside evaluation criteria. This issue is discussed further in section 1.5 of this validation report.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

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

1.4 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-214110-1-R2 were analyzed using instrument Toto. The ICAL for instrument Toto was established on 10/21/2021. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 15% for target compounds or were determined using linear regression and correlation coefficients (r^2) were greater than 0.990. A recalculation of the weighted linear regression was performed from the raw data and no errors in calculation were noted.

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

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

1.5 Calibration Verification (CV)

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

CV (Date/Time)	Compound	%D
400-563931/27-A / 01/21/2021 14:54	1,2-Dibromo-3-chloropropane	**43.0**
400-563931/24-A / 01/21/2021 21:34	1,2-Dibromo-3-chloropropane	**37.4**
400-563931/26-A / 01/21/2021 22:53	1,2-Dibromo-3-chloropropane	**34.3**

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

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

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

1.6 Blank Samples

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

1.7 Laboratory Control Spike (LCS) Samples

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

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

1.8 Surrogate Spike Recoveries

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

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

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

MS/MSD samples are analyzed to assess potential matrix effects. The validated samples in this SDG were not chosen for MS/MSD analysis.

1.10 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P56-ROX-011222/P56-ROX-011222-Dup and ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup were the field duplicate samples in this data set. Target compounds were not detected in either sample of both field duplicate pairs. Field duplicate precision was deemed acceptable.

1.11 Target Compound Identification and Quantification

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

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

1.12 Overall Data Assessment

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

1.0 VALIDATION OF VOC DATA – SDG 400-214110-1-R2

This section describes the validation for eight investigative groundwater samples, two field duplicates, two equipment blanks, and two trip blanks which were prepared by USEPA SW-846 Method 5030B and analyzed for Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260B. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-214110-1-R2-1. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-011222-8260-A	TB-ROX-011222-8260-B
P56-ROX-011222	P56-ROX-011222-Dup
P93A-ROX-011222	MW28-ROX-011222
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup
MW1-ROX-011222-EB	MW1-ROX-011222
MW12-ROX-011222	MW27-ROX-011222
MW10-ROX-011222-EB	MW10-ROX-011222

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

Criteria evaluated included the following method performance criteria:

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

1.1 Data Package Completeness

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

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated 2-butanone (MEK) was detected in the equipment blanks. The bromomethane LCS recovery was outside evaluation criteria. Several VOC MS/MSD recoveries were outside evaluation criteria in sample P56-ROX-011222 and equipment blank MW1-ROX-011222-EB. Field duplicate pair ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup was diluted to bring target compounds into calibration range of the instrument. The continuing calibration verifications for several compounds were outside evaluation criteria. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for acrolein in sample ROST4PZE-ROX-011222-Dup, which was identified as a false positive. The laboratory was revised again on March 16, 2022 to include a missing VOC ICV.

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

The cooler receipt form did not indicate any issues.

1.3 Holding Times and Sample Preservation

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

1.4 GC/MS Instrument Performance

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

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

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in SDG 400-214110-1-R2 were analyzed using instruments Argo, CH_TAN and CH_WASP. The ICALs for instruments Argo, CH_TAN and CH_WASP were established on 11/30/2021, 12/17/2021, and 12/17/2021, respectively. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260B.

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

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 15% for non-CCCs.

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

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

1.6 Calibration Verification (CV)

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

Percent differences or percent drifts (%D) met the evaluation criteria of ≤ 20% for target analytes with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-564007/2 01/22/2022 9:02	Dichlorodifluoromethane	**-24.3**
	Chloromethane	**-29.0**
	Vinyl Chloride	**-34.0**
	Bromomethane	**-39.2**
	Chloroethane	**-30.0**
	Trichlorofluoromethane	**-22.6**
	Acrolein	**-39.7**
	2,2-Dichloropropane	**-23.8**
Associated samples: MW1-ROX-011222-EB, ROST4PZE-ROX-011222-DUP		
400-563826/2 01/20/2022 12:40	Chloromethane	**23.0**
	Vinyl Chloride	**24.9**
	Bromomethane	**82.2**
	Chloroethane	**36.6**
	Trichlorofluoromethane	**25.0**
Associated samples: P56-ROX-011222 RA, ROST4PZE-ROX-011222 DL, TB-ROX-011222-8260-B RA, TB-ROX-011222-8260-A RA, MW10-ROX-011222-EB RA, P56-ROX-011222-DUP RA, P93A-ROX-011222 RA, MW28-ROX-011222 RA, MW1-ROX-011222 RA, MW12-ROX-011222 RA, MW27-ROX-011222 RA, MW10-ROX-011222 RA		

Analytes are qualified as summarized in the following table. Analytical data reported as non-detect and associated with CV results above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Compound	Qualification
ROST4PZE-ROX-011222-DUP	Dichlorodifluoromethane	**UJ**
ROST4PZE-ROX-011222-DUP	Chloromethane	**UJ**
ROST4PZE-ROX-011222-DUP	Vinyl Chloride	**UJ**
ROST4PZE-ROX-011222-DUP	Bromomethane	**UJ**
ROST4PZE-ROX-011222-DUP	Chloroethane	**UJ**
ROST4PZE-ROX-011222-DUP	Trichlorofluoromethane	**UJ**
ROST4PZE-ROX-011222-DUP	Acrolein	**UJ**
ROST4PZE-ROX-011222-DUP	2,2-Dichloropropane	**UJ**

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

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by Method 8260B. The purpose of trip blank samples is to evaluate the existence and magnitude of contamination emanating from field and transport activities. The purpose of equipment blank samples is to evaluate the existence and magnitude of contamination emanating from field activities. Compounds detected in the blanks are summarized below.

Blank ID	Parameter	Compound	Concentration /Amount
MW1-ROX-011222-EB	VOCs	2-Butanone (MEK)	3.3 µg/L
MW10-ROX-011222-EB	VOCs	2-Butanone (MEK) - RA	5.2 µg/L

2-Butanone was not detected in the associated samples; therefore, qualification of the data is not required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation criteria with the exceptions summarized in the following table.

LCS ID	Parameter	Compound	LCS Recovery	LCS Criteria
LCS 400-563826/1002	VOCs	Bromomethane	**182**	10-160

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

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

1.9 Surrogate Spike Recoveries

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

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

MS/MSD samples are analyzed to assess potential matrix effects. Sample P56-ROX-011222 and equipment blank MW1-ROX-011222-EB were spiked and analyzed for VOCs. MS/MSD data were within evaluation criteria with the exceptions summarized in the following table.

MS/MSD ID	Compound	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P56-ROX-011222	Bromomethane	**200/181**	10	10-150/50
P56-ROX-011222	Chloroethane	**151**/124	20	10-150/30
P56-ROX-011222	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW1-ROX-011222-EB	Acrylonitrile	**56**/62	10	62-149/30
MW1-ROX-011222-EB	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50
MW1-ROX-011222-EB	2-Hexanone	**55/61**	11	65-140/30
MW1-ROX-011222-EB	4-Methyl-2-pentanone (MIBK)	**53/60**	11	63-146/30
MW1-ROX-011222-EB	1,1,2,2-Tetrachloroethane	**65**/72	10	66-135/30

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Compound	Qualification
P56-ROX-011222	2-Chloroethyl vinyl ether	**UJ**

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

1.11 Internal Standards

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

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

1.12 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P56-ROX-011222/P56-ROX-011222-Dup and ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup were the field duplicate samples in this data set.

Field duplicate results were within the evaluation criteria of ≤ 25% relative percent difference (RPD) when both results are ≥ 5x the quantitation limit (QL) or ≤ 2x the QL when one or both results is <5x QL with the exceptions summarized in the following table.

Field ID	Field Duplicate ID	Compound	RPD or absolute difference	Qualification
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup	Acetone	**> 2X QL**	**J/J**

1.13 Target Compound Identification and Quantification

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

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

1.14 Overall Data Assessment

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

1.0 VALIDATION OF SVOC DATA – SDG 400-214110-1-R2

This section describes the validation for eight investigative groundwater samples, two field duplicates, and two equipment blanks which were prepared by USEPA SW-846 Method 3520C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270D and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270D Low Level. Samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-214110-1-R2. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
P56-ROX-011222	P56-ROX-011222-Dup
P93A-ROX-011222	MW28-ROX-011222
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup
MW1-ROX-011222-EB	MW1-ROX-011222
MW12-ROX-011222	MW27-ROX-011222
MW10-ROX-011222-EB	MW10-ROX-011222

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

Criteria evaluated included the following method performance criteria:

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

1.1 Data Package Completeness

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

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated indeno[1,2,3-cd]pyrene was detected in the method blanks. Several SVOC LCS/LCSD recoveries, and/or LCS/LCSD RPDs, were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several investigative and quality control samples. The continuing calibration verifications for several compounds were outside evaluation criteria. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for acrolein in sample ROST4PZE-ROX-011222-Dup, which was identified as a false positive. The laboratory report was again revised on March 16, 2022 to include a missing VOC ICV.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

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

1.4 GC/MS Instrument Performance

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

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

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-214110-1-R2 were analyzed using instruments Marianne and Pigpen. PAH samples were analyzed using instrument Chuck. The ICALs for instruments Marianne and Pigpen were established on 12/07-08/2021 and, 11/29-30/2021 respectively. ICALs for instruments Chuck, Marianne and Pigpen were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270D and 8270D Low Level. An average response factor (RF) was determined for each target compound, and the RFs were reviewed and verified as greater than the minimum RF as specified in Method 8270D.

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

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

ICV (Date/Time)	Compound	%D
400-558316/12 12/03/2021 19:53	3,3'-Dichlorobenzidine	**-40.6**
Associated samples: P56-ROX-011222, P56-ROX-011222-DUP, P93A-ROX-011222, MW28-ROX-011222, ROST4PZE-ROX-011222, MW1-ROX-011222, MW12-ROX-011222, MW27-ROX-011222, MW10-ROX-011222-EB, MW10-ROX-011222		

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

Sample ID	Parameter	Compound	Qualification
P56-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P56-ROX-011222-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P93A-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW28-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
ROST4PZE-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW1-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW12-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW27-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
MW10-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**

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

1.6 Calibration Verification (CV)

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

CV (Date/Time)	Compound	%D
400-563495/3 1/18/2022 11:54	N-Nitrosodimethylamine	**38.9**
	Aniline	**-21.4**
	Bis(2-chloroethoxy)methane	**-20.8**
	4-Chloroaniline	**-28.1**
	2,6-Dinitrotoluene	**-22.7**
	4-Nitrophenol	**40.4**
	4,6-Dinitro-o-cresol	**33.5**
	3,3'-Dichlorobenzidine	**-38.9**
400-563495/4 1/18/2022 12:16	Benzoic acid	**-22.5**
400-563495/5 1/18/2022 13:00	Quinoline	**-23.0**

CV (Date/Time)	Compound	%D
Associated samples: P56-ROX-011222, P56-ROX-011222-DUP, P93A-ROX-011222, M28-ROX-011222, ROST4PZE-ROX-011222		
400-563808/3 1/20/2022 10:46	N-Nitrosodimethylamine	**33.4**
	Pyridine	**-22.3**
	Aniline	**-23.9**
	Bis(2-chloroethoxy)methane	**-23.7**
	2,6-Dinitrotoluene	**-21.5**
	2,4-Dinitrophenol	**49.1**
	4-Nitrophenol	**29.4**
	4,6-Dinitro-o-cresol	**35.8**
	3,3'-Dichlorobenzidine	**-22.2**
400-563808/4 1/20/2022 11:06	Benzoic acid	**-25.0**
400-563808/5 1/20/2022 11:27	Quinoline	**-22.5**
	Dibenz(a,h)acridine	**24.7**
Associated samples: MW1-ROX-011222, MW12-ROX-011222, MW27-ROX-011222, MW10-ROX-011222-EB, MW10-ROX-011222		
400-563522/3 1/18/2022 11:02	1,4-Dioxane	**-22.7**
	N-Nitrosodimethylamine	**22.8**
	Pyridine	**-20.7**
	Bis(2-chloroethyl)ether	**-20.3**
	Bis(2-chloroisopropyl)ether	**-25.5**
	Hexachlorocyclopentadiene	**-21.2**
	2,4,5-Trichlorophenol	**24.8**
	4-Chlorophenyl phenylether	**24.7**
Associated samples: ROST4PZE-ROX-011222-DUP, MW1-ROX-011222-EB		

Analytical data that required qualification based on CV %D data are included in the table below. Analytical data reported as non-detect and associated with CV results above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Compound	Qualification
P56-ROX-011222	SVOCs	Aniline	**UJ**
P56-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	**UJ**
P56-ROX-011222	SVOCs	4-Chloroaniline	**UJ**
P56-ROX-011222	SVOCs	2,6-Dinitrotoluene	**UJ**
P56-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	**UJ**
P56-ROX-011222	SVOCs	Benzoic acid	**UJ**
P56-ROX-011222	SVOCs	Quinoline	**UJ**
P56-ROX-011222-DUP	SVOCs	Aniline	**UJ**
P56-ROX-011222-DUP	SVOCs	Bis(2-chloroethoxy)methane	**UJ**
P56-ROX-011222-DUP	SVOCs	4-Chloroaniline	**UJ**
P56-ROX-011222-DUP	SVOCs	2,6-Dinitrotoluene	**UJ**
P56-ROX-011222-DUP	SVOCs	3,3'-Dichlorobenzidine	**UJ**

Sample ID	Parameter	Compound	Qualification
P56-ROX-011222-DUP	SVOCs	Benzoic acid	UJ
P56-ROX-011222-DUP	SVOCs	Quinoline	UJ
P93A-ROX-011222	SVOCs	Aniline	UJ
P93A-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
P93A-ROX-011222	SVOCs	4-Chloroaniline	UJ
P93A-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
P93A-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
P93A-ROX-011222	SVOCs	Benzoic acid	J
P93A-ROX-011222	SVOCs	Quinoline	UJ
M28-ROX-011222	SVOCs	Aniline	UJ
M28-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
M28-ROX-011222	SVOCs	4-Chloroaniline	UJ
M28-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
M28-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
M28-ROX-011222	SVOCs	Benzoic acid	UJ
M28-ROX-011222	SVOCs	Quinoline	UJ
ROST4PZE-ROX-011222	SVOCs	Aniline	UJ
ROST4PZE-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
ROST4PZE-ROX-011222	SVOCs	4-Chloroaniline	UJ
ROST4PZE-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
ROST4PZE-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
ROST4PZE-ROX-011222	SVOCs	Benzoic acid	UJ
ROST4PZE-ROX-011222	SVOCs	Quinoline	UJ
MW1-ROX-011222	SVOCs	Pyridine	UJ
MW1-ROX-011222	SVOCs	Aniline	UJ
MW1-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
MW1-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW1-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
MW1-ROX-011222	SVOCs	Benzoic acid	UJ
MW1-ROX-011222	SVOCs	Quinoline	UJ
MW12-ROX-011222	SVOCs	Pyridine	UJ
MW12-ROX-011222	SVOCs	Aniline	UJ
MW12-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
MW12-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW12-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
MW12-ROX-011222	SVOCs	Benzoic acid	UJ
MW12-ROX-011222	SVOCs	Quinoline	UJ
MW27-ROX-011222	SVOCs	Pyridine	UJ
MW27-ROX-011222	SVOCs	Aniline	UJ
MW27-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
MW27-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW27-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
MW27-ROX-011222	SVOCs	Benzoic acid	UJ

Sample ID	Parameter	Compound	Qualification
MW27-ROX-011222	SVOCs	Quinoline	UJ
MW10-ROX-011222	SVOCs	Pyridine	UJ
MW10-ROX-011222	SVOCs	Aniline	UJ
MW10-ROX-011222	SVOCs	Bis(2-chloroethoxy)methane	UJ
MW10-ROX-011222	SVOCs	2,6-Dinitrotoluene	UJ
MW10-ROX-011222	SVOCs	3,3'-Dichlorobenzidine	UJ
MW10-ROX-011222	SVOCs	Benzoic acid	UJ
MW10-ROX-011222	SVOCs	Quinoline	UJ
ROST4PZE-ROX-011222-DUP	SVOCs	1,4-Dioxane	UJ
ROST4PZE-ROX-011222-DUP	SVOCs	Pyridine	UJ
ROST4PZE-ROX-011222-DUP	SVOCs	Bis(2-chloroethyl)ether	UJ
ROST4PZE-ROX-011222-DUP	SVOCs	Bis(2-chloroisopropyl)ether	UJ
ROST4PZE-ROX-011222-DUP	SVOCs	Hexachlorocyclopentadiene	UJ

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

1.7 Blank Samples

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

Blank ID	Parameter	Compound	Concentration /Amount
MB 400-563528/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.16 µg/L

Qualifications due to blank contamination are included in following table.

Sample ID	Parameter	Compound	New Reporting Limit (RL)	Qualification
MW12-ROX-011222	PAHs	Indeno[1,2,3-cd]pyrene	-	U

1.8 Laboratory Control Spike (LCS) Samples

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

LCS/LCSD ID	Parameter	Compound	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2,4-Dichlorophenol	**48**/63	**27**	49-120/30
LCS/LCSD 400-563401/2-A/3-A	SVOCs	2-Nitrophenol	43/62	**37**	40-124/30
LCS/LCSD 400-563401/4-A/5-A	SVOCs	Benzenethiol	17/**7**	**87**	10-120/30
LCS/LCSD 400-563528/6-A/7-A	SVOCs	Benzenethiol	**4/4**	18	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Compound	Qualification
P56-ROX-011222	SVOCs	Benzenethiol	**UJ**
P56-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
P56-ROX-011222-Dup	SVOCs	Benzenethiol	**UJ**
P56-ROX-011222-Dup	SVOCs	2,4-Dichlorophenol	**UJ**
P93A-ROX-011222	SVOCs	Benzenethiol	**UJ**
P93A-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
MW28-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW28-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dichlorophenol	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-011222-Dup	SVOCs	2,4-Dichlorophenol	**UJ**
MW1-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW12-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW27-ROX-011222	SVOCs	Benzenethiol	**UJ**
MW10-ROX-011222	SVOCs	Benzenethiol	**UJ**

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

1.9 Surrogate Spike Recoveries

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

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW28-ROX-011222	SVOCs	2-Fluorophenol	**1**	13-113
ROST4PZE-ROX-011222	SVOCs	2-Fluorobiphenyl	**31**	46-124
ROST4PZE-ROX-011222	SVOCs	2-Fluorophenol	**2**	13-113
ROST4PZE-ROX-011222	SVOCs	Phenol-d_5	**14**	17-127
ROST4PZE-ROX-011222-Dup	SVOCs	2-Fluorophenol	**10**	13-113
MW12-ROX-011222	SVOCs	2-Fluorophenol	**11**	13-113
MW10-ROX-011222-EB	PAHs	Terphenyl-d_{14}	**141**	33-138
MW10-ROX-011222	PAHs	Terphenyl-d_{14}	**139**	33-138
MB 400-563401/1-A	SVOCs	2-Fluorophenol	**4**	13-113
MB 400-563401/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

Analytical data that required qualification based on surrogate data are included in the table below. Qualifications due to surrogate recoveries were not required if only one of three acid or base/neutral SVOC surrogate recoveries were outside evaluation criteria. Method blanks and equipment blanks are quality control samples and do not require qualification. 2,4-Dichlorophenol in sample ROST4PZE-ROX-011222 was previously qualified in Section 1.8 of this data review due to LCS recovery outside evaluation criteria; no additional qualification was required.

Sample ID	Parameter	Compound	Qualification
ROST4PZE-ROX-011222	SVOCs	Benzoic acid	**UJ**
ROST4PZE-ROX-011222	SVOCs	4-Chloro-3-methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Chlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dimethylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	4,6-Dinitro-ortho-cresol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4-Dinitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	3&4-Methylphenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2-Nitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	4-Nitrophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Pentachlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	Phenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4,5-Trichlorophenol	**UJ**
ROST4PZE-ROX-011222	SVOCs	2,4,6-Trichlorophenol	**UJ**

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

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

MS/MSD samples are analyzed to assess potential matrix effects. The validated samples in this SDG were not chosen for an MS/MSD analysis.

1.11 Internal Standards

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

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

1.12 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P56-ROX-011222/P56-ROX-011222-Dup and ROST4PZE-ROX-011222/ROST4PZE-ROX-011222-Dup were the field duplicate samples in this data set.

Field duplicate results were within the evaluation criteria of ≤ 25% relative percent difference (RPD) when both results are ≥ 5x the quantitation limit (QL) or ≤ 2x the QL when one or both results is <5x QL with the exceptions summarized in the following table.

Field ID	Field Duplicate ID	Parameter	Compound	RPD or Absolute difference	Qualification
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	Fluorene	**> 2X QL**	**UJ/J**
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	1-Methylnaphthalene	**26**	**J/J**
P56-ROX-011222	P56-ROX-011222-Dup	PAHs	2-Methylnaphthalene	**35**	**J/J**
ROST4PZE-ROX-011222	ROST4PZE-ROX-011222-Dup	PAHs	Fluorene	**26**	**J/J**

1.13 Target Compound Identification and Quantification

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

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

1.14 Overall Data Assessment

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

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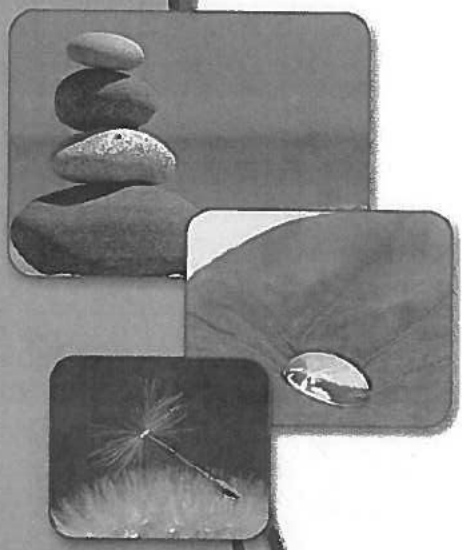

ANALYTICAL REPORT

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

Laboratory Job ID: 400-214110-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

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

Attn: Melissa Remiger

Authorized for release by:
1/28/2022 3:10:39 PM

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

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Reviewed 2/25/2022

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

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

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

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Job ID: 400-214110-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-214110-1

Comments
Revised Report
Report revised to correct the result for acrolein for ROST4PZE-ROX-011222-DUP (400-214110-8), which was identified as a false positive. Supersedes report dated 1-25-2022.

Receipt
The samples were received on 1/14/2022 10:22 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, 0.3° C and 2.1° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563826 recovered above the upper control limit for Bromomethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: ROST4PZE-ROX-011222 (400-214110-7), ROST4PZE-ROX-011222-DUP (400-214110-8). Elevated reporting limits (RLs) are provided.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563826 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563826 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-563826 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-563826 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The following sample MW10-ROX-011222-EB (400-214110-15) contained 2-Butanone (MEK) between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-564007 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-564007 recovered outside acceptance criteria, low biased, for Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-564007 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: Sample MW1-ROX-011222-EB (400-214110-11) contains 2-Butanone (MEK) above the method detection limit (MDL). Reanalysis was performed with concurring results.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-011222-8260-B (400-214110-2), P56-ROX-011222 (400-214110-3), P56-ROX-011222-DUP (400-214110-4), P93A-ROX-011222 (400-214110-5), MW28-ROX-011222 (400-214110-6), ROST4PZE-ROX-011222 (400-214110-7), ROST4PZE-ROX-011222-DUP (400-214110-8), TB-ROX-011222-8260-A (400-214110-9), MW1-ROX-011222-EB (400-214110-11), MW1-ROX-011222 (400-214110-12), MW12-ROX-011222 (400-214110-13),

Job ID: 400-214110-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

MW27-ROX-011222 (400-214110-14), MW10-ROX-011222-EB (400-214110-15) and MW10-ROX-011222 (400-214110-16). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563522 recovered above the upper control limit for N-Nitrosodimethylamine, 2,4,5-Trichlorophenol, 4-Chlorophenyl phenyl ether and Hexachlorobenzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563522 recovered outside acceptance criteria, low biased, for Pyridine, Bis(2-chloroethyl)ether, Hexachlorocyclopentadiene and 1,4-Dioxane. 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 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: ROST4PZE-ROX-011222-DUP (400-214110-8). These results have been reported and qualified.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-563401 and analytical batch 400-563495: 2,4-Dichlorophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analytes: 2-Nitrophenol.

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563401 and analytical batch 400-563495 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563495 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563495 recovered outside acceptance criteria, low biased, for 2,6-Dinitrotoluene, Bis(2-chloroethoxy)methane, Aniline and Quinoline. 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 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW28-ROX-011222 (400-214110-6) and (MB 400-563401/1-A). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: ROST4PZE-ROX-011222 (400-214110-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered above the upper control limit for N-Nitrosodimethylamine, 4,6-Dinitro-2-methylphenol and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been

Job ID: 400-214110-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered outside acceptance criteria, low biased, for Quinoline, 2,6-Dinitrotoluene, Pyridine, Aniline and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW12-ROX-011222 (400-214110-13). These results have been reported and qualified.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-563401/1-A). These results have been reported and qualified.

Method 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW10-ROX-011222-EB (400-214110-15) and MW10-ROX-011222 (400-214110-16). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-563528 and analytical batch 400-563844 contained Indeno[1,2,3-cd]pyrene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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 400-563930 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Organic Prep

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

VOA Prep

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

Sample Summary

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

Job ID: 400-214110-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-214110-1	TB-ROX-011222-8011-B	Water	01/12/22 00:00	01/14/22 10:22
400-214110-2	TB-ROX-011222-8260-B	Water	01/12/22 00:00	01/14/22 10:22
400-214110-3	P56-ROX-011222	Water	01/12/22 10:00	01/14/22 10:22
400-214110-4	P56-ROX-011222-DUP	Water	01/12/22 10:00	01/14/22 10:22
400-214110-5	P93A-ROX-011222	Water	01/12/22 11:10	01/14/22 10:22
400-214110-6	MW28-ROX-011222	Water	01/12/22 12:50	01/14/22 10:22
400-214110-7	ROST4PZE-ROX-011222	Water	01/12/22 13:35	01/14/22 10:22
400-214110-8	ROST4PZE-ROX-011222-DUP	Water	01/12/22 13:35	01/14/22 10:22
400-214110-9	TB-ROX-011222-8260-A	Water	01/12/22 00:00	01/14/22 10:22
400-214110-10	TB-ROX-011222-8011-A	Water	01/12/22 00:00	01/14/22 10:22
400-214110-11	MW1-ROX-011222-EB	Water	01/12/22 08:20	01/14/22 10:22
400-214110-12	MW1-ROX-011222	Water	01/12/22 09:20	01/14/22 10:22
400-214110-13	MW12-ROX-011222	Water	01/12/22 10:00	01/14/22 10:22
400-214110-14	MW27-ROX-011222	Water	01/12/22 10:45	01/14/22 10:22
400-214110-15	MW10-ROX-011222-EB	Water	01/12/22 13:00	01/14/22 10:22
400-214110-16	MW10-ROX-011222	Water	01/12/22 13:45	01/14/22 10:22

Detection Summary

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

Job ID: 400-214110-1

Client Sample ID: TB-ROX-011222-8011-B — Lab Sample ID: 400-214110-1

No Detections.

Client Sample ID: TB-ROX-011222-8260-B — Lab Sample ID: 400-214110-2

No Detections.

Client Sample ID: P56-ROX-011222 — Lab Sample ID: 400-214110-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone - RA	24	J	25	10	ug/L	1		8260B	Total/NA
Benzene - RA	0.60	J	1.0	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK) - RA	4.0	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene - RA	1.0		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene - RA	12		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene - RA	24		5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene - RA	1.7		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene - RA	0.94	J	1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene - RA	14		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene - RA	0.78	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene - RA	0.92	J	1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene - RA	1.8		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene - RA	0.82	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene - RA	11		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene - RA	3.4		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total - RA	25		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.47		0.19	0.031	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	10		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	9.1		0.19	0.058	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.76		0.19	0.035	ug/L	1		8270D LL	Total/NA

Client Sample ID: P56-ROX-011222-DUP — Lab Sample ID: 400-214110-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone - RA	24	J	25	10	ug/L	1		8260B	Total/NA
Benzene - RA	0.58	J	1.0	0.13	ug/L	1		8260B	Total/NA
2-Butanone (MEK) - RA	4.1	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene - RA	1.2		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene - RA	13		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene - RA	26		5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene - RA	1.9		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene - RA	0.88	J	1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene - RA	14		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene - RA	0.86	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene - RA	0.90	J	1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene - RA	1.7		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene - RA	0.89	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene - RA	13		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene - RA	3.8		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total - RA	27		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.41		0.20	0.032	ug/L	1		8270D LL	Total/NA
Fluorene	0.43		0.20	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	13		0.20	0.075	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	13		0.20	0.060	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.93		0.20	0.036	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 400-214110-1

Client Sample ID: P93A-ROX-011222 — Lab Sample ID: 400-214110-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
tert-Butylbenzene - RA	0.86	J	1.0	0.63	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.19	J	0.20	0.072	ug/L	1		8270D LL	Total/NA
Benzoic acid	30		29	7.1	ug/L	1		8270D	Total/NA

Client Sample ID: MW28-ROX-011222 — Lab Sample ID: 400-214110-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether - RA	2.8		1.0	0.22	ug/L	1		8260B	Total/NA
sec-Butylbenzene - RA	0.85	J	1.0	0.70	ug/L	1		8260B	Total/NA

Client Sample ID: ROST4PZE-ROX-011222 — Lab Sample ID: 400-214110-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone - DL	37	J	50	20	ug/L	2		8260B	Total/NA
Benzene - DL	44		2.0	0.26	ug/L	2		8260B	Total/NA
2-Butanone (MEK) - DL	8.1	J	50	5.2	ug/L	2		8260B	Total/NA
Chlorobenzene - DL	0.50	J	2.0	0.30	ug/L	2		8260B	Total/NA
Ethylbenzene - DL	340		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene - DL	13		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene - DL	440		10	1.3	ug/L	2		8260B	Total/NA
Naphthalene - DL	110		2.0	2.0	ug/L	2		8260B	Total/NA
n-Butylbenzene - DL	1.6	J	2.0	1.5	ug/L	2		8260B	Total/NA
N-Propylbenzene - DL	22		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene - DL	54		10	1.2	ug/L	2		8260B	Total/NA
p-Isopropyltoluene - DL	1.7	J	2.0	1.4	ug/L	2		8260B	Total/NA
sec-Butylbenzene - DL	1.6	J	2.0	1.4	ug/L	2		8260B	Total/NA
Toluene - DL	30		2.0	0.82	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene - DL	170		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene - DL	32		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total - DL	490		20	3.2	ug/L	2		8260B	Total/NA
Acenaphthene	1.1		0.19	0.031	ug/L	1		8270D LL	Total/NA
Anthracene	0.48		0.19	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	1.0		0.19	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	38		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	35		0.19	0.058	ug/L	1		8270D LL	Total/NA
Phenanthrene	2.4		0.19	0.035	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.39	J	9.6	0.16	ug/L	1		8270D	Total/NA
Indene	2.3	J	9.6	0.96	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZE-ROX-011222-DUP — Lab Sample ID: 400-214110-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1300	J	50	20	ug/L	2		8260B	Total/NA
Benzene	37		2.0	0.26	ug/L	2		8260B	Total/NA
Ethylbenzene	380		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	15		2.0	1.1	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	530		10	1.3	ug/L	2		8260B	Total/NA
Naphthalene	110		2.0	2.0	ug/L	2		8260B	Total/NA
N-Propylbenzene	23		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene	57		10	1.2	ug/L	2		8260B	Total/NA
p-Isopropyltoluene	1.5	J	2.0	1.4	ug/L	2		8260B	Total/NA
sec-Butylbenzene	1.7	J	2.0	1.4	ug/L	2		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZE-ROX-011222-DUP (Continued) — Lab Sample ID: 400-214110-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	34		2.0	0.82	ug/L	2		8260B	Total/NA
1,2,4-Trimethylbenzene	180		2.0	1.6	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	37		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	590		20	3.2	ug/L	2		8260B	Total/NA
Acenaphthene	1.3		0.20	0.031	ug/L	1		8270D LL	Total/NA
Acenaphthylene	0.23		0.20	0.044	ug/L	1		8270D LL	Total/NA
Anthracene	0.60		0.20	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	1.3		0.20	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	41		0.20	0.072	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	40		0.20	0.059	ug/L	1		8270D LL	Total/NA
Phenanthrene	2.3		0.20	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.12	J	0.20	0.039	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.89	J	9.8	0.17	ug/L	1		8270D	Total/NA
Indene	3.1	J	9.8	0.98	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-011222-8260-A — Lab Sample ID: 400-214110-9

No Detections.

Client Sample ID: TB-ROX-011222-8011-A — Lab Sample ID: 400-214110-10

No Detections.

Client Sample ID: MW1-ROX-011222-EB — Lab Sample ID: 400-214110-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.3	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW1-ROX-011222 — Lab Sample ID: 400-214110-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	0.19		0.19	0.044	ug/L	1		8270D LL	Total/NA
Chrysene	0.16	J	0.19	0.070	ug/L	1		8270D LL	Total/NA
Di-n-butyl phthalate	3.0	J	9.5	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: MW12-ROX-011222 — Lab Sample ID: 400-214110-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.081	J	0.19	0.064	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	~~0.18~~	J B	0.19	0.041	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW27-ROX-011222 — Lab Sample ID: 400-214110-14

No Detections.

Client Sample ID: MW10-ROX-011222-EB — Lab Sample ID: 400-214110-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK) - RA	5.2	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW10-ROX-011222 — Lab Sample ID: 400-214110-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - RA	0.36	J	1.0	0.13	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

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

Job ID: 400-214110-1

Client Sample ID: TB-ROX-011222-8011-B
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-1
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 17:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*01/21/22 11:31*	*01/21/22 17:34*	*1*

Client Sample ID: TB-ROX-011222-8260-B
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 13:01	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 13:01	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/19/22 13:01*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/19/22 13:01*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/19/22 13:01*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 16:30	1
Acrolein	ND		20	3.3	ug/L			01/20/22 16:30	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 16:30	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 16:30	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 16:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 16:30	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 16:30	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 16:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 16:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 16:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 16:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 16:30	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 16:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 16:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 16:30	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 16:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 16:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 16:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 16:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 16:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 16:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 16:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 16:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 16:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 16:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 16:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 16:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 16:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 16:30	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 16:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 16:30	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 16:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 16:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 16:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 16:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 16:30	1

Client Sample ID: TB-ROX-011222-8260-B
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-2
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 16:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 16:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 16:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 16:30	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 16:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 16:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 16:30	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 16:30	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 16:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 16:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 16:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 16:30	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 16:30	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 16:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 16:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 16:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 16:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 16:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 16:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 16:30	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 16:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 16:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 16:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 16:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 16:30	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 16:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 16:30	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 16:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 16:30*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/20/22 16:30*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*01/20/22 16:30*	*1*

Client Sample ID: P56-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 16:14	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 16:14	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 119*		*01/19/22 16:14*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/19/22 16:14*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/19/22 16:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	24	J	25	10	ug/L			01/20/22 14:20	1
Acrolein	ND		20	3.3	ug/L			01/20/22 14:20	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 14:20	1
Benzene	0.60	J	1.0	0.13	ug/L			01/20/22 14:20	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 14:20	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 14:20	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 14:20	1
Bromomethane	ND	F1 *+	1.0	0.98	ug/L			01/20/22 14:20	1
2-Butanone (MEK)	4.0	J	25	2.6	ug/L			01/20/22 14:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 14:20	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 14:20	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 14:20	1
Chloroethane	ND	F1	1.0	0.76	ug/L			01/20/22 14:20	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/20/22 14:20	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 14:20	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 14:20	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 14:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 14:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 14:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 14:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 14:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 14:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 14:20	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 14:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 14:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 14:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 14:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 14:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 14:20	1
Ethylbenzene	1.0		1.0	0.50	ug/L			01/20/22 14:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 14:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 14:20	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 14:20	1
Isopropylbenzene	12		1.0	0.53	ug/L			01/20/22 14:20	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 14:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 14:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 14:20	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 14:20	1
m-Xylene & p-Xylene	24		5.0	0.63	ug/L			01/20/22 14:20	1

Client Sample ID: P56-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	1.7		1.0	1.0	ug/L			01/20/22 14:20	1
n-Butylbenzene	0.94	J	1.0	0.76	ug/L			01/20/22 14:20	1
N-Propylbenzene	14		1.0	0.69	ug/L			01/20/22 14:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 14:20	1
o-Xylene	0.78	J	5.0	0.60	ug/L			01/20/22 14:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 14:20	1
p-Isopropyltoluene	0.92	J	1.0	0.71	ug/L			01/20/22 14:20	1
sec-Butylbenzene	1.8		1.0	0.70	ug/L			01/20/22 14:20	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 14:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 14:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 14:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 14:20	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 14:20	1
Toluene	0.82	J	1.0	0.41	ug/L			01/20/22 14:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 14:20	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 14:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 14:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 14:20	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 14:20	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 14:20	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 14:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 14:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 14:20	1
1,2,4-Trimethylbenzene	11		1.0	0.82	ug/L			01/20/22 14:20	1
1,3,5-Trimethylbenzene	3.4		1.0	0.56	ug/L			01/20/22 14:20	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 14:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 14:20	1
Xylenes, Total	25		10	1.6	ug/L			01/20/22 14:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/20/22 14:20*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/20/22 14:20*	*1*
Toluene-d8 (Surr)	*95*		*64 - 132*		*01/20/22 14:20*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.47		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 21:33	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 21:33	1
Anthracene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 21:33	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 21:33	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 21:33	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 21:33	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/17/22 11:09	01/18/22 21:33	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 21:33	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 21:33	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 21:33	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 21:33	1
Fluorene	ND	UJ	0.19	0.11	ug/L		01/17/22 11:09	01/18/22 21:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 21:33	1
1-Methylnaphthalene	10	J	0.19	0.071	ug/L		01/17/22 11:09	01/18/22 21:33	1

Client Sample ID: P56-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	9.1	J	0.19	0.058	ug/L		01/17/22 11:09	01/18/22 21:33	1
Phenanthrene	0.76		0.19	0.035	ug/L		01/17/22 11:09	01/18/22 21:33	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*99*		*15 - 122*	*01/17/22 11:09*	*01/18/22 21:33*	*1*
Nitrobenzene-d5	*95*		*19 - 130*	*01/17/22 11:09*	*01/18/22 21:33*	*1*
Terphenyl-d14	*68*		*33 - 138*	*01/17/22 11:09*	*01/18/22 21:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.7	ug/L		01/17/22 11:09	01/18/22 20:54	1
Benzenethiol	ND	*-1 UJ	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 20:54	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 20:54	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 20:54	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.15	ug/L		01/17/22 11:09	01/18/22 20:54	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 20:54	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 20:54	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 20:54	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 20:54	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 20:54	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 20:54	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:54	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:54	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4-Dichlorophenol	ND	*- UJ	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 20:54	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:54	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:54	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 20:54	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/17/22 11:09	01/18/22 20:54	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:54	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:54	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 20:54	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 20:54	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 20:54	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 20:54	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 20:54	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 20:54	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/17/22 11:09	01/18/22 20:54	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 20:54	1

Client Sample ID: P56-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 20:54	1
Nitrobenzene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 20:54	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 20:54	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 20:54	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:54	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 20:54	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 20:54	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 20:54	1
Phenol	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 20:54	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 20:54	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 20:54	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*52*		*46 - 124*	*01/17/22 11:09*	*01/18/22 20:54*	*1*
2-Fluorophenol	*53*		*13 - 113*	*01/17/22 11:09*	*01/18/22 20:54*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/17/22 11:09*	*01/18/22 20:54*	*1*
Phenol-d5	*60*		*17 - 127*	*01/17/22 11:09*	*01/18/22 20:54*	*1*
Terphenyl-d14	*48*		*44 - 149*	*01/17/22 11:09*	*01/18/22 20:54*	*1*
2,4,6-Tribromophenol	*93*		*26 - 150*	*01/17/22 11:09*	*01/18/22 20:54*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/21/22 11:31	01/21/22 18:14	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/21/22 11:31	01/21/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*01/21/22 11:31*	*01/21/22 18:14*	*1*

Client Sample ID: P56-ROX-011222-DUP

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 16:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 16:38	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 119*		*01/19/22 16:38*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/19/22 16:38*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/19/22 16:38*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**	**J**	25	10	ug/L			01/20/22 17:48	1
Acrolein	ND		20	3.3	ug/L			01/20/22 17:48	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 17:48	1
Benzene	**0.58**	**J**	1.0	0.13	ug/L			01/20/22 17:48	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 17:48	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 17:48	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 17:48	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 17:48	1
2-Butanone (MEK)	**4.1**	**J**	25	2.6	ug/L			01/20/22 17:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 17:48	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 17:48	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 17:48	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 17:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 17:48	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 17:48	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 17:48	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 17:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 17:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 17:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 17:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 17:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 17:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 17:48	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 17:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 17:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 17:48	1
Ethylbenzene	**1.2**		1.0	0.50	ug/L			01/20/22 17:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 17:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 17:48	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 17:48	1
Isopropylbenzene	**13**		1.0	0.53	ug/L			01/20/22 17:48	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 17:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 17:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 17:48	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 17:48	1
m-Xylene & p-Xylene	**26**		5.0	0.63	ug/L			01/20/22 17:48	1

Client Sample ID: P56-ROX-011222-DUP
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	1.9		1.0	1.0	ug/L			01/20/22 17:48	1
n-Butylbenzene	0.88	J	1.0	0.76	ug/L			01/20/22 17:48	1
N-Propylbenzene	14		1.0	0.69	ug/L			01/20/22 17:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 17:48	1
o-Xylene	0.86	J	5.0	0.60	ug/L			01/20/22 17:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 17:48	1
p-Isopropyltoluene	0.90	J	1.0	0.71	ug/L			01/20/22 17:48	1
sec-Butylbenzene	1.7		1.0	0.70	ug/L			01/20/22 17:48	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 17:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 17:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 17:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 17:48	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 17:48	1
Toluene	0.89	J	1.0	0.41	ug/L			01/20/22 17:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 17:48	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 17:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 17:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 17:48	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 17:48	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 17:48	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 17:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 17:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 17:48	1
1,2,4-Trimethylbenzene	13		1.0	0.82	ug/L			01/20/22 17:48	1
1,3,5-Trimethylbenzene	3.8		1.0	0.56	ug/L			01/20/22 17:48	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 17:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 17:48	1
Xylenes, Total	27		10	1.6	ug/L			01/20/22 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/20/22 17:48*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/20/22 17:48*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/20/22 17:48*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.41		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 21:50	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 21:50	1
Anthracene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 21:50	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/22 11:09	01/18/22 21:50	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 21:50	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/17/22 11:09	01/18/22 21:50	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 21:50	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/22 11:09	01/18/22 21:50	1
Chrysene	ND		0.20	0.075	ug/L		01/17/22 11:09	01/18/22 21:50	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/17/22 11:09	01/18/22 21:50	1
Fluoranthene	ND		0.20	0.068	ug/L		01/17/22 11:09	01/18/22 21:50	1
Fluorene	0.43	J	0.20	0.11	ug/L		01/17/22 11:09	01/18/22 21:50	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/17/22 11:09	01/18/22 21:50	1
1-Methylnaphthalene	13	J	0.20	0.075	ug/L		01/17/22 11:09	01/18/22 21:50	1

Client Sample ID: P56-ROX-011222-DUP
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	13	J	0.20	0.060	ug/L		01/17/22 11:09	01/18/22 21:50	1
Phenanthrene	0.93		0.20	0.036	ug/L		01/17/22 11:09	01/18/22 21:50	1
Pyrene	ND		0.20	0.040	ug/L		01/17/22 11:09	01/18/22 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*01/17/22 11:09*	*01/18/22 21:50*	*1*
Nitrobenzene-d5	*88*		*19 - 130*	*01/17/22 11:09*	*01/18/22 21:50*	*1*
Terphenyl-d14	*71*		*33 - 138*	*01/17/22 11:09*	*01/18/22 21:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	3.8	ug/L		01/17/22 11:09	01/18/22 21:15	1
Benzenethiol	ND	*- *1 UJ	10	1.7	ug/L		01/17/22 11:09	01/18/22 21:15	1
Benzoic acid	ND		30	7.4	ug/L		01/17/22 11:09	01/18/22 21:15	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Bis(2-chloroethoxy)methane	ND	UJ	10	0.16	ug/L		01/17/22 11:09	01/18/22 21:15	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 21:15	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 21:15	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/17/22 11:09	01/18/22 21:15	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 21:15	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 21:15	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Dibenzofuran	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:15	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4-Dichlorophenol	ND	*- UJ	10	3.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Diethyl phthalate	ND		10	0.24	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:15	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:15	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 21:15	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/17/22 11:09	01/18/22 21:15	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:15	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:15	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/22 11:09	01/18/22 21:15	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/22 11:09	01/18/22 21:15	1
Indene	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:15	1
Isophorone	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 21:15	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 21:15	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/17/22 11:09	01/18/22 21:15	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 21:15	1

Client Sample ID: P56-ROX-011222-DUP
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Nitroaniline	ND		10	1.5	ug/L		01/17/22 11:09	01/18/22 21:15	1
Nitrobenzene	ND		10	0.13	ug/L		01/17/22 11:09	01/18/22 21:15	1
2-Nitrophenol	ND	*1	10	5.2	ug/L		01/17/22 11:09	01/18/22 21:15	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/22 11:09	01/18/22 21:15	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:15	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/22 11:09	01/18/22 21:15	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/17/22 11:09	01/18/22 21:15	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 21:15	1
Phenol	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 21:15	1
Pyridine	ND		10	3.2	ug/L		01/17/22 11:09	01/18/22 21:15	1
Quinoline	ND	UJ	10	4.5	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/22 11:09	01/18/22 21:15	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*46 - 124*	*01/17/22 11:09*	*01/18/22 21:15*	*1*
2-Fluorophenol	*16*		*13 - 113*	*01/17/22 11:09*	*01/18/22 21:15*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/17/22 11:09*	*01/18/22 21:15*	*1*
Phenol-d5	*48*		*17 - 127*	*01/17/22 11:09*	*01/18/22 21:15*	*1*
Terphenyl-d14	*51*		*44 - 149*	*01/17/22 11:09*	*01/18/22 21:15*	*1*
2,4,6-Tribromophenol	*72*		*26 - 150*	*01/17/22 11:09*	*01/18/22 21:15*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/21/22 11:31	01/21/22 18:34	1
1,2-Dibromoethane	ND		0.019	0.015	ug/L		01/21/22 11:31	01/21/22 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*01/21/22 11:31*	*01/21/22 18:34*	*1*

Client Sample ID: P93A-ROX-011222
Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 17:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 17:03	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/19/22 17:03*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/19/22 17:03*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/19/22 17:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 18:14	1
Acrolein	ND		20	3.3	ug/L			01/20/22 18:14	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 18:14	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 18:14	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 18:14	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 18:14	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 18:14	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 18:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 18:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 18:14	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 18:14	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 18:14	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 18:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 18:14	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 18:14	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 18:14	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 18:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 18:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 18:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 18:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 18:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 18:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 18:14	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 18:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 18:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 18:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 18:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 18:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 18:14	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 18:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 18:14	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 18:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 18:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 18:14	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 18:14	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 18:14	1

Client Sample ID: P93A-ROX-011222

Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 18:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 18:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 18:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 18:14	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 18:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 18:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 18:14	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 18:14	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 18:14	1
tert-Butylbenzene	**0.86**	**J**	1.0	0.63	ug/L			01/20/22 18:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 18:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 18:14	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 18:14	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 18:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 18:14	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 18:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 18:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 18:14	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 18:14	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 18:14	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 18:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 18:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 18:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 18:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 18:14	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 18:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 18:14	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*72 - 119*		*01/20/22 18:14*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/20/22 18:14*	*1*
Toluene-d8 (Surr)	*92*		*64 - 132*		*01/20/22 18:14*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.031	ug/L		01/17/22 11:09	01/18/22 22:07	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/17/22 11:09	01/18/22 22:07	1
Anthracene	ND		0.20	0.031	ug/L		01/17/22 11:09	01/18/22 22:07	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 22:07	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/17/22 11:09	01/18/22 22:07	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/17/22 11:09	01/18/22 22:07	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 22:07	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/17/22 11:09	01/18/22 22:07	1
Chrysene	ND		0.20	0.072	ug/L		01/17/22 11:09	01/18/22 22:07	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/17/22 11:09	01/18/22 22:07	1
Fluoranthene	ND		0.20	0.067	ug/L		01/17/22 11:09	01/18/22 22:07	1
Fluorene	ND		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 22:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 22:07	1
1-Methylnaphthalene	**0.19**	**J**	0.20	0.072	ug/L		01/17/22 11:09	01/18/22 22:07	1

Client Sample ID: P93A-ROX-011222
Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/17/22 11:09	01/18/22 22:07	1
Phenanthrene	ND		0.20	0.035	ug/L		01/17/22 11:09	01/18/22 22:07	1
Pyrene	ND		0.20	0.039	ug/L		01/17/22 11:09	01/18/22 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*93*		*15 - 122*	*01/17/22 11:09*	*01/18/22 22:07*	*1*
Nitrobenzene-d5	*93*		*19 - 130*	*01/17/22 11:09*	*01/18/22 22:07*	*1*
Terphenyl-d14	*121*		*33 - 138*	*01/17/22 11:09*	*01/18/22 22:07*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.8	3.7	ug/L		01/17/22 11:09	01/18/22 21:35	1
Benzenethiol	ND	*- *1 UJ	9.8	1.7	ug/L		01/17/22 11:09	01/18/22 21:35	1
Benzoic acid	30		29	7.1	ug/L		01/17/22 11:09	01/18/22 21:35	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/17/22 11:09	01/18/22 21:35	1
Bis(2-chloroethoxy)methane	ND	UJ	9.8	0.16	ug/L		01/17/22 11:09	01/18/22 21:35	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		01/17/22 11:09	01/18/22 21:35	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/17/22 11:09	01/18/22 21:35	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/17/22 11:09	01/18/22 21:35	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/17/22 11:09	01/18/22 21:35	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/17/22 11:09	01/18/22 21:35	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/17/22 11:09	01/18/22 21:35	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 21:35	1
Dibenzofuran	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 21:35	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4-Dichlorophenol	ND	*- UJ	9.8	2.9	ug/L		01/17/22 11:09	01/18/22 21:35	1
Diethyl phthalate	ND		9.8	0.23	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 21:35	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 21:35	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/17/22 11:09	01/18/22 21:35	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,6-Dinitrotoluene	ND	UJ	9.8	1.9	ug/L		01/17/22 11:09	01/18/22 21:35	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 21:35	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 21:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 21:35	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 21:35	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		01/17/22 11:09	01/18/22 21:35	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/17/22 11:09	01/18/22 21:35	1
Indene	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 21:35	1
Isophorone	ND		9.8	0.14	ug/L		01/17/22 11:09	01/18/22 21:35	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/17/22 11:09	01/18/22 21:35	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		01/17/22 11:09	01/18/22 21:35	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/17/22 11:09	01/18/22 21:35	1

Client Sample ID: P93A-ROX-011222
Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.8	1.8	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/17/22 11:09	01/18/22 21:35	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/17/22 11:09	01/18/22 21:35	1
2-Nitrophenol	ND	*1	9.8	5.1	ug/L		01/17/22 11:09	01/18/22 21:35	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/17/22 11:09	01/18/22 21:35	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 21:35	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/17/22 11:09	01/18/22 21:35	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/17/22 11:09	01/18/22 21:35	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 21:35	1
Phenol	ND		9.8	2.5	ug/L		01/17/22 11:09	01/18/22 21:35	1
Pyridine	ND		9.8	3.1	ug/L		01/17/22 11:09	01/18/22 21:35	1
Quinoline	ND	UJ	9.8	4.4	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/17/22 11:09	01/18/22 21:35	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*50*		*46 - 124*	*01/17/22 11:09*	*01/18/22 21:35*	*1*
2-Fluorophenol	*18*		*13 - 113*	*01/17/22 11:09*	*01/18/22 21:35*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/17/22 11:09*	*01/18/22 21:35*	*1*
Phenol-d5	*44*		*17 - 127*	*01/17/22 11:09*	*01/18/22 21:35*	*1*
Terphenyl-d14	*81*		*44 - 149*	*01/17/22 11:09*	*01/18/22 21:35*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*01/17/22 11:09*	*01/18/22 21:35*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 18:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*01/21/22 11:31*	*01/21/22 18:54*	*1*

Client Sample ID: MW28-ROX-011222
Date Collected: 01/12/22 12:50
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 17:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 17:27	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 119*		*01/19/22 17:27*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*01/19/22 17:27*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/19/22 17:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 18:40	1
Acrolein	ND		20	3.3	ug/L			01/20/22 18:40	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 18:40	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 18:40	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 18:40	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 18:40	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 18:40	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 18:40	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 18:40	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 18:40	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 18:40	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 18:40	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 18:40	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 18:40	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 18:40	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 18:40	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 18:40	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 18:40	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 18:40	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 18:40	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 18:40	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 18:40	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 18:40	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 18:40	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 18:40	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:40	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:40	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 18:40	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 18:40	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 18:40	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 18:40	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 18:40	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 18:40	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 18:40	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 18:40	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 18:40	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 18:40	1
Methyl tert-butyl ether	**2.8**		1.0	0.22	ug/L			01/20/22 18:40	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 18:40	1

Client Sample ID: MW28-ROX-011222

Date Collected: 01/12/22 12:50
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-6
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 18:40	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 18:40	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 18:40	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 18:40	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 18:40	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 18:40	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 18:40	1
sec-Butylbenzene	0.85	J	1.0	0.70	ug/L			01/20/22 18:40	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 18:40	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 18:40	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 18:40	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 18:40	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 18:40	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 18:40	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 18:40	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 18:40	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 18:40	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 18:40	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 18:40	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 18:40	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 18:40	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 18:40	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 18:40	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 18:40	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 18:40	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 18:40	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 18:40	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/20/22 18:40*	*1*
Dibromofluoromethane	*106*		*75 - 126*		*01/20/22 18:40*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/20/22 18:40*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 22:24	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 22:24	1
Anthracene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 22:24	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/22 11:09	01/18/22 22:24	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 22:24	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/17/22 11:09	01/18/22 22:24	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 22:24	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/22 11:09	01/18/22 22:24	1
Chrysene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 22:24	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/17/22 11:09	01/18/22 22:24	1
Fluoranthene	ND		0.20	0.068	ug/L		01/17/22 11:09	01/18/22 22:24	1
Fluorene	ND		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 22:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/17/22 11:09	01/18/22 22:24	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 22:24	1

Client Sample ID: MW28-ROX-011222

Lab Sample ID: 400-214110-6

Date Collected: 01/12/22 12:50
Date Received: 01/14/22 10:22

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/17/22 11:09	01/18/22 22:24	1
Phenanthrene	ND		0.20	0.036	ug/L		01/17/22 11:09	01/18/22 22:24	1
Pyrene	ND		0.20	0.040	ug/L		01/17/22 11:09	01/18/22 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*15 - 122*	*01/17/22 11:09*	*01/18/22 22:24*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/17/22 11:09*	*01/18/22 22:24*	*1*
Terphenyl-d14	*127*		*33 - 138*	*01/17/22 11:09*	*01/18/22 22:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	3.8	ug/L		01/17/22 11:09	01/18/22 21:56	1
Benzenethiol	ND	*-, *1 UJ	10	1.7	ug/L		01/17/22 11:09	01/18/22 21:56	1
Benzoic acid	ND		30	7.3	ug/L		01/17/22 11:09	01/18/22 21:56	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Bis(2-chloroethoxy)methane	ND	UJ	10	0.16	ug/L		01/17/22 11:09	01/18/22 21:56	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 21:56	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 21:56	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/17/22 11:09	01/18/22 21:56	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 21:56	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 21:56	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Dibenzofuran	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:56	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4-Dichlorophenol	ND	*- UJ	10	3.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Diethyl phthalate	ND		10	0.24	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:56	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:56	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 21:56	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/17/22 11:09	01/18/22 21:56	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:56	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 21:56	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/22 11:09	01/18/22 21:56	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/22 11:09	01/18/22 21:56	1
Indene	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 21:56	1
Isophorone	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 21:56	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 21:56	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/17/22 11:09	01/18/22 21:56	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 21:56	1

Client Sample ID: MW28-ROX-011222
Date Collected: 01/12/22 12:50
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Nitroaniline	ND		10	1.5	ug/L		01/17/22 11:09	01/18/22 21:56	1
Nitrobenzene	ND		10	0.13	ug/L		01/17/22 11:09	01/18/22 21:56	1
2-Nitrophenol	ND	*1	10	5.2	ug/L		01/17/22 11:09	01/18/22 21:56	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/22 11:09	01/18/22 21:56	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:56	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/22 11:09	01/18/22 21:56	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/17/22 11:09	01/18/22 21:56	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 21:56	1
Phenol	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 21:56	1
Pyridine	ND		10	3.2	ug/L		01/17/22 11:09	01/18/22 21:56	1
Quinoline	ND	U5	10	4.5	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/22 11:09	01/18/22 21:56	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 21:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/17/22 11:09*	*01/18/22 21:56*	*1*
2-Fluorophenol	*1*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 21:56*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/17/22 11:09*	*01/18/22 21:56*	*1*
Phenol-d5	*18*		*17 - 127*	*01/17/22 11:09*	*01/18/22 21:56*	*1*
Terphenyl-d14	*95*		*44 - 149*	*01/17/22 11:09*	*01/18/22 21:56*	*1*
2,4,6-Tribromophenol	*40*		*26 - 150*	*01/17/22 11:09*	*01/18/22 21:56*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 19:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*51 - 149*	*01/21/22 11:31*	*01/21/22 19:14*	*1*

Client Sample ID: ROST4PZE-ROX-011222

Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-7

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 17:51	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 17:51	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/19/22 17:51*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*01/19/22 17:51*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/19/22 17:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**37**	J	50	20	ug/L			01/20/22 14:46	2
Acrolein	ND		40	6.6	ug/L			01/20/22 14:46	2
Acrylonitrile	ND		20	5.6	ug/L			01/20/22 14:46	2
Benzene	**44**		2.0	0.26	ug/L			01/20/22 14:46	2
Bromobenzene	ND		2.0	1.1	ug/L			01/20/22 14:46	2
Bromochloromethane	ND		2.0	0.42	ug/L			01/20/22 14:46	2
Bromoform	ND		10	0.50	ug/L			01/20/22 14:46	2
Bromomethane	ND	*+	2.0	2.0	ug/L			01/20/22 14:46	2
2-Butanone (MEK)	**8.1**	J	50	5.2	ug/L			01/20/22 14:46	2
Carbon disulfide	ND		2.0	1.0	ug/L			01/20/22 14:46	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			01/20/22 14:46	2
Chlorobenzene	**0.50**	J	2.0	0.30	ug/L			01/20/22 14:46	2
Chloroethane	ND		2.0	1.5	ug/L			01/20/22 14:46	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			01/20/22 14:46	2
1-Chlorohexane	ND		2.0	0.64	ug/L			01/20/22 14:46	2
Chloromethane	ND		2.0	0.64	ug/L			01/20/22 14:46	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			01/20/22 14:46	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/20/22 14:46	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			01/20/22 14:46	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			01/20/22 14:46	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			01/20/22 14:46	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			01/20/22 14:46	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			01/20/22 14:46	2
Ethylbenzene	**340**		2.0	1.0	ug/L			01/20/22 14:46	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			01/20/22 14:46	2
Hexachlorobutadiene	ND		10	1.8	ug/L			01/20/22 14:46	2
2-Hexanone	ND		50	2.8	ug/L			01/20/22 14:46	2
Isopropylbenzene	**13**		2.0	1.1	ug/L			01/20/22 14:46	2
Methylene bromide	ND		10	0.44	ug/L			01/20/22 14:46	2
Methylene Chloride	ND		10	6.0	ug/L			01/20/22 14:46	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			01/20/22 14:46	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			01/20/22 14:46	2
m-Xylene & p-Xylene	**440**		10	1.3	ug/L			01/20/22 14:46	2

Client Sample ID: ROST4PZE-ROX-011222

Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	110		2.0	2.0	ug/L			01/20/22 14:46	2
n-Butylbenzene	1.6	J	2.0	1.5	ug/L			01/20/22 14:46	2
N-Propylbenzene	22		2.0	1.4	ug/L			01/20/22 14:46	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			01/20/22 14:46	2
o-Xylene	54		10	1.2	ug/L			01/20/22 14:46	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			01/20/22 14:46	2
p-Isopropyltoluene	1.7	J	2.0	1.4	ug/L			01/20/22 14:46	2
sec-Butylbenzene	1.6	J	2.0	1.4	ug/L			01/20/22 14:46	2
Styrene	ND		2.0	2.0	ug/L			01/20/22 14:46	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			01/20/22 14:46	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			01/20/22 14:46	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
Tetrachloroethene	ND		2.0	0.24	ug/L			01/20/22 14:46	2
Toluene	30		2.0	0.82	ug/L			01/20/22 14:46	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/20/22 14:46	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			01/20/22 14:46	2
1,2,3-Trichlorobenzene	ND		2.0	0.38	ug/L			01/20/22 14:46	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			01/20/22 14:46	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			01/20/22 14:46	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			01/20/22 14:46	2
Trichloroethene	ND		2.0	0.30	ug/L			01/20/22 14:46	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			01/20/22 14:46	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			01/20/22 14:46	2
1,2,4-Trimethylbenzene	170		2.0	1.6	ug/L			01/20/22 14:46	2
1,3,5-Trimethylbenzene	32		2.0	1.1	ug/L			01/20/22 14:46	2
Vinyl acetate	ND		50	1.9	ug/L			01/20/22 14:46	2
Vinyl chloride	ND		2.0	1.0	ug/L			01/20/22 14:46	2
Xylenes, Total	490		20	3.2	ug/L			01/20/22 14:46	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 14:46*	*2*
Dibromofluoromethane	*103*		*75 - 126*		*01/20/22 14:46*	*2*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/20/22 14:46*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.1		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 22:41	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 22:41	1
Anthracene	0.48		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 22:41	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 22:41	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 22:41	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 22:41	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/17/22 11:09	01/18/22 22:41	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 22:41	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 22:41	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 22:41	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 22:41	1
Fluorene	1.0		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 22:41	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 22:41	1
1-Methylnaphthalene	38		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 22:41	1

Client Sample ID: ROST4PZE-ROX-011222
Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-7
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	35		0.19	0.058	ug/L		01/17/22 11:09	01/18/22 22:41	1
Phenanthrene	2.4		0.19	0.035	ug/L		01/17/22 11:09	01/18/22 22:41	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*15 - 122*	*01/17/22 11:09*	*01/18/22 22:41*	*1*
Nitrobenzene-d5	*59*		*19 - 130*	*01/17/22 11:09*	*01/18/22 22:41*	*1*
Terphenyl-d14	*77*		*33 - 138*	*01/17/22 11:09*	*01/18/22 22:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.6	3.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
Benzenethiol	ND	*- *1 UJ	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 22:16	1
Benzyl alcohol	ND	UJ	9.6	1.9	ug/L		01/17/22 11:09	01/18/22 22:16	1
Bis(2-chloroethoxy)methane	ND	UJ	9.6	0.15	ug/L		01/17/22 11:09	01/18/22 22:16	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 22:16	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 22:16	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Chloro-3-methylphenol	ND	UJ	9.6	3.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 22:16	1
2-Chlorophenol	ND	UJ	9.6	2.1	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 22:16	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 22:16	1
Dibenzofuran	0.39	J	9.6	0.16	ug/L		01/17/22 11:09	01/18/22 22:16	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4-Dichlorophenol	ND	*- UJ	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 22:16	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4-Dimethylphenol	ND	UJ	9.6	3.4	ug/L		01/17/22 11:09	01/18/22 22:16	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 22:16	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
4,6-Dinitro-ortho-cresol	ND	UJ	9.6	1.5	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4-Dinitrophenol	ND	UJ	29	3.3	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/17/22 11:09	01/18/22 22:16	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 22:16	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 22:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 22:16	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 22:16	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 22:16	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 22:16	1
Indene	2.3	J	9.6	0.96	ug/L		01/17/22 11:09	01/18/22 22:16	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 22:16	1
2-Methylphenol	ND	UJ	9.6	1.7	ug/L		01/17/22 11:09	01/18/22 22:16	1
3 & 4 Methylphenol	ND	UJ	19	0.37	ug/L		01/17/22 11:09	01/18/22 22:16	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 22:16	1

Client Sample ID: ROST4PZE-ROX-011222

Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 22:16	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/17/22 11:09	01/18/22 22:16	1
2-Nitrophenol	ND	*1 UJ	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 22:16	1
4-Nitrophenol	ND	UJ	9.6	2.0	ug/L		01/17/22 11:09	01/18/22 22:16	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 22:16	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 22:16	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 22:16	1
Pentachlorophenol	ND	UJ	19	1.3	ug/L		01/17/22 11:09	01/18/22 22:16	1
Phenol	ND	UJ	9.6	2.5	ug/L		01/17/22 11:09	01/18/22 22:16	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 22:16	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4,5-Trichlorophenol	ND	UJ	9.6	3.6	ug/L		01/17/22 11:09	01/18/22 22:16	1
2,4,6-Trichlorophenol	ND	UJ	9.6	3.4	ug/L		01/17/22 11:09	01/18/22 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*31*	*S1-*	*46 - 124*	*01/17/22 11:09*	*01/18/22 22:16*	*1*
2-Fluorophenol	*2*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 22:16*	*1*
Nitrobenzene-d5	*36*		*36 - 126*	*01/17/22 11:09*	*01/18/22 22:16*	*1*
Phenol-d5	*14*	*S1-*	*17 - 127*	*01/17/22 11:09*	*01/18/22 22:16*	*1*
Terphenyl-d14	*48*		*44 - 149*	*01/17/22 11:09*	*01/18/22 22:16*	*1*
2,4,6-Tribromophenol	*40*		*26 - 150*	*01/17/22 11:09*	*01/18/22 22:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 19:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/21/22 11:31*	*01/21/22 19:34*	*1*

Client Sample ID: ROST4PZE-ROX-011222-DUP
Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1300**	J	50	20	ug/L			01/22/22 10:57	2
Acrolein	ND		40	6.6	ug/L			01/22/22 10:57	2
Acrylonitrile	ND		20	5.6	ug/L			01/22/22 10:57	2
Benzene	**37**		2.0	0.26	ug/L			01/22/22 10:57	2
Bromobenzene	ND		2.0	1.1	ug/L			01/22/22 10:57	2
Bromochloromethane	ND		2.0	0.42	ug/L			01/22/22 10:57	2
Bromodichloromethane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
Bromoform	ND		10	0.50	ug/L			01/22/22 10:57	2
Bromomethane	ND		2.0	2.0	ug/L			01/22/22 10:57	2
2-Butanone (MEK)	ND		50	5.2	ug/L			01/22/22 10:57	2
Carbon disulfide	ND		2.0	1.0	ug/L			01/22/22 10:57	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			01/22/22 10:57	2
Chlorobenzene	ND		2.0	0.30	ug/L			01/22/22 10:57	2
Dibromochloromethane	ND		2.0	0.48	ug/L			01/22/22 10:57	2
Chloroethane	ND		2.0	1.5	ug/L			01/22/22 10:57	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			01/22/22 10:57	2
Chloroform	ND		2.0	1.2	ug/L			01/22/22 10:57	2
1-Chlorohexane	ND		2.0	0.64	ug/L			01/22/22 10:57	2
Chloromethane	ND		2.0	0.64	ug/L			01/22/22 10:57	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			01/22/22 10:57	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/22/22 10:57	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			01/22/22 10:57	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			01/22/22 10:57	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			01/22/22 10:57	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			01/22/22 10:57	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			01/22/22 10:57	2
Ethylbenzene	**380**		2.0	1.0	ug/L			01/22/22 10:57	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			01/22/22 10:57	2
Hexachlorobutadiene	ND		10	1.8	ug/L			01/22/22 10:57	2
2-Hexanone	ND		50	2.8	ug/L			01/22/22 10:57	2
Isopropylbenzene	**15**		2.0	1.1	ug/L			01/22/22 10:57	2
Methylene bromide	ND		10	0.44	ug/L			01/22/22 10:57	2
Methylene Chloride	ND		10	6.0	ug/L			01/22/22 10:57	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			01/22/22 10:57	2
Methyl tert-butyl ether	ND		2.0	0.44	ug/L			01/22/22 10:57	2
m-Xylene & p-Xylene	**530**		10	1.3	ug/L			01/22/22 10:57	2
Naphthalene	**110**		2.0	2.0	ug/L			01/22/22 10:57	2
n-Butylbenzene	ND		2.0	1.5	ug/L			01/22/22 10:57	2
N-Propylbenzene	**23**		2.0	1.4	ug/L			01/22/22 10:57	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			01/22/22 10:57	2
o-Xylene	**57**		10	1.2	ug/L			01/22/22 10:57	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			01/22/22 10:57	2
p-Isopropyltoluene	**1.5**	J	2.0	1.4	ug/L			01/22/22 10:57	2

Client Sample ID: ROST4PZE-ROX-011222-DUP
Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	1.7	J	2.0	1.4	ug/L			01/22/22 10:57	2
Styrene	ND		2.0	2.0	ug/L			01/22/22 10:57	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			01/22/22 10:57	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			01/22/22 10:57	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
Tetrachloroethene	ND		2.0	0.24	ug/L			01/22/22 10:57	2
Toluene	34		2.0	0.82	ug/L			01/22/22 10:57	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/22/22 10:57	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			01/22/22 10:57	2
1,2,3-Trichlorobenzene	ND		2.0	0.38	ug/L			01/22/22 10:57	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			01/22/22 10:57	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			01/22/22 10:57	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			01/22/22 10:57	2
Trichloroethene	ND		2.0	0.30	ug/L			01/22/22 10:57	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			01/22/22 10:57	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			01/22/22 10:57	2
1,2,4-Trimethylbenzene	180		2.0	1.6	ug/L			01/22/22 10:57	2
1,3,5-Trimethylbenzene	37		2.0	1.1	ug/L			01/22/22 10:57	2
Vinyl acetate	ND		50	1.9	ug/L			01/22/22 10:57	2
Vinyl chloride	ND	UJ	2.0	1.0	ug/L			01/22/22 10:57	2
Xylenes, Total	590		20	3.2	ug/L			01/22/22 10:57	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/22/22 10:57*	*2*
Dibromofluoromethane	*92*		*75 - 126*		*01/22/22 10:57*	*2*
Toluene-d8 (Surr)	*106*		*64 - 132*		*01/22/22 10:57*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.3		0.20	0.031	ug/L		01/17/22 11:09	01/18/22 22:58	1
Acenaphthylene	0.23		0.20	0.044	ug/L		01/17/22 11:09	01/18/22 22:58	1
Anthracene	0.60		0.20	0.031	ug/L		01/17/22 11:09	01/18/22 22:58	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 22:58	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/17/22 11:09	01/18/22 22:58	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/17/22 11:09	01/18/22 22:58	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 22:58	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/17/22 11:09	01/18/22 22:58	1
Chrysene	ND		0.20	0.072	ug/L		01/17/22 11:09	01/18/22 22:58	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/17/22 11:09	01/18/22 22:58	1
Fluoranthene	ND		0.20	0.067	ug/L		01/17/22 11:09	01/18/22 22:58	1
Fluorene	1.3		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 22:58	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 22:58	1
1-Methylnaphthalene	41		0.20	0.072	ug/L		01/17/22 11:09	01/18/22 22:58	1
2-Methylnaphthalene	40		0.20	0.059	ug/L		01/17/22 11:09	01/18/22 22:58	1
Phenanthrene	2.3		0.20	0.035	ug/L		01/17/22 11:09	01/18/22 22:58	1
Pyrene	0.12	J	0.20	0.039	ug/L		01/17/22 11:09	01/18/22 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*15 - 122*	*01/17/22 11:09*	*01/18/22 22:58*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*01/17/22 11:09*	*01/18/22 22:58*	*1*

Client Sample ID: ROST4PZE-ROX-011222-DUP

Lab Sample ID: 400-214110-8

Date Collected: 01/12/22 13:35
Matrix: Water
Date Received: 01/14/22 10:22

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*33 - 138*	*01/17/22 11:09*	*01/18/22 22:58*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/17/22 11:09	01/18/22 18:27	1
Benzenethiol	ND	*- *1 UJ	9.8	1.7	ug/L		01/17/22 11:09	01/18/22 18:27	1
Benzoic acid	ND		29	7.1	ug/L		01/17/22 11:09	01/18/22 18:27	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/17/22 11:09	01/18/22 18:27	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		01/17/22 11:09	01/18/22 18:27	1
Bis(2-chloroethyl)ether	ND	UJ	9.8	2.6	ug/L		01/17/22 11:09	01/18/22 18:27	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/17/22 11:09	01/18/22 18:27	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/17/22 11:09	01/18/22 18:27	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/17/22 11:09	01/18/22 18:27	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/17/22 11:09	01/18/22 18:27	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/17/22 11:09	01/18/22 18:27	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 18:27	1
Dibenzofuran	0.89	J	9.8	0.17	ug/L		01/17/22 11:09	01/18/22 18:27	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4-Dichlorophenol	ND	*- UJ	9.8	2.9	ug/L		01/17/22 11:09	01/18/22 18:27	1
Diethyl phthalate	ND		9.8	0.23	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 18:27	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 18:27	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/17/22 11:09	01/18/22 18:27	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		01/17/22 11:09	01/18/22 18:27	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 18:27	1
1,4-Dioxane	ND	UJ	9.8	0.98	ug/L		01/17/22 11:09	01/18/22 18:27	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/17/22 11:09	01/18/22 18:27	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/17/22 11:09	01/18/22 18:27	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		01/17/22 11:09	01/18/22 18:27	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/17/22 11:09	01/18/22 18:27	1
Indene	3.1	J	9.8	0.98	ug/L		01/17/22 11:09	01/18/22 18:27	1
Isophorone	ND		9.8	0.14	ug/L		01/17/22 11:09	01/18/22 18:27	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/17/22 11:09	01/18/22 18:27	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		01/17/22 11:09	01/18/22 18:27	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/17/22 11:09	01/18/22 18:27	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/17/22 11:09	01/18/22 18:27	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/17/22 11:09	01/18/22 18:27	1
2-Nitrophenol	ND	*1	9.8	5.1	ug/L		01/17/22 11:09	01/18/22 18:27	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/17/22 11:09	01/18/22 18:27	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 18:27	1

Client Sample ID: ROST4PZE-ROX-011222-DUP

Lab Sample ID: 400-214110-8

Date Collected: 01/12/22 13:35
Matrix: Water
Date Received: 01/14/22 10:22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/17/22 11:09	01/18/22 18:27	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/17/22 11:09	01/18/22 18:27	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 18:27	1
Phenol	ND		9.8	2.5	ug/L		01/17/22 11:09	01/18/22 18:27	1
Pyridine	ND	UJ	9.8	3.1	ug/L		01/17/22 11:09	01/18/22 18:27	1
Quinoline	ND		9.8	4.4	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/17/22 11:09	01/18/22 18:27	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/17/22 11:09	01/18/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*46 - 124*	*01/17/22 11:09*	*01/18/22 18:27*	*1*
2-Fluorophenol	*10*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 18:27*	*1*
Nitrobenzene-d5	*41*		*36 - 126*	*01/17/22 11:09*	*01/18/22 18:27*	*1*
Phenol-d5	*26*		*17 - 127*	*01/17/22 11:09*	*01/18/22 18:27*	*1*
Terphenyl-d14	*66*		*44 - 149*	*01/17/22 11:09*	*01/18/22 18:27*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*01/17/22 11:09*	*01/18/22 18:27*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/21/22 11:31	01/21/22 19:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*01/21/22 11:31*	*01/21/22 19:54*	*1*

Client Sample ID: TB-ROX-011222-8260-A
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 13:25	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 13:25	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/19/22 13:25*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/19/22 13:25*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/19/22 13:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 16:56	1
Acrolein	ND		20	3.3	ug/L			01/20/22 16:56	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 16:56	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 16:56	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 16:56	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 16:56	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 16:56	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 16:56	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 16:56	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 16:56	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 16:56	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 16:56	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 16:56	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 16:56	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 16:56	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 16:56	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 16:56	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 16:56	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 16:56	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 16:56	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 16:56	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 16:56	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 16:56	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 16:56	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 16:56	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:56	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:56	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 16:56	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 16:56	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 16:56	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 16:56	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 16:56	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 16:56	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 16:56	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 16:56	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 16:56	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 16:56	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 16:56	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 16:56	1

Client Sample ID: TB-ROX-011222-8260-A
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 16:56	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 16:56	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 16:56	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 16:56	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 16:56	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 16:56	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 16:56	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 16:56	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 16:56	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 16:56	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 16:56	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 16:56	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 16:56	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 16:56	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 16:56	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 16:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 16:56	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 16:56	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 16:56	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 16:56	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 16:56	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 16:56	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 16:56	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 16:56	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 16:56	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 16:56	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 16:56*	*1*
Dibromofluoromethane	*103*		*75 - 126*		*01/20/22 16:56*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/20/22 16:56*	*1*

Client Sample Results

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

Job ID: 400-214110-1

Client Sample ID: TB-ROX-011222-8011-A
Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-10
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 20:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*01/21/22 11:31*	*01/21/22 20:14*	*1*

Client Sample Results

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

Job ID: 400-214110-1

Client Sample ID: MW1-ROX-011222-EB
Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/22/22 10:30	1
Acrolein	ND		20	3.3	ug/L			01/22/22 10:30	1
Acrylonitrile	ND	F1	10	2.8	ug/L			01/22/22 10:30	1
Benzene	ND		1.0	0.13	ug/L			01/22/22 10:30	1
Bromobenzene	ND		1.0	0.54	ug/L			01/22/22 10:30	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/22/22 10:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/22/22 10:30	1
Bromoform	ND		5.0	0.25	ug/L			01/22/22 10:30	1
Bromomethane	ND		1.0	0.98	ug/L			01/22/22 10:30	1
2-Butanone (MEK)	3.3	J	25	2.6	ug/L			01/22/22 10:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/22/22 10:30	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/22/22 10:30	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/22/22 10:30	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/22/22 10:30	1
Chloroethane	ND		1.0	0.76	ug/L			01/22/22 10:30	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/22/22 10:30	1
Chloroform	ND		1.0	0.60	ug/L			01/22/22 10:30	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/22/22 10:30	1
Chloromethane	ND		1.0	0.32	ug/L			01/22/22 10:30	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/22/22 10:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/22/22 10:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/22/22 10:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/22/22 10:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/22/22 10:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/22/22 10:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/22/22 10:30	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/22/22 10:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/22/22 10:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/22/22 10:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/22/22 10:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/22/22 10:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/22/22 10:30	1
2-Hexanone	ND	F1	25	1.4	ug/L			01/22/22 10:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/22/22 10:30	1
Methylene bromide	ND		5.0	0.22	ug/L			01/22/22 10:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/22/22 10:30	1
4-Methyl-2-pentanone (MIBK)	ND	F1	25	1.8	ug/L			01/22/22 10:30	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/22/22 10:30	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/22/22 10:30	1
Naphthalene	ND		1.0	1.0	ug/L			01/22/22 10:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/22/22 10:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/22/22 10:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/22/22 10:30	1
o-Xylene	ND		5.0	0.60	ug/L			01/22/22 10:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/22/22 10:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/22/22 10:30	1

Client Sample ID: MW1-ROX-011222-EB
Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/22/22 10:30	1
Styrene	ND		1.0	1.0	ug/L			01/22/22 10:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/22/22 10:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/22/22 10:30	1
1,1,2,2-Tetrachloroethane	ND	F1	1.0	0.50	ug/L			01/22/22 10:30	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/22/22 10:30	1
Toluene	ND		1.0	0.41	ug/L			01/22/22 10:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/22/22 10:30	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/22/22 10:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/22/22 10:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/22/22 10:30	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/22/22 10:30	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/22/22 10:30	1
Trichloroethene	ND		1.0	0.15	ug/L			01/22/22 10:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/22/22 10:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/22/22 10:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/22/22 10:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/22/22 10:30	1
Vinyl acetate	ND		25	0.93	ug/L			01/22/22 10:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/22/22 10:30	1
Xylenes, Total	ND		10	1.6	ug/L			01/22/22 10:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*72 - 119*		*01/22/22 10:30*	*1*
Dibromofluoromethane	*93*		*75 - 126*		*01/22/22 10:30*	*1*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/22/22 10:30*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 23:15	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/17/22 11:09	01/18/22 23:15	1
Anthracene	ND		0.19	0.031	ug/L		01/17/22 11:09	01/18/22 23:15	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/17/22 11:09	01/18/22 23:15	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/17/22 11:09	01/18/22 23:15	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/17/22 11:09	01/18/22 23:15	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/17/22 11:09	01/18/22 23:15	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/17/22 11:09	01/18/22 23:15	1
Chrysene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 23:15	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/17/22 11:09	01/18/22 23:15	1
Fluoranthene	ND		0.19	0.065	ug/L		01/17/22 11:09	01/18/22 23:15	1
Fluorene	ND		0.19	0.11	ug/L		01/17/22 11:09	01/18/22 23:15	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/17/22 11:09	01/18/22 23:15	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/17/22 11:09	01/18/22 23:15	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/17/22 11:09	01/18/22 23:15	1
Phenanthrene	ND		0.19	0.035	ug/L		01/17/22 11:09	01/18/22 23:15	1
Pyrene	ND		0.19	0.038	ug/L		01/17/22 11:09	01/18/22 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*15 - 122*	*01/17/22 11:09*	*01/18/22 23:15*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*01/17/22 11:09*	*01/18/22 23:15*	*1*

Client Sample ID: MW1-ROX-011222-EB
Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	131		33 - 138	01/17/22 11:09	01/18/22 23:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 18:52	1
Benzenethiol	ND	*- *1	9.6	1.6	ug/L		01/17/22 11:09	01/18/22 18:52	1
Benzoic acid	ND		29	7.0	ug/L		01/17/22 11:09	01/18/22 18:52	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 18:52	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 18:52	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 18:52	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/17/22 11:09	01/18/22 18:52	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/17/22 11:09	01/18/22 18:52	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		01/17/22 11:09	01/18/22 18:52	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:52	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/17/22 11:09	01/18/22 18:52	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:52	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:52	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4-Dichlorophenol	ND	*-	9.6	2.9	ug/L		01/17/22 11:09	01/18/22 18:52	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:52	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:52	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/17/22 11:09	01/18/22 18:52	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		01/17/22 11:09	01/18/22 18:52	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:52	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:52	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/17/22 11:09	01/18/22 18:52	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/17/22 11:09	01/18/22 18:52	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/17/22 11:09	01/18/22 18:52	1
Indene	ND		9.6	0.96	ug/L		01/17/22 11:09	01/18/22 18:52	1
Isophorone	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:52	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 18:52	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/17/22 11:09	01/18/22 18:52	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/17/22 11:09	01/18/22 18:52	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/17/22 11:09	01/18/22 18:52	1
Nitrobenzene	ND		9.6	0.13	ug/L		01/17/22 11:09	01/18/22 18:52	1
2-Nitrophenol	ND	*1	9.6	5.0	ug/L		01/17/22 11:09	01/18/22 18:52	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/17/22 11:09	01/18/22 18:52	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:52	1

Client Sample ID: MW1-ROX-011222-EB
Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/17/22 11:09	01/18/22 18:52	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/17/22 11:09	01/18/22 18:52	1
Pentachlorophenol	ND		19	1.3	ug/L		01/17/22 11:09	01/18/22 18:52	1
Phenol	ND		9.6	2.5	ug/L		01/17/22 11:09	01/18/22 18:52	1
Pyridine	ND		9.6	3.1	ug/L		01/17/22 11:09	01/18/22 18:52	1
Quinoline	ND		9.6	4.3	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		01/17/22 11:09	01/18/22 18:52	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/17/22 11:09	01/18/22 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*46 - 124*	*01/17/22 11:09*	*01/18/22 18:52*	*1*
2-Fluorophenol	*23*		*13 - 113*	*01/17/22 11:09*	*01/18/22 18:52*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/17/22 11:09*	*01/18/22 18:52*	*1*
Phenol-d5	*43*		*17 - 127*	*01/17/22 11:09*	*01/18/22 18:52*	*1*
Terphenyl-d14	*95*		*44 - 149*	*01/17/22 11:09*	*01/18/22 18:52*	*1*
2,4,6-Tribromophenol	*99*		*26 - 150*	*01/17/22 11:09*	*01/18/22 18:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 20:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*01/21/22 11:31*	*01/21/22 20:34*	*1*

Client Sample ID: MW1-ROX-011222
Date Collected: 01/12/22 09:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 19:03	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 19:03	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*72 - 119*		*01/19/22 19:03*	*1*
Dibromofluoromethane	*99*		*75 - 126*		*01/19/22 19:03*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/19/22 19:03*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 19:58	1
Acrolein	ND		20	3.3	ug/L			01/20/22 19:58	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 19:58	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 19:58	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 19:58	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 19:58	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 19:58	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 19:58	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 19:58	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 19:58	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 19:58	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 19:58	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 19:58	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 19:58	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 19:58	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 19:58	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 19:58	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 19:58	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 19:58	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 19:58	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 19:58	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 19:58	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 19:58	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 19:58	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 19:58	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 19:58	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 19:58	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 19:58	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 19:58	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 19:58	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 19:58	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 19:58	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 19:58	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 19:58	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 19:58	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 19:58	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 19:58	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 19:58	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 19:58	1

Client Sample ID: MW1-ROX-011222
Date Collected: 01/12/22 09:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 19:58	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 19:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 19:58	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 19:58	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 19:58	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 19:58	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 19:58	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 19:58	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 19:58	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 19:58	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 19:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 19:58	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 19:58	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 19:58	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 19:58	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 19:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 19:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 19:58	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 19:58	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 19:58	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 19:58	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 19:58	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 19:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 19:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 19:58	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 19:58	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 19:58	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*72 - 119*		*01/20/22 19:58*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/20/22 19:58*	*1*
Toluene-d8 (Surr)	*90*		*64 - 132*		*01/20/22 19:58*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 16:52	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 16:52	1
Anthracene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 16:52	1
Benzo[a]anthracene	**0.19**		0.19	0.044	ug/L		01/18/22 10:55	01/20/22 16:52	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/18/22 10:55	01/20/22 16:52	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/18/22 10:55	01/20/22 16:52	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/18/22 10:55	01/20/22 16:52	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/18/22 10:55	01/20/22 16:52	1
Chrysene	**0.16**	**J**	0.19	0.070	ug/L		01/18/22 10:55	01/20/22 16:52	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/18/22 10:55	01/20/22 16:52	1
Fluoranthene	ND		0.19	0.065	ug/L		01/18/22 10:55	01/20/22 16:52	1
Fluorene	ND		0.19	0.10	ug/L		01/18/22 10:55	01/20/22 16:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/18/22 10:55	01/20/22 16:52	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 16:52	1

Client Sample ID: MW1-ROX-011222
Date Collected: 01/12/22 09:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/18/22 10:55	01/20/22 16:52	1
Phenanthrene	ND		0.19	0.034	ug/L		01/18/22 10:55	01/20/22 16:52	1
Pyrene	ND		0.19	0.038	ug/L		01/18/22 10:55	01/20/22 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*15 - 122*	*01/18/22 10:55*	*01/20/22 16:52*	*1*
Nitrobenzene-d5	*103*		*19 - 130*	*01/18/22 10:55*	*01/20/22 16:52*	*1*
Terphenyl-d14	*118*		*33 - 138*	*01/18/22 10:55*	*01/20/22 16:52*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	3.6	ug/L		01/18/22 10:55	01/20/22 15:35	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		01/18/22 10:55	01/20/22 15:35	1
Benzoic acid	ND		28	6.9	ug/L		01/18/22 10:55	01/20/22 15:35	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/18/22 10:55	01/20/22 15:35	1
Bis(2-chloroethoxy)methane	ND	UJ	9.5	0.15	ug/L		01/18/22 10:55	01/20/22 15:35	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/18/22 10:55	01/20/22 15:35	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/18/22 10:55	01/20/22 15:35	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/18/22 10:55	01/20/22 15:35	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/18/22 10:55	01/20/22 15:35	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/18/22 10:55	01/20/22 15:35	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/18/22 10:55	01/20/22 15:35	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 15:35	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 15:35	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/18/22 10:55	01/20/22 15:35	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 15:35	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 15:35	1
Di-n-butyl phthalate	**3.0**	J	9.5	2.6	ug/L		01/18/22 10:55	01/20/22 15:35	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/18/22 10:55	01/20/22 15:35	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 15:35	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 15:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 15:35	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 15:35	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/18/22 10:55	01/20/22 15:35	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/18/22 10:55	01/20/22 15:35	1
Indene	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 15:35	1
Isophorone	ND		9.5	0.13	ug/L		01/18/22 10:55	01/20/22 15:35	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/18/22 10:55	01/20/22 15:35	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/18/22 10:55	01/20/22 15:35	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/18/22 10:55	01/20/22 15:35	1

Client Sample ID: MW1-ROX-011222
Date Collected: 01/12/22 09:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.5	1.7	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/18/22 10:55	01/20/22 15:35	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/18/22 10:55	01/20/22 15:35	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/18/22 10:55	01/20/22 15:35	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/18/22 10:55	01/20/22 15:35	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 15:35	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/18/22 10:55	01/20/22 15:35	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/18/22 10:55	01/20/22 15:35	1
Pentachlorophenol	ND		19	1.3	ug/L		01/18/22 10:55	01/20/22 15:35	1
Phenol	ND		9.5	2.5	ug/L		01/18/22 10:55	01/20/22 15:35	1
Pyridine	ND	UJ	9.5	3.0	ug/L		01/18/22 10:55	01/20/22 15:35	1
Quinoline	ND	UJ	9.5	4.3	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/18/22 10:55	01/20/22 15:35	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/18/22 10:55*	*01/20/22 15:35*	*1*
2-Fluorophenol	*34*		*13 - 113*	*01/18/22 10:55*	*01/20/22 15:35*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/18/22 10:55*	*01/20/22 15:35*	*1*
Phenol-d5	*51*		*17 - 127*	*01/18/22 10:55*	*01/20/22 15:35*	*1*
Terphenyl-d14	*90*		*44 - 149*	*01/18/22 10:55*	*01/20/22 15:35*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*01/18/22 10:55*	*01/20/22 15:35*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/21/22 11:31	01/21/22 20:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/21/22 11:31*	*01/21/22 20:54*	*1*

Client Sample ID: MW12-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 19:27	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 19:27	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 119*		*01/19/22 19:27*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/19/22 19:27*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/19/22 19:27*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 20:24	1
Acrolein	ND		20	3.3	ug/L			01/20/22 20:24	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 20:24	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 20:24	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 20:24	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 20:24	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 20:24	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 20:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 20:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 20:24	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 20:24	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 20:24	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 20:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 20:24	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 20:24	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 20:24	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 20:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 20:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 20:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 20:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 20:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 20:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 20:24	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 20:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 20:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 20:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 20:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 20:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 20:24	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 20:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 20:24	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 20:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 20:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 20:24	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 20:24	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 20:24	1

Client Sample ID: MW12-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 20:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 20:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 20:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 20:24	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 20:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 20:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 20:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 20:24	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 20:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 20:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 20:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 20:24	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 20:24	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 20:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 20:24	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 20:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 20:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 20:24	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 20:24	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 20:24	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 20:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 20:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 20:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 20:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 20:24	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 20:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 20:24	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 20:24*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/20/22 20:24*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/20/22 20:24*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:10	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 17:10	1
Anthracene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:10	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 17:10	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/18/22 10:55	01/20/22 17:10	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/18/22 10:55	01/20/22 17:10	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/18/22 10:55	01/20/22 17:10	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/18/22 10:55	01/20/22 17:10	1
Chrysene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 17:10	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/18/22 10:55	01/20/22 17:10	1
Fluoranthene	0.081	J	0.19	0.064	ug/L		01/18/22 10:55	01/20/22 17:10	1
Fluorene	ND		0.19	0.10	ug/L		01/18/22 10:55	01/20/22 17:10	1
Indeno[1,2,3-cd]pyrene	~~0.18~~	J B U	0.19	0.041	ug/L		01/18/22 10:55	01/20/22 17:10	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 17:10	1

Client Sample ID: MW12-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/18/22 10:55	01/20/22 17:10	1
Phenanthrene	ND		0.19	0.034	ug/L		01/18/22 10:55	01/20/22 17:10	1
Pyrene	ND		0.19	0.038	ug/L		01/18/22 10:55	01/20/22 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*15 - 122*	*01/18/22 10:55*	*01/20/22 17:10*	*1*
Nitrobenzene-d5	*107*		*19 - 130*	*01/18/22 10:55*	*01/20/22 17:10*	*1*
Terphenyl-d14	*119*		*33 - 138*	*01/18/22 10:55*	*01/20/22 17:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.4	3.6	ug/L		01/18/22 10:55	01/20/22 15:56	1
Benzenethiol	ND	*- UJ	9.4	1.6	ug/L		01/18/22 10:55	01/20/22 15:56	1
Benzoic acid	ND		28	6.9	ug/L		01/18/22 10:55	01/20/22 15:56	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 15:56	1
Bis(2-chloroethoxy)methane	ND	UJ	9.4	0.15	ug/L		01/18/22 10:55	01/20/22 15:56	1
Bis(2-chloroethyl)ether	ND		9.4	2.6	ug/L		01/18/22 10:55	01/20/22 15:56	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/18/22 10:55	01/20/22 15:56	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/18/22 10:55	01/20/22 15:56	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/18/22 10:55	01/20/22 15:56	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 15:56	1
2-Chlorophenol	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 15:56	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 15:56	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 15:56	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/18/22 10:55	01/20/22 15:56	1
Diethyl phthalate	ND		9.4	0.23	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 15:56	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 15:56	1
Di-n-butyl phthalate	ND		9.4	2.6	ug/L		01/18/22 10:55	01/20/22 15:56	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,6-Dinitrotoluene	ND	UJ	9.4	1.8	ug/L		01/18/22 10:55	01/20/22 15:56	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 15:56	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 15:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 15:56	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 15:56	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/18/22 10:55	01/20/22 15:56	1
Hexachloroethane	ND		9.4	4.0	ug/L		01/18/22 10:55	01/20/22 15:56	1
Indene	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 15:56	1
Isophorone	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 15:56	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 15:56	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/18/22 10:55	01/20/22 15:56	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 15:56	1

Client Sample Results

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

Job ID: 400-214110-1

Client Sample ID: MW12-ROX-011222
Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/18/22 10:55	01/20/22 15:56	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/18/22 10:55	01/20/22 15:56	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/18/22 10:55	01/20/22 15:56	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/18/22 10:55	01/20/22 15:56	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 15:56	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/18/22 10:55	01/20/22 15:56	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/18/22 10:55	01/20/22 15:56	1
Pentachlorophenol	ND		19	1.3	ug/L		01/18/22 10:55	01/20/22 15:56	1
Phenol	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 15:56	1
Pyridine	ND	UJ	9.4	3.0	ug/L		01/18/22 10:55	01/20/22 15:56	1
Quinoline	ND	UJ	9.4	4.3	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/18/22 10:55	01/20/22 15:56	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 15:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*46 - 124*	*01/18/22 10:55*	*01/20/22 15:56*	*1*
2-Fluorophenol	*11*	*S1-*	*13 - 113*	*01/18/22 10:55*	*01/20/22 15:56*	*1*
Nitrobenzene-d5	*60*		*36 - 126*	*01/18/22 10:55*	*01/20/22 15:56*	*1*
Phenol-d5	*29*		*17 - 127*	*01/18/22 10:55*	*01/20/22 15:56*	*1*
Terphenyl-d14	*89*		*44 - 149*	*01/18/22 10:55*	*01/20/22 15:56*	*1*
2,4,6-Tribromophenol	*31*		*26 - 150*	*01/18/22 10:55*	*01/20/22 15:56*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 21:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*01/21/22 11:31*	*01/21/22 21:14*	*1*

Client Sample ID: MW27-ROX-011222
Date Collected: 01/12/22 10:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 19:52	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 19:52	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 19:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*72 - 119*		*01/19/22 19:52*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/19/22 19:52*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/19/22 19:52*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 20:50	1
Acrolein	ND		20	3.3	ug/L			01/20/22 20:50	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 20:50	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 20:50	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 20:50	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 20:50	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 20:50	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 20:50	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 20:50	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 20:50	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 20:50	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 20:50	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 20:50	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 20:50	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 20:50	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 20:50	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 20:50	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 20:50	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 20:50	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 20:50	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 20:50	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 20:50	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 20:50	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 20:50	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 20:50	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:50	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:50	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 20:50	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 20:50	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 20:50	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 20:50	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 20:50	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 20:50	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 20:50	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 20:50	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 20:50	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 20:50	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 20:50	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 20:50	1

Client Sample ID: MW27-ROX-011222
Date Collected: 01/12/22 10:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-14
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 20:50	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 20:50	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 20:50	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 20:50	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 20:50	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 20:50	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 20:50	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 20:50	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 20:50	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 20:50	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 20:50	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 20:50	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 20:50	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 20:50	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 20:50	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 20:50	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 20:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 20:50	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 20:50	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 20:50	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 20:50	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 20:50	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 20:50	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 20:50	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 20:50	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 20:50	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 20:50	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*72 - 119*		*01/20/22 20:50*	*1*
Dibromofluoromethane	*109*		*75 - 126*		*01/20/22 20:50*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/20/22 20:50*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:27	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/18/22 10:55	01/20/22 17:27	1
Anthracene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:27	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 17:27	1
Benzo[a]pyrene	ND		0.19	0.039	ug/L		01/18/22 10:55	01/20/22 17:27	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/18/22 10:55	01/20/22 17:27	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/18/22 10:55	01/20/22 17:27	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/18/22 10:55	01/20/22 17:27	1
Chrysene	ND		0.19	0.069	ug/L		01/18/22 10:55	01/20/22 17:27	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/18/22 10:55	01/20/22 17:27	1
Fluoranthene	ND		0.19	0.064	ug/L		01/18/22 10:55	01/20/22 17:27	1
Fluorene	ND		0.19	0.10	ug/L		01/18/22 10:55	01/20/22 17:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.040	ug/L		01/18/22 10:55	01/20/22 17:27	1
1-Methylnaphthalene	ND		0.19	0.069	ug/L		01/18/22 10:55	01/20/22 17:27	1

Client Sample ID: MW27-ROX-011222
Date Collected: 01/12/22 10:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-14
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.056	ug/L		01/18/22 10:55	01/20/22 17:27	1
Phenanthrene	ND		0.19	0.034	ug/L		01/18/22 10:55	01/20/22 17:27	1
Pyrene	ND		0.19	0.038	ug/L		01/18/22 10:55	01/20/22 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*15 - 122*	*01/18/22 10:55*	*01/20/22 17:27*	*1*
Nitrobenzene-d5	*102*		*19 - 130*	*01/18/22 10:55*	*01/20/22 17:27*	*1*
Terphenyl-d14	*124*		*33 - 138*	*01/18/22 10:55*	*01/20/22 17:27*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.4	3.6	ug/L		01/18/22 10:55	01/20/22 16:17	1
Benzenethiol	ND	*- UJ	9.4	1.6	ug/L		01/18/22 10:55	01/20/22 16:17	1
Benzoic acid	ND		28	6.9	ug/L		01/18/22 10:55	01/20/22 16:17	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 16:17	1
Bis(2-chloroethoxy)methane	ND	UJ	9.4	0.15	ug/L		01/18/22 10:55	01/20/22 16:17	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:17	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/18/22 10:55	01/20/22 16:17	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/18/22 10:55	01/20/22 16:17	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/18/22 10:55	01/20/22 16:17	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 16:17	1
2-Chlorophenol	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 16:17	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:17	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:17	1
3,3'-Dichlorobenzidine	ND		9.4	2.4	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/18/22 10:55	01/20/22 16:17	1
Diethyl phthalate	ND		9.4	0.23	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:17	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:17	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:17	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,6-Dinitrotoluene	ND	UJ	9.4	1.8	ug/L		01/18/22 10:55	01/20/22 16:17	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:17	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:17	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:17	1
Hexachlorocyclopentadiene	ND		19	2.4	ug/L		01/18/22 10:55	01/20/22 16:17	1
Hexachloroethane	ND		9.4	3.9	ug/L		01/18/22 10:55	01/20/22 16:17	1
Indene	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:17	1
Isophorone	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 16:17	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 16:17	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/18/22 10:55	01/20/22 16:17	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 16:17	1

Client Sample ID: MW27-ROX-011222
Date Collected: 01/12/22 10:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/18/22 10:55	01/20/22 16:17	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/18/22 10:55	01/20/22 16:17	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/18/22 10:55	01/20/22 16:17	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/18/22 10:55	01/20/22 16:17	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:17	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/18/22 10:55	01/20/22 16:17	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/18/22 10:55	01/20/22 16:17	1
Pentachlorophenol	ND		19	1.3	ug/L		01/18/22 10:55	01/20/22 16:17	1
Phenol	ND		9.4	2.4	ug/L		01/18/22 10:55	01/20/22 16:17	1
Pyridine	ND	UJ	9.4	3.0	ug/L		01/18/22 10:55	01/20/22 16:17	1
Quinoline	ND	UJ	9.4	4.2	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/18/22 10:55	01/20/22 16:17	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*01/18/22 10:55*	*01/20/22 16:17*	*1*
2-Fluorophenol	*31*		*13 - 113*	*01/18/22 10:55*	*01/20/22 16:17*	*1*
Nitrobenzene-d5	*59*		*36 - 126*	*01/18/22 10:55*	*01/20/22 16:17*	*1*
Phenol-d5	*52*		*17 - 127*	*01/18/22 10:55*	*01/20/22 16:17*	*1*
Terphenyl-d14	*93*		*44 - 149*	*01/18/22 10:55*	*01/20/22 16:17*	*1*
2,4,6-Tribromophenol	*61*		*26 - 150*	*01/18/22 10:55*	*01/20/22 16:17*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/21/22 11:31	01/21/22 21:54	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 21:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*01/21/22 11:31*	*01/21/22 21:54*	*1*

Client Sample ID: MW10-ROX-011222-EB
Date Collected: 01/12/22 13:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 13:49	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/19/22 13:49*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/19/22 13:49*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/19/22 13:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 17:22	1
Acrolein	ND		20	3.3	ug/L			01/20/22 17:22	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 17:22	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 17:22	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 17:22	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 17:22	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 17:22	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 17:22	1
2-Butanone (MEK)	5.2	J	25	2.6	ug/L			01/20/22 17:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 17:22	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 17:22	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 17:22	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 17:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 17:22	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 17:22	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 17:22	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 17:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 17:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 17:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 17:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 17:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 17:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 17:22	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 17:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 17:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 17:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 17:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 17:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 17:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 17:22	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 17:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 17:22	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 17:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 17:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 17:22	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 17:22	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 17:22	1

Client Sample ID: MW10-ROX-011222-EB
Date Collected: 01/12/22 13:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-15
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 17:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 17:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 17:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 17:22	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 17:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 17:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 17:22	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 17:22	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 17:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 17:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 17:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 17:22	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 17:22	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 17:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 17:22	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 17:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 17:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 17:22	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 17:22	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 17:22	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 17:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 17:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 17:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 17:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 17:22	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 17:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 17:22	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 17:22*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/20/22 17:22*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/20/22 17:22*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:44	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 17:44	1
Anthracene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 17:44	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/18/22 10:55	01/20/22 17:44	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/18/22 10:55	01/20/22 17:44	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/18/22 10:55	01/20/22 17:44	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/18/22 10:55	01/20/22 17:44	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/18/22 10:55	01/20/22 17:44	1
Chrysene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 17:44	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/18/22 10:55	01/20/22 17:44	1
Fluoranthene	ND		0.19	0.065	ug/L		01/18/22 10:55	01/20/22 17:44	1
Fluorene	ND		0.19	0.10	ug/L		01/18/22 10:55	01/20/22 17:44	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/18/22 10:55	01/20/22 17:44	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 17:44	1

Client Sample ID: MW10-ROX-011222-EB
Date Collected: 01/12/22 13:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-15
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/18/22 10:55	01/20/22 17:44	1
Phenanthrene	ND		0.19	0.034	ug/L		01/18/22 10:55	01/20/22 17:44	1
Pyrene	ND		0.19	0.038	ug/L		01/18/22 10:55	01/20/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*116*		*15 - 122*	*01/18/22 10:55*	*01/20/22 17:44*	*1*
Nitrobenzene-d5	*114*		*19 - 130*	*01/18/22 10:55*	*01/20/22 17:44*	*1*
Terphenyl-d14	*141*	*S1+*	*33 - 138*	*01/18/22 10:55*	*01/20/22 17:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.5	3.6	ug/L		01/18/22 10:55	01/20/22 16:37	1
Benzenethiol	ND	*- UJ	9.5	1.6	ug/L		01/18/22 10:55	01/20/22 16:37	1
Benzoic acid	ND		29	6.9	ug/L		01/18/22 10:55	01/20/22 16:37	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/18/22 10:55	01/20/22 16:37	1
Bis(2-chloroethoxy)methane	ND	UJ	9.5	0.15	ug/L		01/18/22 10:55	01/20/22 16:37	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/18/22 10:55	01/20/22 16:37	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/18/22 10:55	01/20/22 16:37	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/18/22 10:55	01/20/22 16:37	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/18/22 10:55	01/20/22 16:37	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/18/22 10:55	01/20/22 16:37	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/18/22 10:55	01/20/22 16:37	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 16:37	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 16:37	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/18/22 10:55	01/20/22 16:37	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 16:37	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 16:37	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/18/22 10:55	01/20/22 16:37	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/18/22 10:55	01/20/22 16:37	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 16:37	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 16:37	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 16:37	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/18/22 10:55	01/20/22 16:37	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/18/22 10:55	01/20/22 16:37	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/18/22 10:55	01/20/22 16:37	1
Indene	ND		9.5	0.95	ug/L		01/18/22 10:55	01/20/22 16:37	1
Isophorone	ND		9.5	0.13	ug/L		01/18/22 10:55	01/20/22 16:37	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/18/22 10:55	01/20/22 16:37	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/18/22 10:55	01/20/22 16:37	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/18/22 10:55	01/20/22 16:37	1

Client Sample ID: MW10-ROX-011222-EB
Date Collected: 01/12/22 13:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.5	1.7	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/18/22 10:55	01/20/22 16:37	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/18/22 10:55	01/20/22 16:37	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/18/22 10:55	01/20/22 16:37	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/18/22 10:55	01/20/22 16:37	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 16:37	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/18/22 10:55	01/20/22 16:37	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/18/22 10:55	01/20/22 16:37	1
Pentachlorophenol	ND		19	1.3	ug/L		01/18/22 10:55	01/20/22 16:37	1
Phenol	ND		9.5	2.5	ug/L		01/18/22 10:55	01/20/22 16:37	1
Pyridine	ND	UJ	9.5	3.0	ug/L		01/18/22 10:55	01/20/22 16:37	1
Quinoline	ND	UJ	9.5	4.3	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/18/22 10:55	01/20/22 16:37	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/18/22 10:55	01/20/22 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/18/22 10:55*	*01/20/22 16:37*	*1*
2-Fluorophenol	*22*		*13 - 113*	*01/18/22 10:55*	*01/20/22 16:37*	*1*
Nitrobenzene-d5	*65*		*36 - 126*	*01/18/22 10:55*	*01/20/22 16:37*	*1*
Phenol-d5	*53*		*17 - 127*	*01/18/22 10:55*	*01/20/22 16:37*	*1*
Terphenyl-d14	*103*		*44 - 149*	*01/18/22 10:55*	*01/20/22 16:37*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*01/18/22 10:55*	*01/20/22 16:37*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 22:14	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*01/21/22 11:31*	*01/21/22 22:14*	*1*

Client Sample ID: MW10-ROX-011222
Date Collected: 01/12/22 13:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 20:16	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 20:16	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*72 - 119*		*01/19/22 20:16*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/19/22 20:16*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/19/22 20:16*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 21:15	1
Acrolein	ND		20	3.3	ug/L			01/20/22 21:15	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 21:15	1
Benzene	0.36	J	1.0	0.13	ug/L			01/20/22 21:15	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 21:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 21:15	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 21:15	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/20/22 21:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 21:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 21:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 21:15	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 21:15	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 21:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 21:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 21:15	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 21:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 21:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 21:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 21:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 21:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 21:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 21:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 21:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 21:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 21:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 21:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 21:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 21:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 21:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 21:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 21:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 21:15	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 21:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 21:15	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 21:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 21:15	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 21:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 21:15	1

Client Sample ID: MW10-ROX-011222
Date Collected: 01/12/22 13:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-16
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 21:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 21:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 21:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 21:15	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 21:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 21:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 21:15	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 21:15	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 21:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 21:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 21:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 21:15	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 21:15	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 21:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 21:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 21:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 21:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 21:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 21:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 21:15	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 21:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 21:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 21:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 21:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 21:15	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 21:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 21:15	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/20/22 21:15*	*1*
Dibromofluoromethane	*108*		*75 - 126*		*01/20/22 21:15*	*1*
Toluene-d8 (Surr)	*91*		*64 - 132*		*01/20/22 21:15*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 18:01	1
Acenaphthylene	ND		0.19	0.042	ug/L		01/18/22 10:55	01/20/22 18:01	1
Anthracene	ND		0.19	0.030	ug/L		01/18/22 10:55	01/20/22 18:01	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/18/22 10:55	01/20/22 18:01	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/18/22 10:55	01/20/22 18:01	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/18/22 10:55	01/20/22 18:01	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/18/22 10:55	01/20/22 18:01	1
Benzo[k]fluoranthene	ND		0.19	0.094	ug/L		01/18/22 10:55	01/20/22 18:01	1
Chrysene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 18:01	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/18/22 10:55	01/20/22 18:01	1
Fluoranthene	ND		0.19	0.064	ug/L		01/18/22 10:55	01/20/22 18:01	1
Fluorene	ND		0.19	0.10	ug/L		01/18/22 10:55	01/20/22 18:01	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/18/22 10:55	01/20/22 18:01	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/18/22 10:55	01/20/22 18:01	1

Client Sample ID: MW10-ROX-011222
Date Collected: 01/12/22 13:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-16
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/18/22 10:55	01/20/22 18:01	1
Phenanthrene	ND		0.19	0.034	ug/L		01/18/22 10:55	01/20/22 18:01	1
Pyrene	ND		0.19	0.038	ug/L		01/18/22 10:55	01/20/22 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*15 - 122*	*01/18/22 10:55*	*01/20/22 18:01*	*1*
Nitrobenzene-d5	*111*		*19 - 130*	*01/18/22 10:55*	*01/20/22 18:01*	*1*
Terphenyl-d14	*139*	*S1+*	*33 - 138*	*01/18/22 10:55*	*01/20/22 18:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.4	3.6	ug/L		01/18/22 10:55	01/20/22 16:58	1
Benzenethiol	ND	*-	9.4	1.6	ug/L		01/18/22 10:55	01/20/22 16:58	1
Benzoic acid	ND		28	6.9	ug/L		01/18/22 10:55	01/20/22 16:58	1
Benzyl alcohol	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 16:58	1
Bis(2-chloroethoxy)methane	ND		9.4	0.15	ug/L		01/18/22 10:55	01/20/22 16:58	1
Bis(2-chloroethyl)ether	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
bis (2-chloroisopropyl) ether	ND		9.4	0.15	ug/L		01/18/22 10:55	01/20/22 16:58	1
Bis(2-ethylhexyl) phthalate	ND		9.4	4.7	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Bromophenyl phenyl ether	ND		9.4	0.19	ug/L		01/18/22 10:55	01/20/22 16:58	1
Butyl benzyl phthalate	ND		9.4	0.18	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Chloroaniline	ND		9.4	3.2	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Chloro-3-methylphenol	ND		9.4	3.6	ug/L		01/18/22 10:55	01/20/22 16:58	1
2-Chloronaphthalene	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 16:58	1
2-Chlorophenol	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Chlorophenyl phenyl ether	ND		9.4	1.9	ug/L		01/18/22 10:55	01/20/22 16:58	1
Dibenz[a,h]acridine	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:58	1
Dibenzofuran	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:58	1
3,3'-Dichlorobenzidine	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4-Dichlorophenol	ND		9.4	2.8	ug/L		01/18/22 10:55	01/20/22 16:58	1
Diethyl phthalate	ND		9.4	0.23	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4-Dimethylphenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:58	1
Dimethyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:58	1
Di-n-butyl phthalate	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
4,6-Dinitro-ortho-cresol	ND		9.4	1.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4-Dinitrotoluene	ND		9.4	1.8	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,6-Dinitrotoluene	ND		9.4	1.8	ug/L		01/18/22 10:55	01/20/22 16:58	1
Di-n-octyl phthalate	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:58	1
1,4-Dioxane	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:58	1
Hexachlorobenzene	ND		9.4	0.16	ug/L		01/18/22 10:55	01/20/22 16:58	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
Hexachloroethane	ND		9.4	4.0	ug/L		01/18/22 10:55	01/20/22 16:58	1
Indene	ND		9.4	0.94	ug/L		01/18/22 10:55	01/20/22 16:58	1
Isophorone	ND		9.4	0.13	ug/L		01/18/22 10:55	01/20/22 16:58	1
2-Methylphenol	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 16:58	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/18/22 10:55	01/20/22 16:58	1
2-Nitroaniline	ND		9.4	2.1	ug/L		01/18/22 10:55	01/20/22 16:58	1

Client Sample ID: MW10-ROX-011222
Date Collected: 01/12/22 13:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Nitroaniline	ND		9.4	1.7	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Nitroaniline	ND		9.4	1.4	ug/L		01/18/22 10:55	01/20/22 16:58	1
Nitrobenzene	ND		9.4	0.12	ug/L		01/18/22 10:55	01/20/22 16:58	1
2-Nitrophenol	ND		9.4	4.9	ug/L		01/18/22 10:55	01/20/22 16:58	1
4-Nitrophenol	ND		9.4	2.0	ug/L		01/18/22 10:55	01/20/22 16:58	1
N-Nitrosodimethylamine	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:58	1
N-Nitrosodi-n-propylamine	ND		9.4	3.1	ug/L		01/18/22 10:55	01/20/22 16:58	1
N-Nitrosodiphenylamine	ND		9.4	0.17	ug/L		01/18/22 10:55	01/20/22 16:58	1
Pentachlorophenol	ND		19	1.3	ug/L		01/18/22 10:55	01/20/22 16:58	1
Phenol	ND		9.4	2.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
Pyridine	ND		9.4	3.0	ug/L		01/18/22 10:55	01/20/22 16:58	1
Quinoline	ND		9.4	4.2	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4,5-Trichlorophenol	ND		9.4	3.5	ug/L		01/18/22 10:55	01/20/22 16:58	1
2,4,6-Trichlorophenol	ND		9.4	3.3	ug/L		01/18/22 10:55	01/20/22 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/18/22 10:55*	*01/20/22 16:58*	*1*
2-Fluorophenol	*57*		*13 - 113*	*01/18/22 10:55*	*01/20/22 16:58*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*01/18/22 10:55*	*01/20/22 16:58*	*1*
Phenol-d5	*61*		*17 - 127*	*01/18/22 10:55*	*01/20/22 16:58*	*1*
Terphenyl-d14	*103*		*44 - 149*	*01/18/22 10:55*	*01/20/22 16:58*	*1*
2,4,6-Tribromophenol	*64*		*26 - 150*	*01/18/22 10:55*	*01/20/22 16:58*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/21/22 11:31	01/21/22 22:33	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*01/21/22 11:31*	*01/21/22 22:33*	*1*

Definitions/Glossary

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

Job ID: 400-214110-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*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.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-214110-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-214110-2	TB-ROX-011222-8260-B	105	103	96
400-214110-2 - RA	TB-ROX-011222-8260-B	92	105	92
400-214110-3	P56-ROX-011222	107	102	101
400-214110-3 - RA	P56-ROX-011222	94	104	95
400-214110-3 MS	P56-ROX-011222	96	104	90
400-214110-3 MSD	P56-ROX-011222	94	105	88
400-214110-4	P56-ROX-011222-DUP	104	104	97
400-214110-4 - RA	P56-ROX-011222-DUP	94	103	93
400-214110-5	P93A-ROX-011222	105	103	100
400-214110-5 - RA	P93A-ROX-011222	94	104	92
400-214110-6	MW28-ROX-011222	102	99	98
400-214110-6 - RA	MW28-ROX-011222	93	106	90
400-214110-7	ROST4PZE-ROX-011222	105	98	97
400-214110-7 - DL	ROST4PZE-ROX-011222	92	103	93
400-214110-8	ROST4PZE-ROX-011222-DUP	98	92	106
400-214110-9	TB-ROX-011222-8260-A	98	105	96
400-214110-9 - RA	TB-ROX-011222-8260-A	92	103	91
400-214110-11	MW1-ROX-011222-EB	103	93	103
400-214110-11 MS	MW1-ROX-011222-EB	97	94	102
400-214110-11 MSD	MW1-ROX-011222-EB	98	95	102
400-214110-12	MW1-ROX-011222	100	99	99
400-214110-12 - RA	MW1-ROX-011222	90	104	90
400-214110-13	MW12-ROX-011222	102	101	101
400-214110-13 - RA	MW12-ROX-011222	92	104	91
400-214110-14	MW27-ROX-011222	101	102	99
400-214110-14 - RA	MW27-ROX-011222	89	109	91
400-214110-15	MW10-ROX-011222-EB	98	102	96
400-214110-15 - RA	MW10-ROX-011222-EB	92	104	93
400-214110-16	MW10-ROX-011222	98	101	97
400-214110-16 - RA	MW10-ROX-011222	92	108	91
LCS 400-563659/1002	Lab Control Sample	99	98	106
LCS 400-563826/1002	Lab Control Sample	92	105	91
LCS 400-564007/1002	Lab Control Sample	93	106	97
MB 400-563659/5	Method Blank	102	100	98
MB 400-563826/5	Method Blank	93	106	91
MB 400-564007/5	Method Blank	104	102	99

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-214110-3	P56-ROX-011222	52	53	67	60	48	93
400-214110-4	P56-ROX-011222-DUP	51	16	60	48	51	72

Surrogate Summary

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

Job ID: 400-214110-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	FBP (46-124)	2FP (13-113)	NBZ (36-126)	PHL (17-127)	TPHL (44-149)	TBP (26-150)
400-214110-5	P93A-ROX-011222	50	18	60	44	81	74
400-214110-6	MW28-ROX-011222	55	1 S1-	60	18	95	40
400-214110-7	ROST4PZE-ROX-011222	31 S1-	2 S1-	36	14 S1-	48	40
400-214110-8	ROST4PZE-ROX-011222-DUP	51	10 S1-	41	26	66	75
400-214110-11	MW1-ROX-011222-EB	76	23	60	43	95	99
400-214110-12	MW1-ROX-011222	55	34	63	51	90	62
400-214110-13	MW12-ROX-011222	53	11 S1-	60	29	89	31
400-214110-14	MW27-ROX-011222	54	31	59	52	93	61
400-214110-15	MW10-ROX-011222-EB	56	22	65	53	103	64
400-214110-16	MW10-ROX-011222	56	57	64	61	103	64
LCS 400-563401/2-A	Lab Control Sample	60	20	59	48	87	77
LCS 400-563401/4-A	Lab Control Sample	54	19	58	41	86	54
LCS 400-563528/2-A	Lab Control Sample	75	25	63	54	99	82
LCS 400-563528/6-A	Lab Control Sample	59	37	68	57	118	53
LCSD 400-563401/3-A	Lab Control Sample Dup	68	24	58	55	90	87
LCSD 400-563401/5-A	Lab Control Sample Dup	61	22	70	50	105	62
LCSD 400-563528/3-A	Lab Control Sample Dup	67	21	60	54	91	89
LCSD 400-563528/7-A	Lab Control Sample Dup	58	25	68	52	103	48
MB 400-563401/1-A	Method Blank	58	4 S1-	63	29	80	62
MB 400-563528/1-A	Method Blank	53	13	61	42	118	58

Surrogate Legend

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

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	FBP (15-122)	NBZ (19-130)	TPHL (33-138)
400-214110-3	P56-ROX-011222	99	95	68
400-214110-4	P56-ROX-011222-DUP	96	88	71
400-214110-5	P93A-ROX-011222	93	93	121
400-214110-6	MW28-ROX-011222	104	98	127
400-214110-7	ROST4PZE-ROX-011222	60	59	77
400-214110-8	ROST4PZE-ROX-011222-DUP	69	63	88
400-214110-11	MW1-ROX-011222-EB	107	101	131
400-214110-12	MW1-ROX-011222	113	103	118
400-214110-13	MW12-ROX-011222	104	107	119
400-214110-14	MW27-ROX-011222	106	102	124
400-214110-15	MW10-ROX-011222-EB	116	114	141 S1+
400-214110-16	MW10-ROX-011222	107	111	139 S1+
LCS 400-563401/2-A	Lab Control Sample	94	111	115
LCS 400-563528/2-A	Lab Control Sample	111	126	123
LCSD 400-563401/3-A	Lab Control Sample Dup	112	124	116
LCSD 400-563528/3-A	Lab Control Sample Dup	92	128	114

Surrogate Summary

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

Job ID: 400-214110-1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
MB 400-563401/1-A	Method Blank	108	98	140 S1+
MB 400-563528/1-A	Method Blank	96	98	131

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)
400-214110-1	TB-ROX-011222-8011-B	89
400-214110-3	P56-ROX-011222	114
400-214110-4	P56-ROX-011222-DUP	101
400-214110-5	P93A-ROX-011222	99
400-214110-6	MW28-ROX-011222	97
400-214110-7	ROST4PZE-ROX-011222	98
400-214110-8	ROST4PZE-ROX-011222-DUP	106
400-214110-10	TB-ROX-011222-8011-A	107
400-214110-11	MW1-ROX-011222-EB	98
400-214110-12	MW1-ROX-011222	96
400-214110-13	MW12-ROX-011222	109
400-214110-14	MW27-ROX-011222	104
400-214110-15	MW10-ROX-011222-EB	103
400-214110-16	MW10-ROX-011222	96
LCS 400-563931/2-A	Lab Control Sample	100
LCSD 400-563931/3-A	Lab Control Sample Dup	96
MB 400-563931/1-A	Method Blank	95

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-214110-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: TB-ROX-011222-8011-B

Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.8 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 17:34	DS	TAL PEN

Client Sample ID: TB-ROX-011222-8260-B

Date Collected: 01/12/22 00:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 13:01	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 16:30	BPO	TAL PEN

Client Sample ID: P56-ROX-011222

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 16:14	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 14:20	BPO	TAL PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 20:54	S1B	TAL PEN
Total/NA	Prep	3520C			259.8 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 21:33	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 18:14	DS	TAL PEN

Client Sample ID: P56-ROX-011222-DUP

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 16:38	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 17:48	BPO	TAL PEN
Total/NA	Prep	3520C			248.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 21:15	S1B	TAL PEN
Total/NA	Prep	3520C			248.2 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 21:50	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 18:34	DS	TAL PEN

Client Sample ID: P93A-ROX-011222

Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 17:03	BPO	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: P93A-ROX-011222

Date Collected: 01/12/22 11:10
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 18:14	BPO	TAL PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 21:35	S1B	TAL PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 22:07	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 18:54	DS	TAL PEN

Client Sample ID: MW28-ROX-011222

Date Collected: 01/12/22 12:50
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 17:27	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 18:40	BPO	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 21:56	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 22:24	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 19:14	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-011222

Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 17:51	BPO	TAL PEN
Total/NA	Analysis	8260B	DL	2	5 mL	5 mL	563826	01/20/22 14:46	BPO	TAL PEN
Total/NA	Prep	3520C			260.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 22:16	S1B	TAL PEN
Total/NA	Prep	3520C			260.4 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 22:41	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 19:34	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-011222-DUP

Date Collected: 01/12/22 13:35
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	564007	01/22/22 10:57	BEP	TAL PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 18:27	S1B	TAL PEN

Client Sample ID: ROST4PZE-ROX-011222-DUP

Lab Sample ID: 400-214110-8

Date Collected: 01/12/22 13:35
Matrix: Water
Date Received: 01/14/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			255.6 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 22:58	PP1	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 19:54	DS	TAL PEN

Client Sample ID: TB-ROX-011222-8260-A

Lab Sample ID: 400-214110-9

Date Collected: 01/12/22 00:00
Matrix: Water
Date Received: 01/14/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 13:25	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 16:56	BPO	TAL PEN

Client Sample ID: TB-ROX-011222-8011-A

Lab Sample ID: 400-214110-10

Date Collected: 01/12/22 00:00
Matrix: Water
Date Received: 01/14/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.9 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 20:14	DS	TAL PEN

Client Sample ID: MW1-ROX-011222-EB

Lab Sample ID: 400-214110-11

Date Collected: 01/12/22 08:20
Matrix: Water
Date Received: 01/14/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	564007	01/22/22 10:30	BEP	TAL PEN
Total/NA	Prep	3520C			260 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563522	01/18/22 18:52	S1B	TAL PEN
Total/NA	Prep	3520C			260 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 23:15	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 20:34	DS	TAL PEN

Client Sample ID: MW1-ROX-011222

Lab Sample ID: 400-214110-12

Date Collected: 01/12/22 09:20
Matrix: Water
Date Received: 01/14/22 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 19:03	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 19:58	BPO	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 15:35	S1B	TAL PEN
Total/NA	Prep	3520C			263.4 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 16:52	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: MW1-ROX-011222

Date Collected: 01/12/22 09:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.3 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 20:54	DS	TAL PEN

Client Sample ID: MW12-ROX-011222

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 19:27	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 20:24	BPO	TAL PEN
Total/NA	Prep	3520C			264.6 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 15:56	S1B	TAL PEN
Total/NA	Prep	3520C			264.6 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 17:10	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 21:14	DS	TAL PEN

Client Sample ID: MW27-ROX-011222

Date Collected: 01/12/22 10:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 19:52	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 20:50	BPO	TAL PEN
Total/NA	Prep	3520C			266.2 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 16:17	S1B	TAL PEN
Total/NA	Prep	3520C			266.2 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 17:27	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 21:54	DS	TAL PEN

Client Sample ID: MW10-ROX-011222-EB

Date Collected: 01/12/22 13:00
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 13:49	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 17:22	BPO	TAL PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 16:37	S1B	TAL PEN
Total/NA	Prep	3520C			262.8 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 17:44	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 22:14	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: MW10-ROX-011222

Date Collected: 01/12/22 13:45
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 20:16	BPO	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563826	01/20/22 21:15	BPO	TAL PEN
Total/NA	Prep	3520C			265 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 16:58	S1B	TAL PEN
Total/NA	Prep	3520C			265 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 18:01	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 22:33	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563401/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 16:28	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563567	01/18/22 18:26	PP1	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563528/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 12:29	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 16:01	PP1	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563659/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 12:37	BPO	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563826/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563826	01/20/22 13:54	BPO	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-563931/1-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 14:34	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-564007/5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	564007	01/22/22 10:02	BEP	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 16:48	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 18:43	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563401/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:29	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 12:50	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563844	01/20/22 16:18	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-563528/6-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:31	S1B	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563659/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563659	01/19/22 10:52	BPO	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563826/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563826	01/20/22 12:40	BPO	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563931/2-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	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 14:54	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-564007/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	564007	01/22/22 09:02	BEP	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-563401/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:09	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563567	01/18/22 19:00	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-563401/5-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563401	01/17/22 11:09	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563495	01/18/22 17:50	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563528/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:10	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563844	01/20/22 16:35	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563528/7-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:52	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563931/3-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	563931	01/21/22 11:31	KIS	TAL PEN
Total/NA	Analysis	8011		1			563930	01/21/22 15:14	DS	TAL PEN

Client Sample ID: P56-ROX-011222

Lab Sample ID: 400-214110-3 MS

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563826	01/20/22 15:12	BPO	TAL PEN

Client Sample ID: P56-ROX-011222

Lab Sample ID: 400-214110-3 MSD

Date Collected: 01/12/22 10:00
Date Received: 01/14/22 10:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563826	01/20/22 15:38	BPO	TAL PEN

Client Sample ID: MW1-ROX-011222-EB

Lab Sample ID: 400-214110-11 MS

Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	564007	01/22/22 11:25	BEP	TAL PEN

Lab Chronicle

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

Job ID: 400-214110-1

Client Sample ID: MW1-ROX-011222-EB
Date Collected: 01/12/22 08:20
Date Received: 01/14/22 10:22

Lab Sample ID: 400-214110-11 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	564007	01/22/22 11:53	BEP	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-214110-1

GC/MS VOA

Analysis Batch: 563659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-2	TB-ROX-011222-8260-B	Total/NA	Water	8260B	
400-214110-3	P56-ROX-011222	Total/NA	Water	8260B	
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	8260B	
400-214110-5	P93A-ROX-011222	Total/NA	Water	8260B	
400-214110-6	MW28-ROX-011222	Total/NA	Water	8260B	
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	8260B	
400-214110-9	TB-ROX-011222-8260-A	Total/NA	Water	8260B	
400-214110-12	MW1-ROX-011222	Total/NA	Water	8260B	
400-214110-13	MW12-ROX-011222	Total/NA	Water	8260B	
400-214110-14	MW27-ROX-011222	Total/NA	Water	8260B	
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	8260B	
400-214110-16	MW10-ROX-011222	Total/NA	Water	8260B	
MB 400-563659/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563659/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 563826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-2 - RA	TB-ROX-011222-8260-B	Total/NA	Water	8260B	
400-214110-3 - RA	P56-ROX-011222	Total/NA	Water	8260B	
400-214110-4 - RA	P56-ROX-011222-DUP	Total/NA	Water	8260B	
400-214110-5 - RA	P93A-ROX-011222	Total/NA	Water	8260B	
400-214110-6 - RA	MW28-ROX-011222	Total/NA	Water	8260B	
400-214110-7 - DL	ROST4PZE-ROX-011222	Total/NA	Water	8260B	
400-214110-9 - RA	TB-ROX-011222-8260-A	Total/NA	Water	8260B	
400-214110-12 - RA	MW1-ROX-011222	Total/NA	Water	8260B	
400-214110-13 - RA	MW12-ROX-011222	Total/NA	Water	8260B	
400-214110-14 - RA	MW27-ROX-011222	Total/NA	Water	8260B	
400-214110-15 - RA	MW10-ROX-011222-EB	Total/NA	Water	8260B	
400-214110-16 - RA	MW10-ROX-011222	Total/NA	Water	8260B	
MB 400-563826/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563826/1002	Lab Control Sample	Total/NA	Water	8260B	
400-214110-3 MS	P56-ROX-011222	Total/NA	Water	8260B	
400-214110-3 MSD	P56-ROX-011222	Total/NA	Water	8260B	

Analysis Batch: 564007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	8260B	
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	8260B	
MB 400-564007/5	Method Blank	Total/NA	Water	8260B	
LCS 400-564007/1002	Lab Control Sample	Total/NA	Water	8260B	
400-214110-11 MS	MW1-ROX-011222-EB	Total/NA	Water	8260B	
400-214110-11 MSD	MW1-ROX-011222-EB	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 563401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-3	P56-ROX-011222	Total/NA	Water	3520C	
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	3520C	
400-214110-5	P93A-ROX-011222	Total/NA	Water	3520C	
400-214110-6	MW28-ROX-011222	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 563401 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	3520C	
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	3520C	
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	3520C	
MB 400-563401/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563401/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-563401/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-3	P56-ROX-011222	Total/NA	Water	8270D	563401
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	8270D	563401
400-214110-5	P93A-ROX-011222	Total/NA	Water	8270D	563401
400-214110-6	MW28-ROX-011222	Total/NA	Water	8270D	563401
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	8270D	563401
MB 400-563401/1-A	Method Blank	Total/NA	Water	8270D	563401
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	8270D	563401
LCS 400-563401/4-A	Lab Control Sample	Total/NA	Water	8270D	563401
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	563401
LCSD 400-563401/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	563401

Analysis Batch: 563522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	8270D	563401
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	8270D	563401

Prep Batch: 563528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-12	MW1-ROX-011222	Total/NA	Water	3520C	
400-214110-13	MW12-ROX-011222	Total/NA	Water	3520C	
400-214110-14	MW27-ROX-011222	Total/NA	Water	3520C	
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	3520C	
400-214110-16	MW10-ROX-011222	Total/NA	Water	3520C	
MB 400-563528/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563528/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-563528/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-3	P56-ROX-011222	Total/NA	Water	8270D LL	563401
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	8270D LL	563401
400-214110-5	P93A-ROX-011222	Total/NA	Water	8270D LL	563401
400-214110-6	MW28-ROX-011222	Total/NA	Water	8270D LL	563401
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	8270D LL	563401
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	8270D LL	563401
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	8270D LL	563401
MB 400-563401/1-A	Method Blank	Total/NA	Water	8270D LL	563401
LCS 400-563401/2-A	Lab Control Sample	Total/NA	Water	8270D LL	563401

GC/MS Semi VOA (Continued)

Analysis Batch: 563567 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 400-563401/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	563401

Analysis Batch: 563808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-12	MW1-ROX-011222	Total/NA	Water	8270D	563528
400-214110-13	MW12-ROX-011222	Total/NA	Water	8270D	563528
400-214110-14	MW27-ROX-011222	Total/NA	Water	8270D	563528
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	8270D	563528
400-214110-16	MW10-ROX-011222	Total/NA	Water	8270D	563528
MB 400-563528/1-A	Method Blank	Total/NA	Water	8270D	563528
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	8270D	563528
LCS 400-563528/6-A	Lab Control Sample	Total/NA	Water	8270D	563528
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	563528
LCSD 400-563528/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	563528

Analysis Batch: 563844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-12	MW1-ROX-011222	Total/NA	Water	8270D LL	563528
400-214110-13	MW12-ROX-011222	Total/NA	Water	8270D LL	563528
400-214110-14	MW27-ROX-011222	Total/NA	Water	8270D LL	563528
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	8270D LL	563528
400-214110-16	MW10-ROX-011222	Total/NA	Water	8270D LL	563528
MB 400-563528/1-A	Method Blank	Total/NA	Water	8270D LL	563528
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	8270D LL	563528
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	563528

GC Semi VOA

Analysis Batch: 563930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-1	TB-ROX-011222-8011-B	Total/NA	Water	8011	563931
400-214110-3	P56-ROX-011222	Total/NA	Water	8011	563931
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	8011	563931
400-214110-5	P93A-ROX-011222	Total/NA	Water	8011	563931
400-214110-6	MW28-ROX-011222	Total/NA	Water	8011	563931
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	8011	563931
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	8011	563931
400-214110-10	TB-ROX-011222-8011-A	Total/NA	Water	8011	563931
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	8011	563931
400-214110-12	MW1-ROX-011222	Total/NA	Water	8011	563931
400-214110-13	MW12-ROX-011222	Total/NA	Water	8011	563931
400-214110-14	MW27-ROX-011222	Total/NA	Water	8011	563931
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	8011	563931
400-214110-16	MW10-ROX-011222	Total/NA	Water	8011	563931
MB 400-563931/1-A	Method Blank	Total/NA	Water	8011	563931
LCS 400-563931/2-A	Lab Control Sample	Total/NA	Water	8011	563931
LCSD 400-563931/3-A	Lab Control Sample Dup	Total/NA	Water	8011	563931

Prep Batch: 563931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-1	TB-ROX-011222-8011-B	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-214110-1

GC Semi VOA (Continued)

Prep Batch: 563931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214110-3	P56-ROX-011222	Total/NA	Water	8011	
400-214110-4	P56-ROX-011222-DUP	Total/NA	Water	8011	
400-214110-5	P93A-ROX-011222	Total/NA	Water	8011	
400-214110-6	MW28-ROX-011222	Total/NA	Water	8011	
400-214110-7	ROST4PZE-ROX-011222	Total/NA	Water	8011	
400-214110-8	ROST4PZE-ROX-011222-DUP	Total/NA	Water	8011	
400-214110-10	TB-ROX-011222-8011-A	Total/NA	Water	8011	
400-214110-11	MW1-ROX-011222-EB	Total/NA	Water	8011	
400-214110-12	MW1-ROX-011222	Total/NA	Water	8011	
400-214110-13	MW12-ROX-011222	Total/NA	Water	8011	
400-214110-14	MW27-ROX-011222	Total/NA	Water	8011	
400-214110-15	MW10-ROX-011222-EB	Total/NA	Water	8011	
400-214110-16	MW10-ROX-011222	Total/NA	Water	8011	
MB 400-563931/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563931/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-563931/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563659/5
Matrix: Water
Analysis Batch: 563659

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 12:37	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 12:37	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 12:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*72 - 119*		*01/19/22 12:37*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*01/19/22 12:37*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/19/22 12:37*	*1*

Lab Sample ID: LCS 400-563659/1002
Matrix: Water
Analysis Batch: 563659

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	50.0	48.6		ug/L		97	67 - 133
Dibromochloromethane	50.0	50.7		ug/L		101	67 - 135
Chloroform	50.0	42.8		ug/L		86	69 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*98*		*75 - 126*
Toluene-d8 (Surr)	*106*		*64 - 132*

Lab Sample ID: MB 400-563826/5
Matrix: Water
Analysis Batch: 563826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/20/22 13:54	1
Acrolein	ND		20	3.3	ug/L			01/20/22 13:54	1
Acrylonitrile	ND		10	2.8	ug/L			01/20/22 13:54	1
Benzene	ND		1.0	0.13	ug/L			01/20/22 13:54	1
Bromobenzene	ND		1.0	0.54	ug/L			01/20/22 13:54	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/20/22 13:54	1
Bromoform	ND		5.0	0.25	ug/L			01/20/22 13:54	1
Bromomethane	ND		1.0	0.98	ug/L			01/20/22 13:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/20/22 13:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/20/22 13:54	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/20/22 13:54	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/20/22 13:54	1
Chloroethane	ND		1.0	0.76	ug/L			01/20/22 13:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/20/22 13:54	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/20/22 13:54	1
Chloromethane	ND		1.0	0.32	ug/L			01/20/22 13:54	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/20/22 13:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/20/22 13:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/20/22 13:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/20/22 13:54	1

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

Lab Sample ID: MB 400-563826/5
Matrix: Water
Analysis Batch: 563826

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/20/22 13:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/20/22 13:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/20/22 13:54	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/20/22 13:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 13:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 13:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 13:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/20/22 13:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/20/22 13:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/20/22 13:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/20/22 13:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/20/22 13:54	1
2-Hexanone	ND		25	1.4	ug/L			01/20/22 13:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/20/22 13:54	1
Methylene bromide	ND		5.0	0.22	ug/L			01/20/22 13:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/20/22 13:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/20/22 13:54	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/20/22 13:54	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/20/22 13:54	1
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 13:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/20/22 13:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/20/22 13:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/20/22 13:54	1
o-Xylene	ND		5.0	0.60	ug/L			01/20/22 13:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/20/22 13:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/20/22 13:54	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/20/22 13:54	1
Styrene	ND		1.0	1.0	ug/L			01/20/22 13:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/20/22 13:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/20/22 13:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/20/22 13:54	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/20/22 13:54	1
Toluene	ND		1.0	0.41	ug/L			01/20/22 13:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/20/22 13:54	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/20/22 13:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/20/22 13:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/20/22 13:54	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/20/22 13:54	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/20/22 13:54	1
Trichloroethene	ND		1.0	0.15	ug/L			01/20/22 13:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/20/22 13:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/20/22 13:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 13:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/20/22 13:54	1
Vinyl acetate	ND		25	0.93	ug/L			01/20/22 13:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/20/22 13:54	1
Xylenes, Total	ND		10	1.6	ug/L			01/20/22 13:54	1

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

Lab Sample ID: MB 400-563826/5
Matrix: Water
Analysis Batch: 563826

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		72 - 119		01/20/22 13:54	1
Dibromofluoromethane	106		75 - 126		01/20/22 13:54	1
Toluene-d8 (Surr)	91		64 - 132		01/20/22 13:54	1

Lab Sample ID: LCS 400-563826/1002
Matrix: Water
Analysis Batch: 563826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	220		ug/L		110	43 - 160
Acrolein	500	568		ug/L		114	38 - 160
Acrylonitrile	500	547		ug/L		109	64 - 142
Benzene	50.0	57.2		ug/L		114	70 - 130
Bromobenzene	50.0	47.8		ug/L		96	70 - 132
Bromochloromethane	50.0	58.1		ug/L		116	70 - 130
Bromoform	50.0	43.5		ug/L		87	57 - 140
Bromomethane	50.0	91.1	*+	ug/L		182	10 - 160
2-Butanone (MEK)	200	210		ug/L		105	61 - 145
Carbon disulfide	50.0	56.7		ug/L		113	61 - 137
Carbon tetrachloride	50.0	55.2		ug/L		110	61 - 137
Chlorobenzene	50.0	50.9		ug/L		102	70 - 130
Chloroethane	50.0	68.3		ug/L		137	55 - 141
2-Chloroethyl vinyl ether	50.0	57.3		ug/L		115	10 - 160
1-Chlorohexane	50.0	49.7		ug/L		99	69 - 130
Chloromethane	50.0	61.5		ug/L		123	58 - 137
cis-1,2-Dichloroethene	50.0	55.7		ug/L		111	68 - 130
cis-1,3-Dichloropropene	50.0	54.0		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	48.6		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	48.9		ug/L		98	70 - 130
1,4-Dichlorobenzene	50.0	48.9		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	58.8		ug/L		118	41 - 146
1,1-Dichloroethane	50.0	55.9		ug/L		112	70 - 130
1,2-Dichloroethane	50.0	54.9		ug/L		110	69 - 130
1,1-Dichloroethene	50.0	54.4		ug/L		109	63 - 134
1,2-Dichloropropane	50.0	56.0		ug/L		112	70 - 130
1,3-Dichloropropane	50.0	48.8		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	51.8		ug/L		104	52 - 135
1,1-Dichloropropene	50.0	56.9		ug/L		114	70 - 130
Ethylbenzene	50.0	49.8		ug/L		100	70 - 130
Ethyl methacrylate	50.0	45.2		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	51.8		ug/L		104	53 - 140
2-Hexanone	200	175		ug/L		88	65 - 137
Isopropylbenzene	50.0	50.5		ug/L		101	70 - 130
Methylene bromide	50.0	57.3		ug/L		115	70 - 130
Methylene Chloride	50.0	55.1		ug/L		110	66 - 135
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	52.2		ug/L		104	66 - 130
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	70 - 130

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

Lab Sample ID: LCS 400-563826/1002
Matrix: Water
Analysis Batch: 563826

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	50.0	43.3		ug/L		87	47 - 149
n-Butylbenzene	50.0	51.5		ug/L		103	67 - 130
N-Propylbenzene	50.0	48.8		ug/L		98	70 - 130
o-Chlorotoluene	50.0	48.1		ug/L		96	70 - 130
o-Xylene	50.0	49.1		ug/L		98	70 - 130
p-Chlorotoluene	50.0	46.6		ug/L		93	70 - 130
p-Isopropyltoluene	50.0	47.3		ug/L		95	65 - 130
sec-Butylbenzene	50.0	48.7		ug/L		97	66 - 130
Styrene	50.0	49.7		ug/L		99	70 - 130
tert-Butylbenzene	50.0	45.8		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.1		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.6		ug/L		91	70 - 131
Tetrachloroethene	50.0	51.6		ug/L		103	65 - 130
Toluene	50.0	47.0		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	55.3		ug/L		111	70 - 130
trans-1,3-Dichloropropene	50.0	47.0		ug/L		94	63 - 130
1,2,3-Trichlorobenzene	50.0	47.4		ug/L		95	60 - 138
1,2,4-Trichlorobenzene	50.0	48.5		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	56.5		ug/L		113	68 - 130
1,1,2-Trichloroethane	50.0	48.5		ug/L		97	70 - 130
Trichloroethene	50.0	58.5		ug/L		117	70 - 130
Trichlorofluoromethane	50.0	62.5		ug/L		125	65 - 138
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	48.0		ug/L		96	70 - 130
1,3,5-Trimethylbenzene	50.0	47.3		ug/L		95	69 - 130
Vinyl acetate	100	116		ug/L		116	26 - 160
Vinyl chloride	50.0	62.4		ug/L		125	59 - 136
Xylenes, Total	100	97.2		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*72 - 119*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*91*		*64 - 132*

Lab Sample ID: 400-214110-3 MS
Matrix: Water
Analysis Batch: 563826

Client Sample ID: P56-ROX-011222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	24	J	200	222		ug/L		99	43 - 150
Acrolein	ND		500	640		ug/L		128	38 - 150
Acrylonitrile	ND		500	575		ug/L		115	62 - 149
Benzene	0.60	J	50.0	59.0		ug/L		117	56 - 142
Bromobenzene	ND		50.0	46.7		ug/L		93	59 - 136
Bromochloromethane	ND		50.0	59.0		ug/L		118	64 - 140
Bromoform	ND		50.0	44.9		ug/L		90	50 - 140
Bromomethane	ND	F1 *+	50.0	99.9	F1	ug/L		200	10 - 150
2-Butanone (MEK)	4.0	J	200	216		ug/L		106	55 - 150

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

Lab Sample ID: 400-214110-3 MS
Matrix: Water
Analysis Batch: 563826

Client Sample ID: P56-ROX-011222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	ND		50.0	57.2		ug/L		114	48 - 150
Carbon tetrachloride	ND		50.0	56.2		ug/L		112	55 - 145
Chlorobenzene	ND		50.0	49.4		ug/L		99	64 - 130
Chloroethane	ND	F1	50.0	75.7	F1	ug/L		151	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
1-Chlorohexane	ND		50.0	46.8		ug/L		94	56 - 136
Chloromethane	ND		50.0	69.1		ug/L		138	49 - 148
cis-1,2-Dichloroethene	ND		50.0	57.0		ug/L		114	59 - 143
cis-1,3-Dichloropropene	ND		50.0	56.5		ug/L		113	57 - 140
1,2-Dichlorobenzene	ND		50.0	45.7		ug/L		91	52 - 137
1,3-Dichlorobenzene	ND		50.0	45.0		ug/L		90	54 - 135
1,4-Dichlorobenzene	ND		50.0	44.7		ug/L		89	53 - 135
Dichlorodifluoromethane	ND		50.0	65.9		ug/L		132	16 - 150
1,1-Dichloroethane	ND		50.0	57.9		ug/L		116	61 - 144
1,2-Dichloroethane	ND		50.0	58.0		ug/L		116	60 - 141
1,1-Dichloroethene	ND		50.0	55.9		ug/L		112	54 - 147
1,2-Dichloropropane	ND		50.0	60.9		ug/L		122	66 - 137
1,3-Dichloropropane	ND		50.0	49.8		ug/L		100	66 - 133
2,2-Dichloropropane	ND		50.0	53.8		ug/L		108	42 - 144
1,1-Dichloropropene	ND		50.0	58.1		ug/L		116	65 - 136
Ethylbenzene	1.0		50.0	48.8		ug/L		96	58 - 131
Ethyl methacrylate	ND		50.0	42.9		ug/L		86	64 - 130
Hexachlorobutadiene	ND		50.0	43.5		ug/L		87	31 - 149
2-Hexanone	ND		200	178		ug/L		89	65 - 140
Isopropylbenzene	12		50.0	58.8		ug/L		93	56 - 133
Methylene bromide	ND		50.0	59.2		ug/L		118	63 - 138
Methylene Chloride	ND		50.0	58.0		ug/L		116	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	220		ug/L		110	63 - 146
Methyl tert-butyl ether	ND		50.0	54.8		ug/L		110	59 - 137
m-Xylene & p-Xylene	24		50.0	67.6		ug/L		88	57 - 130
Naphthalene	1.7		50.0	45.6		ug/L		88	25 - 150
n-Butylbenzene	0.94	J	50.0	44.7		ug/L		88	41 - 142
N-Propylbenzene	14		50.0	56.9		ug/L		85	51 - 138
o-Chlorotoluene	ND		50.0	46.2		ug/L		92	53 - 134
o-Xylene	0.78	J	50.0	47.9		ug/L		94	61 - 130
p-Chlorotoluene	ND		50.0	43.2		ug/L		86	54 - 133
p-Isopropyltoluene	0.92	J	50.0	42.9		ug/L		84	48 - 139
sec-Butylbenzene	1.8		50.0	45.7		ug/L		88	50 - 138
Styrene	ND		50.0	48.2		ug/L		96	58 - 131
tert-Butylbenzene	ND		50.0	42.7		ug/L		85	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	49.2		ug/L		98	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	45.8		ug/L		92	66 - 135
Tetrachloroethene	ND		50.0	47.9		ug/L		96	52 - 133
Toluene	0.82	J	50.0	47.0		ug/L		92	65 - 130
trans-1,2-Dichloroethene	ND		50.0	56.7		ug/L		113	61 - 143
trans-1,3-Dichloropropene	ND		50.0	48.5		ug/L		97	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	43.9		ug/L		88	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	44.3		ug/L		89	39 - 148
1,1,1-Trichloroethane	ND		50.0	57.6		ug/L		115	57 - 142

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

Lab Sample ID: 400-214110-3 MS
Matrix: Water
Analysis Batch: 563826

Client Sample ID: P56-ROX-011222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	ND		50.0	51.3		ug/L		103	66 - 131
Trichloroethene	ND		50.0	58.6		ug/L		117	64 - 136
Trichlorofluoromethane	ND		50.0	75.2		ug/L		150	54 - 150
1,2,3-Trichloropropane	ND		50.0	46.6		ug/L		93	65 - 133
1,2,4-Trimethylbenzene	11		50.0	54.6		ug/L		86	50 - 139
1,3,5-Trimethylbenzene	3.4		50.0	46.8		ug/L		87	52 - 135
Vinyl acetate	ND		100	134		ug/L		134	26 - 150
Vinyl chloride	ND		50.0	73.1		ug/L		146	46 - 150
Xylenes, Total	25		100	115		ug/L		91	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*90*		*64 - 132*

Lab Sample ID: 400-214110-3 MSD
Matrix: Water
Analysis Batch: 563826

Client Sample ID: P56-ROX-011222
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	24	J	200	243		ug/L		110	43 - 150	9	30
Acrolein	ND		500	558		ug/L		112	38 - 150	14	31
Acrylonitrile	ND		500	627		ug/L		125	62 - 149	9	30
Benzene	0.60	J	50.0	63.7		ug/L		126	56 - 142	8	30
Bromobenzene	ND		50.0	49.4		ug/L		99	59 - 136	6	30
Bromochloromethane	ND		50.0	63.9		ug/L		128	64 - 140	8	30
Bromoform	ND		50.0	48.6		ug/L		97	50 - 140	8	30
Bromomethane	ND	F1 *+	50.0	90.3	F1	ug/L		181	10 - 150	10	50
2-Butanone (MEK)	4.0	J	200	242		ug/L		119	55 - 150	11	30
Carbon disulfide	ND		50.0	61.2		ug/L		122	48 - 150	7	30
Carbon tetrachloride	ND		50.0	61.0		ug/L		122	55 - 145	8	30
Chlorobenzene	ND		50.0	53.1		ug/L		106	64 - 130	7	30
Chloroethane	ND	F1	50.0	62.1		ug/L		124	50 - 150	20	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
1-Chlorohexane	ND		50.0	50.1		ug/L		100	56 - 136	7	30
Chloromethane	ND		50.0	57.3		ug/L		115	49 - 148	19	31
cis-1,2-Dichloroethene	ND		50.0	61.4		ug/L		123	59 - 143	7	30
cis-1,3-Dichloropropene	ND		50.0	61.6		ug/L		123	57 - 140	9	30
1,2-Dichlorobenzene	ND		50.0	48.6		ug/L		97	52 - 137	6	30
1,3-Dichlorobenzene	ND		50.0	47.8		ug/L		96	54 - 135	6	30
1,4-Dichlorobenzene	ND		50.0	47.2		ug/L		94	53 - 135	5	30
Dichlorodifluoromethane	ND		50.0	55.1		ug/L		110	16 - 150	18	31
1,1-Dichloroethane	ND		50.0	62.6		ug/L		125	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	62.8		ug/L		126	60 - 141	8	30
1,1-Dichloroethene	ND		50.0	60.4		ug/L		121	54 - 147	8	30
1,2-Dichloropropane	ND		50.0	63.1		ug/L		126	66 - 137	4	30
1,3-Dichloropropane	ND		50.0	54.2		ug/L		108	66 - 133	8	30
2,2-Dichloropropane	ND		50.0	58.1		ug/L		116	42 - 144	8	31

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

Lab Sample ID: 400-214110-3 MSD
Matrix: Water
Analysis Batch: 563826

Client Sample ID: P56-ROX-011222
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	61.7		ug/L		123	65 - 136	6	30
Ethylbenzene	1.0		50.0	52.0		ug/L		102	58 - 131	6	30
Ethyl methacrylate	ND		50.0	52.1		ug/L		104	64 - 130	19	30
Hexachlorobutadiene	ND		50.0	46.8		ug/L		94	31 - 149	7	36
2-Hexanone	ND		200	203		ug/L		101	65 - 140	13	30
Isopropylbenzene	12		50.0	61.7		ug/L		99	56 - 133	5	30
Methylene bromide	ND		50.0	65.0		ug/L		130	63 - 138	9	30
Methylene Chloride	ND		50.0	61.4		ug/L		123	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	244		ug/L		122	63 - 146	10	30
Methyl tert-butyl ether	ND		50.0	60.2		ug/L		120	59 - 137	9	30
m-Xylene & p-Xylene	24		50.0	69.8		ug/L		92	57 - 130	3	30
Naphthalene	1.7		50.0	49.2		ug/L		95	25 - 150	8	30
n-Butylbenzene	0.94	J	50.0	45.9		ug/L		90	41 - 142	3	31
N-Propylbenzene	14		50.0	59.0		ug/L		90	51 - 138	4	30
o-Chlorotoluene	ND		50.0	46.9		ug/L		94	53 - 134	2	30
o-Xylene	0.78	J	50.0	51.0		ug/L		101	61 - 130	6	30
p-Chlorotoluene	ND		50.0	45.6		ug/L		91	54 - 133	5	30
p-Isopropyltoluene	0.92	J	50.0	45.3		ug/L		89	48 - 139	5	30
sec-Butylbenzene	1.8		50.0	48.0		ug/L		92	50 - 138	5	30
Styrene	ND		50.0	51.2		ug/L		102	58 - 131	6	30
tert-Butylbenzene	ND		50.0	46.4		ug/L		93	54 - 146	8	30
1,1,1,2-Tetrachloroethane	ND		50.0	53.1		ug/L		106	59 - 137	7	30
1,1,2,2-Tetrachloroethane	ND		50.0	50.2		ug/L		100	66 - 135	9	30
Tetrachloroethene	ND		50.0	51.1		ug/L		102	52 - 133	7	30
Toluene	0.82	J	50.0	50.2		ug/L		99	65 - 130	7	30
trans-1,2-Dichloroethene	ND		50.0	60.9		ug/L		122	61 - 143	7	30
trans-1,3-Dichloropropene	ND		50.0	51.6		ug/L		103	53 - 133	6	30
1,2,3-Trichlorobenzene	ND		50.0	47.3		ug/L		95	43 - 145	7	30
1,2,4-Trichlorobenzene	ND		50.0	48.0		ug/L		96	39 - 148	8	30
1,1,1-Trichloroethane	ND		50.0	62.2		ug/L		124	57 - 142	8	30
1,1,2-Trichloroethane	ND		50.0	55.2		ug/L		110	66 - 131	7	30
Trichloroethene	ND		50.0	62.7		ug/L		125	64 - 136	7	30
Trichlorofluoromethane	ND		50.0	62.8		ug/L		126	54 - 150	18	30
1,2,3-Trichloropropane	ND		50.0	49.9		ug/L		100	65 - 133	7	30
1,2,4-Trimethylbenzene	11		50.0	56.7		ug/L		91	50 - 139	4	30
1,3,5-Trimethylbenzene	3.4		50.0	48.9		ug/L		91	52 - 135	4	30
Vinyl acetate	ND		100	112		ug/L		112	26 - 150	18	33
Vinyl chloride	ND		50.0	60.5		ug/L		121	46 - 150	19	30
Xylenes, Total	25		100	121		ug/L		96	59 - 130	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*72 - 119*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*88*		*64 - 132*

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

Lab Sample ID: MB 400-564007/5
Matrix: Water
Analysis Batch: 564007

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/22/22 10:02	1
Acrolein	ND		20	3.3	ug/L			01/22/22 10:02	1
Acrylonitrile	ND		10	2.8	ug/L			01/22/22 10:02	1
Benzene	ND		1.0	0.13	ug/L			01/22/22 10:02	1
Bromobenzene	ND		1.0	0.54	ug/L			01/22/22 10:02	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/22/22 10:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Bromoform	ND		5.0	0.25	ug/L			01/22/22 10:02	1
Bromomethane	ND		1.0	0.98	ug/L			01/22/22 10:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/22/22 10:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/22/22 10:02	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/22/22 10:02	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/22/22 10:02	1
Chloroethane	ND		1.0	0.76	ug/L			01/22/22 10:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/22/22 10:02	1
Chloroform	ND		1.0	0.60	ug/L			01/22/22 10:02	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/22/22 10:02	1
Chloromethane	ND		1.0	0.32	ug/L			01/22/22 10:02	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/22/22 10:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/22/22 10:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/22/22 10:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/22/22 10:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/22/22 10:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/22/22 10:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/22/22 10:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/22/22 10:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/22/22 10:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/22/22 10:02	1
2-Hexanone	ND		25	1.4	ug/L			01/22/22 10:02	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/22/22 10:02	1
Methylene bromide	ND		5.0	0.22	ug/L			01/22/22 10:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/22/22 10:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/22/22 10:02	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/22/22 10:02	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/22/22 10:02	1
Naphthalene	ND		1.0	1.0	ug/L			01/22/22 10:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/22/22 10:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/22/22 10:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/22/22 10:02	1
o-Xylene	ND		5.0	0.60	ug/L			01/22/22 10:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/22/22 10:02	1

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

Lab Sample ID: MB 400-564007/5
Matrix: Water
Analysis Batch: 564007

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/22/22 10:02	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/22/22 10:02	1
Styrene	ND		1.0	1.0	ug/L			01/22/22 10:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/22/22 10:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/22/22 10:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/22/22 10:02	1
Toluene	ND		1.0	0.41	ug/L			01/22/22 10:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/22/22 10:02	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/22/22 10:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/22/22 10:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/22/22 10:02	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/22/22 10:02	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/22/22 10:02	1
Trichloroethene	ND		1.0	0.15	ug/L			01/22/22 10:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/22/22 10:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/22/22 10:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/22/22 10:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/22/22 10:02	1
Vinyl acetate	ND		25	0.93	ug/L			01/22/22 10:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/22/22 10:02	1
Xylenes, Total	ND		10	1.6	ug/L			01/22/22 10:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 119*		*01/22/22 10:02*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/22/22 10:02*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/22/22 10:02*	*1*

Lab Sample ID: LCS 400-564007/1002
Matrix: Water
Analysis Batch: 564007

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	176		ug/L		88	43 - 160
Acrolein	500	301		ug/L		60	38 - 160
Acrylonitrile	500	449		ug/L		90	64 - 142
Benzene	50.0	47.6		ug/L		95	70 - 130
Bromobenzene	50.0	46.2		ug/L		92	70 - 132
Bromochloromethane	50.0	49.6		ug/L		99	70 - 130
Bromodichloromethane	50.0	48.3		ug/L		97	67 - 133
Bromoform	50.0	42.7		ug/L		85	57 - 140
Bromomethane	50.0	30.4		ug/L		61	10 - 160
2-Butanone (MEK)	200	172		ug/L		86	61 - 145
Carbon disulfide	50.0	43.2		ug/L		86	61 - 137
Carbon tetrachloride	50.0	47.8		ug/L		96	61 - 137
Chlorobenzene	50.0	49.3		ug/L		99	70 - 130
Dibromochloromethane	50.0	48.1		ug/L		96	67 - 135
Chloroethane	50.0	35.0		ug/L		70	55 - 141

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

Lab Sample ID: LCS 400-564007/1002
Matrix: Water
Analysis Batch: 564007

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	42.3		ug/L		85	10 - 160
Chloroform	50.0	48.3		ug/L		97	69 - 130
1-Chlorohexane	50.0	46.2		ug/L		92	69 - 130
Chloromethane	50.0	35.5		ug/L		71	58 - 137
cis-1,2-Dichloroethene	50.0	44.7		ug/L		89	68 - 130
cis-1,3-Dichloropropene	50.0	46.2		ug/L		92	69 - 132
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
Dichlorodifluoromethane	50.0	37.9		ug/L		76	41 - 146
1,1-Dichloroethane	50.0	44.9		ug/L		90	70 - 130
1,2-Dichloroethane	50.0	45.0		ug/L		90	69 - 130
1,1-Dichloroethene	50.0	41.3		ug/L		83	63 - 134
1,2-Dichloropropane	50.0	44.5		ug/L		89	70 - 130
1,3-Dichloropropane	50.0	45.5		ug/L		91	70 - 130
2,2-Dichloropropane	50.0	38.1		ug/L		76	52 - 135
1,1-Dichloropropene	50.0	46.7		ug/L		93	70 - 130
Ethylbenzene	50.0	48.2		ug/L		96	70 - 130
Ethyl methacrylate	50.0	43.5		ug/L		87	68 - 130
Hexachlorobutadiene	50.0	52.5		ug/L		105	53 - 140
2-Hexanone	200	163		ug/L		81	65 - 137
Isopropylbenzene	50.0	50.5		ug/L		101	70 - 130
Methylene bromide	50.0	49.4		ug/L		99	70 - 130
Methylene Chloride	50.0	45.7		ug/L		91	66 - 135
4-Methyl-2-pentanone (MIBK)	200	167		ug/L		83	69 - 138
Methyl tert-butyl ether	50.0	42.5		ug/L		85	66 - 130
m-Xylene & p-Xylene	50.0	48.2		ug/L		96	70 - 130
Naphthalene	50.0	43.9		ug/L		88	47 - 149
n-Butylbenzene	50.0	45.9		ug/L		92	67 - 130
N-Propylbenzene	50.0	45.8		ug/L		92	70 - 130
o-Chlorotoluene	50.0	44.9		ug/L		90	70 - 130
o-Xylene	50.0	47.3		ug/L		95	70 - 130
p-Chlorotoluene	50.0	46.1		ug/L		92	70 - 130
p-Isopropyltoluene	50.0	46.7		ug/L		93	65 - 130
sec-Butylbenzene	50.0	47.6		ug/L		95	66 - 130
Styrene	50.0	48.3		ug/L		97	70 - 130
tert-Butylbenzene	50.0	44.7		ug/L		89	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.8		ug/L		96	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.5		ug/L		85	70 - 131
Tetrachloroethene	50.0	49.8		ug/L		100	65 - 130
Toluene	50.0	46.9		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	47.1		ug/L		94	70 - 130
trans-1,3-Dichloropropene	50.0	42.2		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	48.0		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 140
1,1,1-Trichloroethane	50.0	47.7		ug/L		95	68 - 130
1,1,2-Trichloroethane	50.0	46.2		ug/L		92	70 - 130
Trichloroethene	50.0	51.4		ug/L		103	70 - 130
Trichlorofluoromethane	50.0	38.7		ug/L		77	65 - 138

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

Lab Sample ID: LCS 400-564007/1002
Matrix: Water
Analysis Batch: 564007

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	45.2		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	46.0		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	50.0	46.4		ug/L		93	69 - 130
Vinyl acetate	100	82.0		ug/L		82	26 - 160
Vinyl chloride	50.0	33.0		ug/L		66	59 - 136
Xylenes, Total	100	95.5		ug/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*72 - 119*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-214110-11 MS
Matrix: Water
Analysis Batch: 564007

Client Sample ID: MW1-ROX-011222-EB
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	107		ug/L		53	43 - 150
Acrolein	ND		500	242		ug/L		48	38 - 150
Acrylonitrile	ND	F1	500	279	F1	ug/L		56	62 - 149
Benzene	ND		50.0	43.1		ug/L		86	56 - 142
Bromobenzene	ND		50.0	40.9		ug/L		82	59 - 136
Bromochloromethane	ND		50.0	39.8		ug/L		80	64 - 140
Bromodichloromethane	ND		50.0	40.1		ug/L		80	59 - 143
Bromoform	ND		50.0	31.5		ug/L		63	50 - 140
Bromomethane	ND		50.0	32.5		ug/L		65	10 - 150
2-Butanone (MEK)	3.3	J	200	113		ug/L		55	55 - 150
Carbon disulfide	ND		50.0	40.0		ug/L		80	48 - 150
Carbon tetrachloride	ND		50.0	44.1		ug/L		88	55 - 145
Chlorobenzene	ND		50.0	43.7		ug/L		87	64 - 130
Dibromochloromethane	ND		50.0	37.8		ug/L		76	56 - 143
Chloroethane	ND		50.0	38.7		ug/L		77	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	43.3		ug/L		87	60 - 141
1-Chlorohexane	ND		50.0	41.9		ug/L		84	56 - 136
Chloromethane	ND		50.0	38.1		ug/L		76	49 - 148
cis-1,2-Dichloroethene	ND		50.0	39.3		ug/L		79	59 - 143
cis-1,3-Dichloropropene	ND		50.0	36.7		ug/L		73	57 - 140
1,2-Dichlorobenzene	ND		50.0	40.4		ug/L		81	52 - 137
1,3-Dichlorobenzene	ND		50.0	40.0		ug/L		80	54 - 135
1,4-Dichlorobenzene	ND		50.0	41.0		ug/L		82	53 - 135
Dichlorodifluoromethane	ND		50.0	44.6		ug/L		89	16 - 150
1,1-Dichloroethane	ND		50.0	41.3		ug/L		83	61 - 144
1,2-Dichloroethane	ND		50.0	34.6		ug/L		69	60 - 141
1,1-Dichloroethene	ND		50.0	40.3		ug/L		81	54 - 147
1,2-Dichloropropane	ND		50.0	39.1		ug/L		78	66 - 137
1,3-Dichloropropane	ND		50.0	36.3		ug/L		73	66 - 133
2,2-Dichloropropane	ND		50.0	35.3		ug/L		71	42 - 144

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

Lab Sample ID: 400-214110-11 MS
Matrix: Water
Analysis Batch: 564007

Client Sample ID: MW1-ROX-011222-EB
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	42.6		ug/L		85	65 - 136
Ethylbenzene	ND		50.0	43.3		ug/L		87	58 - 131
Ethyl methacrylate	ND		50.0	32.5		ug/L		65	64 - 130
Hexachlorobutadiene	ND		50.0	44.2		ug/L		88	31 - 149
2-Hexanone	ND	F1	200	110	F1	ug/L		55	65 - 140
Isopropylbenzene	ND		50.0	44.1		ug/L		88	56 - 133
Methylene bromide	ND		50.0	36.2		ug/L		72	63 - 138
Methylene Chloride	ND		50.0	40.2		ug/L		80	60 - 146
4-Methyl-2-pentanone (MIBK)	ND	F1	200	107	F1	ug/L		53	63 - 146
Methyl tert-butyl ether	ND		50.0	32.2		ug/L		64	59 - 137
m-Xylene & p-Xylene	ND		50.0	43.2		ug/L		86	57 - 130
Naphthalene	ND		50.0	35.2		ug/L		70	25 - 150
n-Butylbenzene	ND		50.0	40.1		ug/L		80	41 - 142
N-Propylbenzene	ND		50.0	41.1		ug/L		82	51 - 138
o-Chlorotoluene	ND		50.0	40.9		ug/L		82	53 - 134
o-Xylene	ND		50.0	41.5		ug/L		83	61 - 130
p-Chlorotoluene	ND		50.0	40.6		ug/L		81	54 - 133
p-Isopropyltoluene	ND		50.0	40.5		ug/L		81	48 - 139
sec-Butylbenzene	ND		50.0	42.7		ug/L		85	50 - 138
Styrene	ND		50.0	41.0		ug/L		82	58 - 131
tert-Butylbenzene	ND		50.0	41.2		ug/L		82	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	41.8		ug/L		84	59 - 137
1,1,2,2-Tetrachloroethane	ND	F1	50.0	32.6	F1	ug/L		65	66 - 135
Tetrachloroethene	ND		50.0	46.1		ug/L		92	52 - 133
Toluene	ND		50.0	44.3		ug/L		89	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.3		ug/L		89	61 - 143
trans-1,3-Dichloropropene	ND		50.0	34.2		ug/L		68	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	39.0		ug/L		78	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	40.4		ug/L		81	39 - 148
1,1,1-Trichloroethane	ND		50.0	44.5		ug/L		89	57 - 142
1,1,2-Trichloroethane	ND		50.0	37.6		ug/L		75	66 - 131
Trichloroethene	ND		50.0	45.9		ug/L		92	64 - 136
Trichlorofluoromethane	ND		50.0	43.4		ug/L		87	54 - 150
1,2,3-Trichloropropane	ND		50.0	34.3		ug/L		69	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	41.5		ug/L		83	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	41.8		ug/L		84	52 - 135
Vinyl acetate	ND		100	65.6		ug/L		66	26 - 150
Vinyl chloride	ND		50.0	36.6		ug/L		73	46 - 150
Xylenes, Total	ND		100	84.7		ug/L		85	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*72 - 119*
Dibromofluoromethane	*94*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: 400-214110-11 MSD
Matrix: Water
Analysis Batch: 564007

Client Sample ID: MW1-ROX-011222-EB
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	107		ug/L		53	43 - 150	0	30
Acrolein	ND		500	216		ug/L		43	38 - 150	11	31
Acrylonitrile	ND	F1	500	308		ug/L		62	62 - 149	10	30
Benzene	ND		50.0	46.5		ug/L		93	56 - 142	8	30
Bromobenzene	ND		50.0	43.8		ug/L		88	59 - 136	7	30
Bromochloromethane	ND		50.0	44.0		ug/L		88	64 - 140	10	30
Bromodichloromethane	ND		50.0	43.9		ug/L		88	59 - 143	9	30
Bromoform	ND		50.0	35.5		ug/L		71	50 - 140	12	30
Bromomethane	ND		50.0	35.4		ug/L		71	10 - 150	9	50
2-Butanone (MEK)	3.3	J	200	127		ug/L		62	55 - 150	12	30
Carbon disulfide	ND		50.0	45.1		ug/L		90	48 - 150	12	30
Carbon tetrachloride	ND		50.0	49.2		ug/L		98	55 - 145	11	30
Chlorobenzene	ND		50.0	45.1		ug/L		90	64 - 130	3	30
Dibromochloromethane	ND		50.0	41.8		ug/L		84	56 - 143	10	30
Chloroethane	ND		50.0	33.5		ug/L		67	50 - 150	14	30
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	47.5		ug/L		95	60 - 141	9	30
1-Chlorohexane	ND		50.0	41.1		ug/L		82	56 - 136	2	30
Chloromethane	ND		50.0	39.6		ug/L		79	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	42.7		ug/L		85	59 - 143	8	30
cis-1,3-Dichloropropene	ND		50.0	39.9		ug/L		80	57 - 140	8	30
1,2-Dichlorobenzene	ND		50.0	41.9		ug/L		84	52 - 137	4	30
1,3-Dichlorobenzene	ND		50.0	41.0		ug/L		82	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	42.0		ug/L		84	53 - 135	2	30
Dichlorodifluoromethane	ND		50.0	46.6		ug/L		93	16 - 150	4	31
1,1-Dichloroethane	ND		50.0	45.9		ug/L		92	61 - 144	11	30
1,2-Dichloroethane	ND		50.0	38.9		ug/L		78	60 - 141	12	30
1,1-Dichloroethene	ND		50.0	38.3		ug/L		77	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	42.0		ug/L		84	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	39.5		ug/L		79	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	40.0		ug/L		80	42 - 144	13	31
1,1-Dichloropropene	ND		50.0	47.0		ug/L		94	65 - 136	10	30
Ethylbenzene	ND		50.0	44.1		ug/L		88	58 - 131	2	30
Ethyl methacrylate	ND		50.0	35.6		ug/L		71	64 - 130	9	30
Hexachlorobutadiene	ND		50.0	44.8		ug/L		90	31 - 149	1	36
2-Hexanone	ND	F1	200	122	F1	ug/L		61	65 - 140	11	30
Isopropylbenzene	ND		50.0	43.9		ug/L		88	56 - 133	0	30
Methylene bromide	ND		50.0	40.7		ug/L		81	63 - 138	12	30
Methylene Chloride	ND		50.0	44.7		ug/L		89	60 - 146	10	32
4-Methyl-2-pentanone (MIBK)	ND	F1	200	120	F1	ug/L		60	63 - 146	11	30
Methyl tert-butyl ether	ND		50.0	36.8		ug/L		74	59 - 137	13	30
m-Xylene & p-Xylene	ND		50.0	43.3		ug/L		87	57 - 130	0	30
Naphthalene	ND		50.0	37.2		ug/L		74	25 - 150	6	30
n-Butylbenzene	ND		50.0	39.6		ug/L		79	41 - 142	1	31
N-Propylbenzene	ND		50.0	41.4		ug/L		83	51 - 138	1	30
o-Chlorotoluene	ND		50.0	42.8		ug/L		86	53 - 134	5	30
o-Xylene	ND		50.0	42.1		ug/L		84	61 - 130	1	30
p-Chlorotoluene	ND		50.0	41.6		ug/L		83	54 - 133	2	30

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

Lab Sample ID: 400-214110-11 MSD
Matrix: Water
Analysis Batch: 564007

Client Sample ID: MW1-ROX-011222-EB
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	40.6		ug/L		81	48 - 139	0	30
sec-Butylbenzene	ND		50.0	42.4		ug/L		85	50 - 138	0	30
Styrene	ND		50.0	41.7		ug/L		83	58 - 131	2	30
tert-Butylbenzene	ND		50.0	41.7		ug/L		83	54 - 146	1	30
1,1,1,2-Tetrachloroethane	ND		50.0	44.6		ug/L		89	59 - 137	7	30
1,1,2,2-Tetrachloroethane	ND	F1	50.0	36.1		ug/L		72	66 - 135	10	30
Tetrachloroethene	ND		50.0	47.3		ug/L		95	52 - 133	3	30
Toluene	ND		50.0	46.6		ug/L		93	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	48.6		ug/L		97	61 - 143	9	30
trans-1,3-Dichloropropene	ND		50.0	37.3		ug/L		75	53 - 133	9	30
1,2,3-Trichlorobenzene	ND		50.0	41.5		ug/L		83	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	41.2		ug/L		82	39 - 148	2	30
1,1,1-Trichloroethane	ND		50.0	49.1		ug/L		98	57 - 142	10	30
1,1,2-Trichloroethane	ND		50.0	40.5		ug/L		81	66 - 131	7	30
Trichloroethene	ND		50.0	49.3		ug/L		99	64 - 136	7	30
Trichlorofluoromethane	ND		50.0	36.6		ug/L		73	54 - 150	17	30
1,2,3-Trichloropropane	ND		50.0	38.8		ug/L		78	65 - 133	12	30
1,2,4-Trimethylbenzene	ND		50.0	41.4		ug/L		83	50 - 139	0	30
1,3,5-Trimethylbenzene	ND		50.0	42.1		ug/L		84	52 - 135	1	30
Vinyl acetate	ND		100	71.1		ug/L		71	26 - 150	8	33
Vinyl chloride	ND		50.0	37.0		ug/L		74	46 - 150	1	30
Xylenes, Total	ND		100	85.4		ug/L		85	59 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*72 - 119*
Dibromofluoromethane	*95*		*75 - 126*
Toluene-d8 (Surr)	*102*		*64 - 132*

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

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzenethiol	ND		10	1.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzoic acid	ND		30	7.3	ug/L		01/17/22 11:09	01/18/22 16:28	1
Benzyl alcohol	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/17/22 11:09	01/18/22 16:28	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/17/22 11:09	01/18/22 16:28	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Chloroaniline	ND		10	3.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Chlorophenol	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 16:28	1

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

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dibenzofuran	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Diethyl phthalate	ND		10	0.24	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/17/22 11:09	01/18/22 16:28	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
1,4-Dioxane	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
Hexachloroethane	ND		10	4.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
Indene	ND		10	1.0	ug/L		01/17/22 11:09	01/18/22 16:28	1
Isophorone	ND		10	0.14	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Methylphenol	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Nitroaniline	ND		10	2.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
3-Nitroaniline	ND		10	1.8	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Nitroaniline	ND		10	1.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
Nitrobenzene	ND		10	0.13	ug/L		01/17/22 11:09	01/18/22 16:28	1
2-Nitrophenol	ND		10	5.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
4-Nitrophenol	ND		10	2.1	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/17/22 11:09	01/18/22 16:28	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/17/22 11:09	01/18/22 16:28	1
Pentachlorophenol	ND		20	1.4	ug/L		01/17/22 11:09	01/18/22 16:28	1
Phenol	ND		10	2.6	ug/L		01/17/22 11:09	01/18/22 16:28	1
Pyridine	ND		10	3.2	ug/L		01/17/22 11:09	01/18/22 16:28	1
Quinoline	ND		10	4.5	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/17/22 11:09	01/18/22 16:28	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/17/22 11:09	01/18/22 16:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*46 - 124*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
2-Fluorophenol	*4*	*S1-*	*13 - 113*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Phenol-d5	*29*		*17 - 127*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
Terphenyl-d14	*80*		*44 - 149*	*01/17/22 11:09*	*01/18/22 16:28*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*01/17/22 11:09*	*01/18/22 16:28*	*1*

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

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.3		ug/L		51	21 - 120
Benzoic acid	498	278		ug/L		56	10 - 144
Benzyl alcohol	120	88.1		ug/L		73	28 - 120
Bis(2-chloroethoxy)methane	120	61.8		ug/L		52	47 - 120
Bis(2-chloroethyl)ether	120	68.0		ug/L		57	44 - 120
bis (2-chloroisopropyl) ether	120	83.7		ug/L		70	33 - 121
Bis(2-ethylhexyl) phthalate	120	98.2		ug/L		82	52 - 147
4-Bromophenyl phenyl ether	120	89.7		ug/L		75	54 - 122
Butyl benzyl phthalate	120	92.2		ug/L		77	54 - 133
4-Chloroaniline	120	59.5		ug/L		50	26 - 120
4-Chloro-3-methylphenol	120	81.6		ug/L		68	48 - 131
2-Chloronaphthalene	120	73.2		ug/L		61	52 - 121
2-Chlorophenol	120	48.4		ug/L		40	40 - 120
4-Chlorophenyl phenyl ether	120	80.5		ug/L		67	56 - 125
Dibenz[a,h]acridine	120	119		ug/L		99	31 - 150
Dibenzofuran	120	77.6		ug/L		65	56 - 122
3,3'-Dichlorobenzidine	160	111		ug/L		70	36 - 132
2,4-Dichlorophenol	120	57.1	*	ug/L		48	49 - 120
Diethyl phthalate	120	102		ug/L		85	50 - 137
2,4-Dimethylphenol	120	82.2		ug/L		69	48 - 120
Dimethyl phthalate	120	79.1		ug/L		66	57 - 124
Di-n-butyl phthalate	120	94.9		ug/L		79	58 - 126
4,6-Dinitro-ortho-cresol	240	291		ug/L		121	23 - 148
2,4-Dinitrophenol	240	312		ug/L		130	10 - 150
2,4-Dinitrotoluene	120	77.6		ug/L		65	54 - 142
2,6-Dinitrotoluene	120	65.6		ug/L		55	55 - 130
Di-n-octyl phthalate	120	96.4		ug/L		80	57 - 138
1,4-Dioxane	120	53.7		ug/L		45	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	81.8		ug/L		68	45 - 124
Hexachlorobenzene	120	114		ug/L		95	52 - 129
Hexachlorocyclopentadiene	120	87.9		ug/L		73	10 - 134
Hexachloroethane	120	80.7		ug/L		67	20 - 120
Indene	120	82.9		ug/L		69	49 - 120
Isophorone	120	69.1		ug/L		58	48 - 120
2-Methylphenol	120	82.6		ug/L		69	46 - 124
3 & 4 Methylphenol	120	88.7		ug/L		74	45 - 120
2-Nitroaniline	120	85.5		ug/L		71	51 - 145
3-Nitroaniline	120	74.4		ug/L		62	37 - 127
4-Nitroaniline	120	78.3		ug/L		65	36 - 137
Nitrobenzene	120	70.4		ug/L		59	45 - 120
2-Nitrophenol	120	51.4		ug/L		43	40 - 124
4-Nitrophenol	240	250		ug/L		104	23 - 146
N-Nitrosodimethylamine	120	112		ug/L		94	29 - 137
N-Nitrosodi-n-propylamine	120	95.9		ug/L		80	45 - 120
N-Nitrosodiphenylamine	119	75.3		ug/L		63	54 - 120
Pentachlorophenol	240	233		ug/L		97	31 - 130
Phenol	120	56.2		ug/L		47	11 - 120
Pyridine	240	100		ug/L		42	16 - 120

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

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	120	74.5		ug/L		62	49 - 130
2,4,5-Trichlorophenol	120	78.2		ug/L		65	51 - 136
2,4,6-Trichlorophenol	120	67.8		ug/L		57	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*46 - 124*
2-Fluorophenol	*20*		*13 - 113*
Nitrobenzene-d5	*59*		*36 - 126*
Phenol-d5	*48*		*17 - 127*
Terphenyl-d14	*87*		*44 - 149*
2,4,6-Tribromophenol	*77*		*26 - 150*

Lab Sample ID: LCS 400-563401/4-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	20.8		ug/L		17	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*46 - 124*
2-Fluorophenol	*19*		*13 - 113*
Nitrobenzene-d5	*58*		*36 - 126*
Phenol-d5	*41*		*17 - 127*
Terphenyl-d14	*86*		*44 - 149*
2,4,6-Tribromophenol	*54*		*26 - 150*

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	64.9		ug/L		54	21 - 120	6	30
Benzoic acid	498	278		ug/L		56	10 - 144	0	30
Benzyl alcohol	120	92.1		ug/L		77	28 - 120	5	30
Bis(2-chloroethoxy)methane	120	63.0		ug/L		53	47 - 120	2	30
Bis(2-chloroethyl)ether	120	70.6		ug/L		59	44 - 120	4	30
bis (2-chloroisopropyl) ether	120	87.6		ug/L		73	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	99.6		ug/L		83	52 - 147	1	30
4-Bromophenyl phenyl ether	120	93.9		ug/L		78	54 - 122	4	30
Butyl benzyl phthalate	120	93.5		ug/L		78	54 - 133	1	30
4-Chloroaniline	120	61.2		ug/L		51	26 - 120	3	30
4-Chloro-3-methylphenol	120	82.9		ug/L		69	48 - 131	2	30
2-Chloronaphthalene	120	82.2		ug/L		68	52 - 121	12	30
2-Chlorophenol	120	64.3		ug/L		54	40 - 120	28	30
4-Chlorophenyl phenyl ether	120	85.0		ug/L		71	56 - 125	5	30
Dibenz[a,h]acridine	120	111		ug/L		93	31 - 150	7	30
Dibenzofuran	120	82.2		ug/L		68	56 - 122	6	30

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

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	160	128		ug/L		80	36 - 132	14	30
2,4-Dichlorophenol	120	75.2		ug/L		63	49 - 120	27	30
Diethyl phthalate	120	107		ug/L		89	50 - 137	4	30
2,4-Dimethylphenol	120	86.4		ug/L		72	48 - 120	5	30
Dimethyl phthalate	120	85.5		ug/L		71	57 - 124	8	30
Di-n-butyl phthalate	120	98.1		ug/L		82	58 - 126	3	30
4,6-Dinitro-ortho-cresol	240	323		ug/L		135	23 - 148	10	30
2,4-Dinitrophenol	240	330		ug/L		137	10 - 150	6	30
2,4-Dinitrotoluene	120	81.3		ug/L		68	54 - 142	5	30
2,6-Dinitrotoluene	120	72.5		ug/L		60	55 - 130	10	30
Di-n-octyl phthalate	120	99.4		ug/L		83	57 - 138	3	30
1,4-Dioxane	120	56.7		ug/L		47	31 - 120	6	30
1,2-Diphenylhydrazine (as Azobenzene)	120	84.2		ug/L		70	45 - 124	3	30
Hexachlorobenzene	120	119		ug/L		99	52 - 129	5	30
Hexachlorocyclopentadiene	120	99.0		ug/L		82	10 - 134	12	30
Hexachloroethane	120	86.3		ug/L		72	20 - 120	7	30
Indene	120	89.7		ug/L		75	49 - 120	8	30
Isophorone	120	68.7		ug/L		57	48 - 120	1	30
2-Methylphenol	120	90.4		ug/L		75	46 - 124	9	30
3 & 4 Methylphenol	120	99.0		ug/L		83	45 - 120	11	30
2-Nitroaniline	120	89.1		ug/L		74	51 - 145	4	30
3-Nitroaniline	120	76.8		ug/L		64	37 - 127	3	30
4-Nitroaniline	120	85.4		ug/L		71	36 - 137	9	30
Nitrobenzene	120	70.1		ug/L		58	45 - 120	0	30
2-Nitrophenol	120	74.6	*1	ug/L		62	40 - 124	37	30
4-Nitrophenol	240	271		ug/L		113	23 - 146	8	30
N-Nitrosodimethylamine	120	118		ug/L		99	29 - 137	5	30
N-Nitrosodi-n-propylamine	120	101		ug/L		84	45 - 120	6	30
N-Nitrosodiphenylamine	119	78.8		ug/L		66	54 - 120	4	30
Pentachlorophenol	240	253		ug/L		105	31 - 130	8	30
Phenol	120	64.0		ug/L		53	11 - 120	13	30
Pyridine	240	111		ug/L		46	16 - 120	10	30
Quinoline	120	75.5		ug/L		63	49 - 130	1	30
2,4,5-Trichlorophenol	120	100		ug/L		84	51 - 136	25	30
2,4,6-Trichlorophenol	120	90.7		ug/L		76	50 - 127	29	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*46 - 124*
2-Fluorophenol	*24*		*13 - 113*
Nitrobenzene-d5	*58*		*36 - 126*
Phenol-d5	*55*		*17 - 127*
Terphenyl-d14	*90*		*44 - 149*
2,4,6-Tribromophenol	*87*		*26 - 150*

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

Lab Sample ID: LCSD 400-563401/5-A
Matrix: Water
Analysis Batch: 563495

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol			120	8.18	J *- *1	ug/L		7	10 - 120	87	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*46 - 124*
2-Fluorophenol	*22*		*13 - 113*
Nitrobenzene-d5	*70*		*36 - 126*
Phenol-d5	*50*		*17 - 127*
Terphenyl-d14	*105*		*44 - 149*
2,4,6-Tribromophenol	*62*		*26 - 150*

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzenethiol	ND		10	1.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzoic acid	ND		30	7.3	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzyl alcohol	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/18/22 10:55	01/20/22 12:29	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chloroaniline	ND		10	3.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Chlorophenol	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dibenzofuran	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Diethyl phthalate	ND		10	0.24	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 12:29	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
1,4-Dioxane	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1

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

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		10	4.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
Indene	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Isophorone	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Methylphenol	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Nitroaniline	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
3-Nitroaniline	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Nitroaniline	ND		10	1.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
Nitrobenzene	ND		10	0.13	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Nitrophenol	ND		10	5.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Nitrophenol	ND		10	2.1	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/18/22 10:55	01/20/22 12:29	1
Pentachlorophenol	ND		20	1.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
Phenol	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
Pyridine	ND		10	3.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
Quinoline	ND		10	4.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*46 - 124*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2-Fluorophenol	*13*		*13 - 113*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Phenol-d5	*42*		*17 - 127*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Terphenyl-d14	*118*		*44 - 149*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*01/18/22 10:55*	*01/20/22 12:29*	*1*

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	67.9		ug/L		57	21 - 120
Benzoic acid	498	201		ug/L		40	10 - 144
Benzyl alcohol	120	98.9		ug/L		82	28 - 120
Bis(2-chloroethoxy)methane	120	65.9		ug/L		55	47 - 120
Bis(2-chloroethyl)ether	120	77.2		ug/L		64	44 - 120
bis (2-chloroisopropyl) ether	120	91.4		ug/L		76	33 - 121
Bis(2-ethylhexyl) phthalate	120	114		ug/L		95	52 - 147
4-Bromophenyl phenyl ether	120	106		ug/L		88	54 - 122
Butyl benzyl phthalate	120	106		ug/L		88	54 - 133
4-Chloroaniline	120	68.3		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	87.0		ug/L		72	48 - 131
2-Chloronaphthalene	120	90.5		ug/L		75	52 - 121
2-Chlorophenol	120	57.3		ug/L		48	40 - 120
4-Chlorophenyl phenyl ether	120	91.8		ug/L		76	56 - 125

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

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz[a,h]acridine	120	138		ug/L		116	31 - 150
Dibenzofuran	120	90.4		ug/L		75	56 - 122
3,3'-Dichlorobenzidine	160	152		ug/L		95	36 - 132
2,4-Dichlorophenol	120	67.2		ug/L		56	49 - 120
Diethyl phthalate	120	115		ug/L		96	50 - 137
2,4-Dimethylphenol	120	91.3		ug/L		76	48 - 120
Dimethyl phthalate	120	93.6		ug/L		78	57 - 124
Di-n-butyl phthalate	120	113		ug/L		94	58 - 126
4,6-Dinitro-ortho-cresol	240	246		ug/L		102	23 - 148
2,4-Dinitrophenol	240	282		ug/L		117	10 - 150
2,4-Dinitrotoluene	120	79.6		ug/L		66	54 - 142
2,6-Dinitrotoluene	120	78.4		ug/L		65	55 - 130
Di-n-octyl phthalate	120	113		ug/L		94	57 - 138
1,4-Dioxane	120	61.4		ug/L		51	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	94.6		ug/L		79	45 - 124
Hexachlorobenzene	120	142		ug/L		119	52 - 129
Hexachlorocyclopentadiene	120	90.5		ug/L		75	10 - 134
Hexachloroethane	120	88.1		ug/L		73	20 - 120
Indene	120	89.8		ug/L		75	49 - 120
Isophorone	120	74.2		ug/L		62	48 - 120
2-Methylphenol	120	91.7		ug/L		76	46 - 124
3 & 4 Methylphenol	120	98.1		ug/L		82	45 - 120
2-Nitroaniline	120	93.8		ug/L		78	51 - 145
3-Nitroaniline	120	83.6		ug/L		70	37 - 127
4-Nitroaniline	120	94.4		ug/L		79	36 - 137
Nitrobenzene	120	74.0		ug/L		62	45 - 120
2-Nitrophenol	120	58.2		ug/L		49	40 - 124
4-Nitrophenol	240	250		ug/L		104	23 - 146
N-Nitrosodimethylamine	120	123		ug/L		102	29 - 137
N-Nitrosodi-n-propylamine	120	101		ug/L		84	45 - 120
N-Nitrosodiphenylamine	119	85.5		ug/L		72	54 - 120
Pentachlorophenol	240	201		ug/L		84	31 - 130
Phenol	120	70.1		ug/L		58	11 - 120
Pyridine	240	118		ug/L		49	16 - 120
Quinoline	120	84.3		ug/L		70	49 - 130
2,4,5-Trichlorophenol	120	96.8		ug/L		81	51 - 136
2,4,6-Trichlorophenol	120	86.0		ug/L		72	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

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

Lab Sample ID: LCS 400-563528/6-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	5.06	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*59*		*46 - 124*
2-Fluorophenol	*37*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*118*		*44 - 149*
2,4,6-Tribromophenol	*53*		*26 - 150*

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	66.0		ug/L		55	21 - 120	3	30
Benzoic acid	498	223		ug/L		45	10 - 144	10	30
Benzyl alcohol	120	91.2		ug/L		76	28 - 120	8	30
Bis(2-chloroethoxy)methane	120	62.9		ug/L		52	47 - 120	5	30
Bis(2-chloroethyl)ether	120	72.2		ug/L		60	44 - 120	7	30
bis (2-chloroisopropyl) ether	120	86.7		ug/L		72	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147	6	30
4-Bromophenyl phenyl ether	120	98.5		ug/L		82	54 - 122	7	30
Butyl benzyl phthalate	120	99.4		ug/L		83	54 - 133	6	30
4-Chloroaniline	120	65.8		ug/L		55	26 - 120	4	30
4-Chloro-3-methylphenol	120	84.1		ug/L		70	48 - 131	3	30
2-Chloronaphthalene	120	84.0		ug/L		70	52 - 121	7	30
2-Chlorophenol	120	59.9		ug/L		50	40 - 120	4	30
4-Chlorophenyl phenyl ether	120	89.0		ug/L		74	56 - 125	3	30
Dibenz[a,h]acridine	120	136		ug/L		114	31 - 150	1	30
Dibenzofuran	120	87.2		ug/L		73	56 - 122	4	30
3,3'-Dichlorobenzidine	160	140		ug/L		88	36 - 132	8	30
2,4-Dichlorophenol	120	74.0		ug/L		62	49 - 120	10	30
Diethyl phthalate	120	111		ug/L		92	50 - 137	4	30
2,4-Dimethylphenol	120	85.8		ug/L		71	48 - 120	6	30
Dimethyl phthalate	120	90.2		ug/L		75	57 - 124	4	30
Di-n-butyl phthalate	120	103		ug/L		86	58 - 126	10	30
4,6-Dinitro-ortho-cresol	240	290		ug/L		121	23 - 148	16	30
2,4-Dinitrophenol	240	323		ug/L		135	10 - 150	14	30
2,4-Dinitrotoluene	120	86.1		ug/L		72	54 - 142	8	30
2,6-Dinitrotoluene	120	75.8		ug/L		63	55 - 130	3	30
Di-n-octyl phthalate	120	104		ug/L		86	57 - 138	8	30
1,4-Dioxane	120	58.2		ug/L		49	31 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)	120	88.6		ug/L		74	45 - 124	7	30
Hexachlorobenzene	120	124		ug/L		104	52 - 129	13	30
Hexachlorocyclopentadiene	120	88.8		ug/L		74	10 - 134	2	30
Hexachloroethane	120	86.8		ug/L		72	20 - 120	2	30

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

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Indene	120	86.9		ug/L		72	49 - 120	3	30
Isophorone	120	70.3		ug/L		59	48 - 120	5	30
2-Methylphenol	120	88.8		ug/L		74	46 - 124	3	30
3 & 4 Methylphenol	120	95.4		ug/L		80	45 - 120	3	30
2-Nitroaniline	120	93.5		ug/L		78	51 - 145	0	30
3-Nitroaniline	120	89.2		ug/L		74	37 - 127	6	30
4-Nitroaniline	120	107		ug/L		89	36 - 137	13	30
Nitrobenzene	120	72.5		ug/L		60	45 - 120	2	30
2-Nitrophenol	120	69.4		ug/L		58	40 - 124	18	30
4-Nitrophenol	240	276		ug/L		115	23 - 146	10	30
N-Nitrosodimethylamine	120	126		ug/L		105	29 - 137	3	30
N-Nitrosodi-n-propylamine	120	95.4		ug/L		80	45 - 120	6	30
N-Nitrosodiphenylamine	119	81.6		ug/L		69	54 - 120	5	30
Pentachlorophenol	240	208		ug/L		87	31 - 130	3	30
Phenol	120	71.4		ug/L		60	11 - 120	2	30
Pyridine	240	107		ug/L		45	16 - 120	10	30
Quinoline	120	78.0		ug/L		65	49 - 130	8	30
2,4,5-Trichlorophenol	120	101		ug/L		84	51 - 136	4	30
2,4,6-Trichlorophenol	120	88.4		ug/L		74	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*89*		*26 - 150*

Lab Sample ID: LCSD 400-563528/7-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	4.22	J *-	ug/L		4	10 - 120	18	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*52*		*17 - 127*
Terphenyl-d14	*103*		*44 - 149*
2,4,6-Tribromophenol	*48*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-563401/1-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563401

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 18:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/17/22 11:09	01/18/22 18:26	1
Anthracene	ND		0.20	0.032	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/17/22 11:09	01/18/22 18:26	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/17/22 11:09	01/18/22 18:26	1
Chrysene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 18:26	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/17/22 11:09	01/18/22 18:26	1
Fluoranthene	ND		0.20	0.068	ug/L		01/17/22 11:09	01/18/22 18:26	1
Fluorene	ND		0.20	0.11	ug/L		01/17/22 11:09	01/18/22 18:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/17/22 11:09	01/18/22 18:26	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/17/22 11:09	01/18/22 18:26	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/17/22 11:09	01/18/22 18:26	1
Phenanthrene	ND		0.20	0.036	ug/L		01/17/22 11:09	01/18/22 18:26	1
Pyrene	ND		0.20	0.040	ug/L		01/17/22 11:09	01/18/22 18:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*15 - 122*	*01/17/22 11:09*	*01/18/22 18:26*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/17/22 11:09*	*01/18/22 18:26*	*1*
Terphenyl-d14	*140*	*S1+*	*33 - 138*	*01/17/22 11:09*	*01/18/22 18:26*	*1*

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	120		ug/L		100	41 - 120
Acenaphthylene	120	107		ug/L		89	44 - 120
Anthracene	120	113		ug/L		94	49 - 120
Benzo[a]anthracene	120	131		ug/L		109	61 - 135
Benzo[a]pyrene	120	117		ug/L		97	52 - 120
Benzo[b]fluoranthene	120	125		ug/L		104	53 - 134
Benzo[g,h,i]perylene	120	114		ug/L		95	47 - 133
Benzo[k]fluoranthene	120	131		ug/L		109	57 - 134
Chrysene	120	121		ug/L		101	55 - 122
Dibenz(a,h)anthracene	120	127		ug/L		106	48 - 146
Fluoranthene	120	125		ug/L		104	54 - 128
Fluorene	120	131		ug/L		109	45 - 125
Indeno[1,2,3-cd]pyrene	120	118		ug/L		98	43 - 142
1-Methylnaphthalene	120	117		ug/L		98	41 - 120
2-Methylnaphthalene	120	106		ug/L		88	32 - 124
Phenanthrene	120	112		ug/L		94	48 - 120
Pyrene	120	125		ug/L		105	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*15 - 122*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-563401/2-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563401

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	111		19 - 130
Terphenyl-d14	115		33 - 138

Lab Sample ID: LCSD 400-563401/3-A
Matrix: Water
Analysis Batch: 563567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563401

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	131		ug/L		109	41 - 120	8	56
Acenaphthylene	120	123		ug/L		103	44 - 120	14	56
Anthracene	120	131		ug/L		109	49 - 120	15	51
Benzo[a]anthracene	120	134		ug/L		112	61 - 135	2	49
Benzo[a]pyrene	120	122		ug/L		101	52 - 120	4	50
Benzo[b]fluoranthene	120	126		ug/L		105	53 - 134	1	54
Benzo[g,h,i]perylene	120	116		ug/L		97	47 - 133	2	50
Benzo[k]fluoranthene	120	131		ug/L		109	57 - 134	0	52
Chrysene	120	130		ug/L		109	55 - 122	8	50
Dibenz(a,h)anthracene	120	133		ug/L		111	48 - 146	5	50
Fluoranthene	120	132		ug/L		110	54 - 128	6	52
Fluorene	120	145		ug/L		121	45 - 125	11	56
Indeno[1,2,3-cd]pyrene	120	124		ug/L		103	43 - 142	5	51
1-Methylnaphthalene	120	130		ug/L		109	41 - 120	11	55
2-Methylnaphthalene	120	119		ug/L		99	32 - 124	11	57
Phenanthrene	120	129		ug/L		108	48 - 120	14	56
Pyrene	120	134		ug/L		112	48 - 132	7	52

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	112		15 - 122
Nitrobenzene-d5	124		19 - 130
Terphenyl-d14	116		33 - 138

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 16:01	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/18/22 10:55	01/20/22 16:01	1
Anthracene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/18/22 10:55	01/20/22 16:01	1
Chrysene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 16:01	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/18/22 10:55	01/20/22 16:01	1
Fluoranthene	ND		0.20	0.068	ug/L		01/18/22 10:55	01/20/22 16:01	1
Fluorene	ND		0.20	0.11	ug/L		01/18/22 10:55	01/20/22 16:01	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	0.160	J	0.20	0.043	ug/L		01/18/22 10:55	01/20/22 16:01	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 16:01	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/18/22 10:55	01/20/22 16:01	1
Phenanthrene	ND		0.20	0.036	ug/L		01/18/22 10:55	01/20/22 16:01	1
Pyrene	ND		0.20	0.040	ug/L		01/18/22 10:55	01/20/22 16:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*01/18/22 10:55*	*01/20/22 16:01*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/18/22 10:55*	*01/20/22 16:01*	*1*
Terphenyl-d14	*131*		*33 - 138*	*01/18/22 10:55*	*01/20/22 16:01*	*1*

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	138		ug/L		115	41 - 120
Acenaphthylene	120	125		ug/L		104	44 - 120
Anthracene	120	127		ug/L		106	49 - 120
Benzo[a]anthracene	120	133		ug/L		110	61 - 135
Benzo[a]pyrene	120	124		ug/L		103	52 - 120
Benzo[b]fluoranthene	120	133		ug/L		111	53 - 134
Benzo[g,h,i]perylene	120	121		ug/L		101	47 - 133
Benzo[k]fluoranthene	120	133		ug/L		111	57 - 134
Chrysene	120	129		ug/L		107	55 - 122
Dibenz(a,h)anthracene	120	135		ug/L		112	48 - 146
Fluoranthene	120	134		ug/L		112	54 - 128
Fluorene	120	146		ug/L		122	45 - 125
Indeno[1,2,3-cd]pyrene	120	130		ug/L		108	43 - 142
1-Methylnaphthalene	120	124		ug/L		104	41 - 120
2-Methylnaphthalene	120	119		ug/L		99	32 - 124
Phenanthrene	120	127		ug/L		106	48 - 120
Pyrene	120	123		ug/L		103	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*111*		*15 - 122*
Nitrobenzene-d5	*126*		*19 - 130*
Terphenyl-d14	*123*		*33 - 138*

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	121		ug/L		101	41 - 120	13	56
Acenaphthylene	120	111		ug/L		92	44 - 120	13	56
Anthracene	120	121		ug/L		101	49 - 120	5	51
Benzo[a]anthracene	120	116		ug/L		97	61 - 135	13	49

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[a]pyrene			120	100		ug/L		84	52 - 120	21	50
Benzo[b]fluoranthene			120	116		ug/L		97	53 - 134	14	54
Benzo[g,h,i]perylene			120	110		ug/L		91	47 - 133	10	50
Benzo[k]fluoranthene			120	114		ug/L		95	57 - 134	16	52
Chrysene			120	112		ug/L		93	55 - 122	14	50
Dibenz(a,h)anthracene			120	123		ug/L		103	48 - 146	9	50
Fluoranthene			120	118		ug/L		99	54 - 128	12	52
Fluorene			120	127		ug/L		106	45 - 125	14	56
Indeno[1,2,3-cd]pyrene			120	108		ug/L		90	43 - 142	19	51
1-Methylnaphthalene			120	120		ug/L		100	41 - 120	3	55
2-Methylnaphthalene			120	118		ug/L		98	32 - 124	1	57
Phenanthrene			120	115		ug/L		96	48 - 120	10	56
Pyrene			120	117		ug/L		98	48 - 132	5	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*15 - 122*
Nitrobenzene-d5	*128*		*19 - 130*
Terphenyl-d14	*114*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-563931/1-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563931

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 11:31	01/21/22 14:34	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 11:31	01/21/22 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*51 - 149*	*01/21/22 11:31*	*01/21/22 14:34*	*1*

Lab Sample ID: LCS 400-563931/2-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563931

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane			0.101	0.0879		ug/L		87	60 - 140
1,2-Dibromoethane			0.101	0.104		ug/L		103	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-563931/3-A
Matrix: Water
Analysis Batch: 563930

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563931

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0789		ug/L		78	60 - 140	11	30
1,2-Dibromoethane			0.101	0.0961		ug/L		95	60 - 140	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr Pensacola, FL 32514 (850-474-1001))
- ☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL	
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES	
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES		

Print Bill To Contact Name:	Melissa Remiger
PO #	60674381 – 3.1.2
PlaNet Site or Project ID	25278
GSAP Project ID	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/12/2022

PAGE: 1 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID:

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): MD'Angelo LBadmus

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS)

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) EDD

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDO DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

400-214110 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011222-8011-B	1/12/2022	0000	Water	2					2		X		
	TB-ROX-011222-8260-B	1/12/2022	0000	Water	2					2	X			
	P56-ROX-011222	1/12/2022	1000	Water	6			2		8	X	X	X	X
	P56-ROX-011222-DUP	1/12/2022	1000	Water	6			2		8	X	X	X	X
	P93A-ROX-011222	1/12/2022	1110	Water	6			2		8	X	X	X	X
	MW28-ROX-011222	1/12/2022	1250	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-011222	1/12/2022	1335	Water	6			2		8	X	X	X	X
	ROST4PZE-ROX-011222-DUP	1/12/2022	1335	Water	6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.0°C, 0.3°C, 2.1°C

Container PID Readings or Laboratory Notes

Relinquished by: (Signature) MARY D'ANGELO	Received by: (Signature) FEDEX: 1482 3811 4874, 1482 3811 4885, 1482 3811 4896	Date: 1/12/2022	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date: 1-14-22	Time: 1022
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

CUSTODY SEALS: 1854700, 18547001, 1854697, 18547696, 1854698, 1854699

Version: 2Apr21

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES

Print Bill To Contact Name: Melissa Remiger
PlaNet Site or Project ID: 25278
☐ CHECK IF NO INCIDENT # APPLIES
DATE: 1/12/2022
PAGE: 2 of 2

PO #: 60674381 – 3.1.2
GSAP Project ID: 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 60674381 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions
PHONE NO.: 314-802-1207; 314-802-1122
E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com
AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger
SAMPLER NAME(S) (Print): J. Mayer, T. Jones
FOR 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 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES:
Please include "J" values on Reports.
Please provide sample receipt upon login.
Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andreLzamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS
60674381 – 3.1.2

FOR LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-011222-8260-A	1/12/2022	0000	Water	X					2	X				TEMPERATURE ON RECEIPT 0.0°C, 0.3°C, 2.1°C
	TB-ROX-011222-8011-A	1/12/2022	0000	Water	X					2		X			
	MW1-ROX-011222-EB	1/12/2022	0820	Water	X			X		8	X	X	X	X	
	MW1-ROX-011222	1/12/2022	0920	Water	X			X		8	X	X	X	X	
	MW12-ROX-011222	1/12/2022	1000	Water	X			X		8	X	X	X	X	
	MW27-ROX-011222	1/12/2022	1045	Water	X			X		8	X	X	X	X	
	MW10-ROX-011222-EB	1/12/2022	1300	Water	X			X		8	X	X	X	X	
	MW10-ROX-011222	1/12/2022	1345	Water	X			X		8	X	X	X	X	

Relinquished by: (Signature) Joe Mayer	Received by: (Signature) FEDEX: see page 1	Date 1/12/2022	Time 16:00
Relinquished by: (Signature)	Received by: (Signature)	Date 1-14-22	Time 1022
Relinquished by: (Signature)	Received by: (Signature)	Date	Time

Version: 2Apr21

CUSTODY SEALS: see page 1

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-214110-1

Login Number: 214110
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.3°C, 2.1°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-214110-1

Laboratory: Eurofins Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alabama	State	40150	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-214132-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/25/2022

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

Sample Identification	Sample Identification
TB-ROX-011422-8260	TB-ROX-011422-8011
T12-ROX-011422	P57-ROX-011422
P93D-ROX-011422	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, the laboratory case narrative indicated indeno[1,2,3-cd]pyrene was detected in the method blank. Several VOC and SVOC LCS/LCSD recoveries were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in several samples. The MS/MSD recoveries for 2-chloroethyl vinyl ether were outside evaluation criteria in sample P57-ROX-011422. VOCs in T12-ROX-011422 were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review.

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

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MB 400-563528/1-A	PAHs	Indeno[1,2,3-cd]pyrene	0.16 µg/L

Analytical data that were reported non-detect or at concentrations greater than five times

(5X) the associated blank concentration did not require qualification. No qualification of data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-563634/1002	VOCs	Bromomethane	**162**	NA	10-160
LCS/LCSD 400-563528/6-A/7-A	SVOCs	Benzenethiol	**4/4**	18	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
T12-ROX-011422	SVOCs	Benzenethiol	**UJ**
P57-ROX-011422	SVOCs	Benzenethiol	**UJ**
P93D-ROX-011422	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
T12-ROX-011422	SVOCs	2-Fluorobiphenyl	**33**	46-124
P93D-ROX-011422	SVOCs	2-Fluorophenol	**6**	13-113

Qualifications due to surrogate recoveries were not required if only one of three acid or base/neutral SVOC surrogate recoveries were outside evaluation criteria. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample P57-ROX-011422 were spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
P57-ROX-011422	VOCs	2-Chloroethyl vinyl ether	**7/4**	48	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
P57-ROX-011422	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
T12-ROX-011422	SVOCs	Aniline	**UJ**
T12-ROX-011422	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
T12-ROX-011422	SVOCs	2,6-Dinitrotoluene	**UJ**
T12-ROX-011422	SVOCs	Pyridine	**UJ**
T12-ROX-011422	SVOCs	Quinoline	**UJ**
P57-ROX-011422	SVOCs	Aniline	**UJ**
P57-ROX-011422	SVOCs	bis(2-Chloroethoxy)methane	**UJ**
P57-ROX-011422	SVOCs	2,6-Dinitrotoluene	**UJ**
P57-ROX-011422	SVOCs	Pyridine	**UJ**
P57-ROX-011422	SVOCs	Quinoline	**UJ**
P93D-ROX-011422	SVOCs	Aniline	**UJ**
P93D-ROX-011422	SVOCs	bis(2-Chloroethoxy)methane	**UJ**

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-011422	SVOCs	2,6-Dinitrotoluene	**UJ**
P93D-ROX-011422	SVOCs	Pyridine	**UJ**
P93D-ROX-011422	SVOCs	Quinoline	**UJ**

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ANALYTICAL REPORT

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

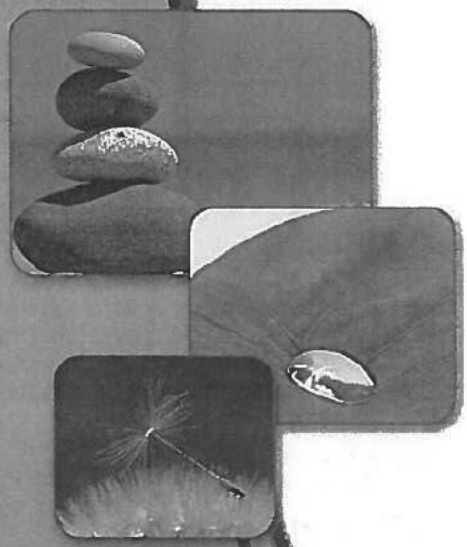
Laboratory Job ID: 400-214132-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Melissa Remiger

Authorized for release by:
1/26/2022 5:32:11 PM

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



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Reviewed 2/25/2022 LR

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

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

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

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Case Narrative

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

Job ID: 400-214132-1

Job ID: 400-214132-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-214132-1

Comments
No additional comments.

Receipt
The samples were received on 1/15/2022 9:03 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 0.0° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563634 recovered above the upper control limit for Bromomethane. The samples associated with this CCV were non-detects or not reported for the affected analyte; therefore, the data have been reported.

Method 8260B: The laboratory control sample (LCS) for analytical batch 400-563634 recovered outside control limits for the following analyte: Bromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563634 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-563634 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-011422-8260 (400-214132-1), T12-ROX-011422 (400-214132-3), P57-ROX-011422 (400-214132-4) and P93D-ROX-011422 (400-214132-5). 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 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: T12-ROX-011422 (400-214132-3). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-563528 and analytical batch 400-563808 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered above the upper control limit for N-Nitrosodimethylamine, 4,6-Dinitro-2-methylphenol and 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563808 recovered outside acceptance criteria, low biased, for Quinoline, 2,6-Dinitrotoluene, Pyridine, Aniline and Bis(2-chloroethoxy)methane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds

Job ID: 400-214132-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

outside limits: T12-ROX-011422 (400-214132-3) and P93D-ROX-011422 (400-214132-5). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-563528 and analytical batch 400-563844 contained Indeno[1,2,3-cd]pyrene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

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

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

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

Sample Summary

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

Job ID: 400-214132-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-214132-1	TB-ROX-011422-8260	Water	01/14/22 00:00	01/15/22 09:03
400-214132-2	TB-ROX-011422-8011	Water	01/14/22 00:00	01/15/22 09:03
400-214132-3	T12-ROX-011422	Water	01/14/22 10:10	01/15/22 09:03
400-214132-4	P57-ROX-011422	Water	01/14/22 11:10	01/15/22 09:03
400-214132-5	P93D-ROX-011422	Water	01/14/22 11:55	01/15/22 09:03

Detection Summary

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

Job ID: 400-214132-1

Client Sample ID: TB-ROX-011422-8260

Lab Sample ID: 400-214132-1

No Detections.

Client Sample ID: TB-ROX-011422-8011

Lab Sample ID: 400-214132-2

No Detections.

Client Sample ID: T12-ROX-011422

Lab Sample ID: 400-214132-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	66		50	20	ug/L	2		8260B	Total/NA
2-Butanone (MEK)	24	J	50	5.2	ug/L	2		8260B	Total/NA
Ethylbenzene	3.2		2.0	1.0	ug/L	2		8260B	Total/NA
Isopropylbenzene	1.4	J	2.0	1.1	ug/L	2		8260B	Total/NA
Methyl tert-butyl ether	3.9		2.0	0.44	ug/L	2		8260B	Total/NA
m-Xylene & p-Xylene	18		10	1.3	ug/L	2		8260B	Total/NA
Naphthalene	2.1		2.0	2.0	ug/L	2		8260B	Total/NA
N-Propylbenzene	2.0		2.0	1.4	ug/L	2		8260B	Total/NA
o-Xylene	2.1	J	10	1.2	ug/L	2		8260B	Total/NA
Toluene	12		2.0	0.82	ug/L	2		8260B	Total/NA
1,3,5-Trimethylbenzene	3.0		2.0	1.1	ug/L	2		8260B	Total/NA
Xylenes, Total	21		20	3.2	ug/L	2		8260B	Total/NA
Benzene - DL	1100		5.0	0.65	ug/L	5		8260B	Total/NA
Benzoic acid	33		30	7.3	ug/L	1		8270D	Total/NA
Phenol	36		10	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: P57-ROX-011422

Lab Sample ID: 400-214132-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	11		1.0	0.13	ug/L	1		8260B	Total/NA
Ethylbenzene	0.54	J	1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	17		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	1.3	J	5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene	11		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.5		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	17		1.0	0.69	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	0.86	J	1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	3.9		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	6.4		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	3.7		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	1.6	J	10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	12		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	7.6		0.20	0.060	ug/L	1		8270D LL	Total/NA

Client Sample ID: P93D-ROX-011422

Lab Sample ID: 400-214132-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.82	J	1.0	0.22	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-011422-8260

Date Collected: 01/14/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/22 13:49	1
Acrolein	ND		20	3.3	ug/L			01/19/22 13:49	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/22 13:49	1
Benzene	ND		1.0	0.13	ug/L			01/19/22 13:49	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/22 13:49	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/19/22 13:49	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Bromoform	ND		5.0	0.25	ug/L			01/19/22 13:49	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/19/22 13:49	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/22 13:49	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/19/22 13:49	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/19/22 13:49	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 13:49	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/22 13:49	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/22 13:49	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 13:49	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/19/22 13:49	1
Chloromethane	ND		1.0	0.32	ug/L			01/19/22 13:49	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/19/22 13:49	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/22 13:49	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/22 13:49	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/22 13:49	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/22 13:49	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/22 13:49	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/19/22 13:49	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 13:49	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/22 13:49	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/22 13:49	1
2-Hexanone	ND		25	1.4	ug/L			01/19/22 13:49	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/22 13:49	1
Methylene bromide	ND		5.0	0.22	ug/L			01/19/22 13:49	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/22 13:49	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/22 13:49	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/19/22 13:49	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/19/22 13:49	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/22 13:49	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/22 13:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/22 13:49	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/22 13:49	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/22 13:49	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/22 13:49	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/22 13:49	1

Client Sample ID: TB-ROX-011422-8260
Date Collected: 01/14/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/22 13:49	1
Styrene	ND		1.0	1.0	ug/L			01/19/22 13:49	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/22 13:49	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/19/22 13:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/19/22 13:49	1
Toluene	ND		1.0	0.41	ug/L			01/19/22 13:49	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 13:49	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/19/22 13:49	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/19/22 13:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/22 13:49	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/19/22 13:49	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/19/22 13:49	1
Trichloroethene	ND		1.0	0.15	ug/L			01/19/22 13:49	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/22 13:49	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/22 13:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/22 13:49	1
Vinyl acetate	ND		25	0.93	ug/L			01/19/22 13:49	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/22 13:49	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/22 13:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*72 - 119*		*01/19/22 13:49*	*1*
Dibromofluoromethane	*104*		*75 - 126*		*01/19/22 13:49*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*01/19/22 13:49*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/20/22 19:01*	*1*
Dibromofluoromethane	*102*		*75 - 126*		*01/20/22 19:01*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/20/22 19:01*	*1*

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

Job ID: 400-214132-1

Client Sample ID: TB-ROX-011422-8011
Date Collected: 01/14/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		01/21/22 12:37	01/24/22 14:41	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		01/21/22 12:37	01/24/22 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/21/22 12:37*	*01/24/22 14:41*	*1*

Client Sample ID: T12-ROX-011422
Date Collected: 01/14/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**66**		50	20	ug/L			01/19/22 16:01	2
Acrolein	ND		40	6.6	ug/L			01/19/22 16:01	2
Acrylonitrile	ND		20	5.6	ug/L			01/19/22 16:01	2
Bromobenzene	ND		2.0	1.1	ug/L			01/19/22 16:01	2
Bromochloromethane	ND		2.0	0.42	ug/L			01/19/22 16:01	2
Bromodichloromethane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
Bromoform	ND		10	0.50	ug/L			01/19/22 16:01	2
Bromomethane	ND	*+	2.0	2.0	ug/L			01/19/22 16:01	2
2-Butanone (MEK)	**24**	**J**	50	5.2	ug/L			01/19/22 16:01	2
Carbon disulfide	ND		2.0	1.0	ug/L			01/19/22 16:01	2
Carbon tetrachloride	ND		2.0	0.38	ug/L			01/19/22 16:01	2
Chlorobenzene	ND		2.0	0.30	ug/L			01/19/22 16:01	2
Dibromochloromethane	ND		2.0	0.48	ug/L			01/19/22 16:01	2
Chloroethane	ND		2.0	1.5	ug/L			01/19/22 16:01	2
2-Chloroethyl vinyl ether	ND		10	4.0	ug/L			01/19/22 16:01	2
Chloroform	ND		2.0	1.2	ug/L			01/19/22 16:01	2
1-Chlorohexane	ND		2.0	0.64	ug/L			01/19/22 16:01	2
Chloromethane	ND		2.0	0.64	ug/L			01/19/22 16:01	2
cis-1,2-Dichloroethene	ND		2.0	0.40	ug/L			01/19/22 16:01	2
cis-1,3-Dichloropropene	ND		10	1.0	ug/L			01/19/22 16:01	2
1,2-Dichlorobenzene	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,3-Dichlorobenzene	ND		2.0	1.1	ug/L			01/19/22 16:01	2
1,4-Dichlorobenzene	ND		2.0	1.3	ug/L			01/19/22 16:01	2
Dichlorodifluoromethane	ND		2.0	1.7	ug/L			01/19/22 16:01	2
1,1-Dichloroethane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,2-Dichloroethane	ND		2.0	0.38	ug/L			01/19/22 16:01	2
1,1-Dichloroethene	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,2-Dichloropropane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,3-Dichloropropane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
2,2-Dichloropropane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,1-Dichloropropene	ND		2.0	1.0	ug/L			01/19/22 16:01	2
Ethylbenzene	**3.2**		2.0	1.0	ug/L			01/19/22 16:01	2
Ethyl methacrylate	ND		2.0	1.2	ug/L			01/19/22 16:01	2
Hexachlorobutadiene	ND		10	1.8	ug/L			01/19/22 16:01	2
2-Hexanone	ND		50	2.8	ug/L			01/19/22 16:01	2
Isopropylbenzene	**1.4**	**J**	2.0	1.1	ug/L			01/19/22 16:01	2
Methylene bromide	ND		10	0.44	ug/L			01/19/22 16:01	2
Methylene Chloride	ND		10	6.0	ug/L			01/19/22 16:01	2
4-Methyl-2-pentanone (MIBK)	ND		50	3.6	ug/L			01/19/22 16:01	2
Methyl tert-butyl ether	**3.9**		2.0	0.44	ug/L			01/19/22 16:01	2
m-Xylene & p-Xylene	**18**		10	1.3	ug/L			01/19/22 16:01	2
Naphthalene	**2.1**		2.0	2.0	ug/L			01/19/22 16:01	2
n-Butylbenzene	ND		2.0	1.5	ug/L			01/19/22 16:01	2
N-Propylbenzene	**2.0**		2.0	1.4	ug/L			01/19/22 16:01	2
o-Chlorotoluene	ND		2.0	1.1	ug/L			01/19/22 16:01	2
o-Xylene	**2.1**	**J**	10	1.2	ug/L			01/19/22 16:01	2
p-Chlorotoluene	ND		2.0	1.1	ug/L			01/19/22 16:01	2
p-Isopropyltoluene	ND		2.0	1.4	ug/L			01/19/22 16:01	2
sec-Butylbenzene	ND		2.0	1.4	ug/L			01/19/22 16:01	2

Client Sample ID: T12-ROX-011422
Date Collected: 01/14/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		2.0	2.0	ug/L			01/19/22 16:01	2
tert-Butylbenzene	ND		2.0	1.3	ug/L			01/19/22 16:01	2
1,1,1,2-Tetrachloroethane	ND		2.0	0.32	ug/L			01/19/22 16:01	2
1,1,2,2-Tetrachloroethane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
Tetrachloroethene	ND		2.0	0.24	ug/L			01/19/22 16:01	2
Toluene	12		2.0	0.82	ug/L			01/19/22 16:01	2
trans-1,2-Dichloroethene	ND		2.0	1.0	ug/L			01/19/22 16:01	2
trans-1,3-Dichloropropene	ND		10	0.40	ug/L			01/19/22 16:01	2
1,2,3-Trichlorobenzene	ND		2.0	0.38	ug/L			01/19/22 16:01	2
1,2,4-Trichlorobenzene	ND		2.0	1.6	ug/L			01/19/22 16:01	2
1,1,1-Trichloroethane	ND		2.0	0.36	ug/L			01/19/22 16:01	2
1,1,2-Trichloroethane	ND		10	0.42	ug/L			01/19/22 16:01	2
Trichloroethene	ND		2.0	0.30	ug/L			01/19/22 16:01	2
Trichlorofluoromethane	ND		2.0	1.0	ug/L			01/19/22 16:01	2
1,2,3-Trichloropropane	ND		10	1.7	ug/L			01/19/22 16:01	2
1,2,4-Trimethylbenzene	ND		2.0	1.6	ug/L			01/19/22 16:01	2
1,3,5-Trimethylbenzene	3.0		2.0	1.1	ug/L			01/19/22 16:01	2
Vinyl acetate	ND		50	1.9	ug/L			01/19/22 16:01	2
Vinyl chloride	ND		2.0	1.0	ug/L			01/19/22 16:01	2
Xylenes, Total	21		20	3.2	ug/L			01/19/22 16:01	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/19/22 16:01*	*2*
Dibromofluoromethane	*103*		*75 - 126*		*01/19/22 16:01*	*2*
Toluene-d8 (Surr)	*94*		*64 - 132*		*01/19/22 16:01*	*2*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1100		5.0	0.65	ug/L			01/20/22 19:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/20/22 19:27*	*5*
Dibromofluoromethane	*100*		*75 - 126*		*01/20/22 19:27*	*5*
Toluene-d8 (Surr)	*104*		*64 - 132*		*01/20/22 19:27*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 18:18	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/18/22 10:55	01/20/22 18:18	1
Anthracene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 18:18	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/18/22 10:55	01/20/22 18:18	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/18/22 10:55	01/20/22 18:18	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/18/22 10:55	01/20/22 18:18	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/18/22 10:55	01/20/22 18:18	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/18/22 10:55	01/20/22 18:18	1
Chrysene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 18:18	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/18/22 10:55	01/20/22 18:18	1
Fluoranthene	ND		0.20	0.068	ug/L		01/18/22 10:55	01/20/22 18:18	1
Fluorene	ND		0.20	0.11	ug/L		01/18/22 10:55	01/20/22 18:18	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/18/22 10:55	01/20/22 18:18	1

Client Sample ID: T12-ROX-011422
Date Collected: 01/14/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 18:18	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/18/22 10:55	01/20/22 18:18	1
Phenanthrene	ND		0.20	0.036	ug/L		01/18/22 10:55	01/20/22 18:18	1
Pyrene	ND		0.20	0.040	ug/L		01/18/22 10:55	01/20/22 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*15 - 122*	*01/18/22 10:55*	*01/20/22 18:18*	*1*
Nitrobenzene-d5	*103*		*19 - 130*	*01/18/22 10:55*	*01/20/22 18:18*	*1*
Terphenyl-d14	*113*		*33 - 138*	*01/18/22 10:55*	*01/20/22 18:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	3.8	ug/L		01/18/22 10:55	01/20/22 14:33	1
Benzenethiol	ND	*- UJ	10	1.7	ug/L		01/18/22 10:55	01/20/22 14:33	1
Benzoic acid	33		30	7.3	ug/L		01/18/22 10:55	01/20/22 14:33	1
Benzyl alcohol	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Bis(2-chloroethoxy)methane	ND	UJ	10	0.16	ug/L		01/18/22 10:55	01/20/22 14:33	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 14:33	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 14:33	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/18/22 10:55	01/20/22 14:33	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Chloroaniline	ND		10	3.4	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 14:33	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 14:33	1
2-Chlorophenol	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Dibenzofuran	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:33	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Diethyl phthalate	ND		10	0.24	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:33	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:33	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 14:33	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/18/22 10:55	01/20/22 14:33	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:33	1
1,4-Dioxane	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:33	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/18/22 10:55	01/20/22 14:33	1
Hexachloroethane	ND		10	4.2	ug/L		01/18/22 10:55	01/20/22 14:33	1
Indene	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:33	1
Isophorone	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 14:33	1
2-Methylphenol	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 14:33	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/18/22 10:55	01/20/22 14:33	1

Client Sample ID: T12-ROX-011422
Date Collected: 01/14/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 14:33	1
3-Nitroaniline	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Nitroaniline	ND		10	1.5	ug/L		01/18/22 10:55	01/20/22 14:33	1
Nitrobenzene	ND		10	0.13	ug/L		01/18/22 10:55	01/20/22 14:33	1
2-Nitrophenol	ND		10	5.2	ug/L		01/18/22 10:55	01/20/22 14:33	1
4-Nitrophenol	ND		10	2.1	ug/L		01/18/22 10:55	01/20/22 14:33	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:33	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/18/22 10:55	01/20/22 14:33	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/18/22 10:55	01/20/22 14:33	1
Pentachlorophenol	ND		20	1.4	ug/L		01/18/22 10:55	01/20/22 14:33	1
Phenol	**36**		10	2.6	ug/L		01/18/22 10:55	01/20/22 14:33	1
Pyridine	ND	U5	10	3.2	ug/L		01/18/22 10:55	01/20/22 14:33	1
Quinoline	ND	U5	10	4.5	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/18/22 10:55	01/20/22 14:33	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*33*	*S1-*	*46 - 124*	*01/18/22 10:55*	*01/20/22 14:33*	*1*
2-Fluorophenol	*14*		*13 - 113*	*01/18/22 10:55*	*01/20/22 14:33*	*1*
Nitrobenzene-d5	*44*		*36 - 126*	*01/18/22 10:55*	*01/20/22 14:33*	*1*
Phenol-d5	*33*		*17 - 127*	*01/18/22 10:55*	*01/20/22 14:33*	*1*
Terphenyl-d14	*56*		*44 - 149*	*01/18/22 10:55*	*01/20/22 14:33*	*1*
2,4,6-Tribromophenol	*55*		*26 - 150*	*01/18/22 10:55*	*01/20/22 14:33*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.018	ug/L		01/21/22 12:37	01/24/22 15:01	1
1,2-Dibromoethane	ND		0.021	0.015	ug/L		01/21/22 12:37	01/24/22 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*01/21/22 12:37*	*01/24/22 15:01*	*1*

Client Sample Results

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

Job ID: 400-214132-1

Client Sample ID: P57-ROX-011422
Date Collected: 01/14/22 11:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/22 11:38	1
Acrolein	ND		20	3.3	ug/L			01/19/22 11:38	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/22 11:38	1
Benzene	11		1.0	0.13	ug/L			01/19/22 11:38	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/22 11:38	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/19/22 11:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
Bromoform	ND		5.0	0.25	ug/L			01/19/22 11:38	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/19/22 11:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/22 11:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/22 11:38	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/19/22 11:38	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/19/22 11:38	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 11:38	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/22 11:38	1
2-Chloroethyl vinyl ether	ND	F1	5.0	2.0	ug/L			01/19/22 11:38	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 11:38	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/19/22 11:38	1
Chloromethane	ND		1.0	0.32	ug/L			01/19/22 11:38	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/19/22 11:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/22 11:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/22 11:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/22 11:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/22 11:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/22 11:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/19/22 11:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 11:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/22 11:38	1
Ethylbenzene	0.54	J	1.0	0.50	ug/L			01/19/22 11:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/22 11:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/22 11:38	1
2-Hexanone	ND		25	1.4	ug/L			01/19/22 11:38	1
Isopropylbenzene	17		1.0	0.53	ug/L			01/19/22 11:38	1
Methylene bromide	ND		5.0	0.22	ug/L			01/19/22 11:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/22 11:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/22 11:38	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/19/22 11:38	1
m-Xylene & p-Xylene	1.3	J	5.0	0.63	ug/L			01/19/22 11:38	1
Naphthalene	11		1.0	1.0	ug/L			01/19/22 11:38	1
n-Butylbenzene	2.5		1.0	0.76	ug/L			01/19/22 11:38	1
N-Propylbenzene	17		1.0	0.69	ug/L			01/19/22 11:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/22 11:38	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/22 11:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/22 11:38	1
p-Isopropyltoluene	0.86	J	1.0	0.71	ug/L			01/19/22 11:38	1

Client Sample ID: P57-ROX-011422
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Lab Sample ID: 400-214132-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**3.9**		1.0	0.70	ug/L			01/19/22 11:38	1
Styrene	ND		1.0	1.0	ug/L			01/19/22 11:38	1
tert-Butylbenzene	**6.4**		1.0	0.63	ug/L			01/19/22 11:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/19/22 11:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/22 11:38	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/19/22 11:38	1
Toluene	**3.7**		1.0	0.41	ug/L			01/19/22 11:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 11:38	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/19/22 11:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/19/22 11:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/22 11:38	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/19/22 11:38	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/19/22 11:38	1
Trichloroethene	ND		1.0	0.15	ug/L			01/19/22 11:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/22 11:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/22 11:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/22 11:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/22 11:38	1
Vinyl acetate	ND		25	0.93	ug/L			01/19/22 11:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/22 11:38	1
Xylenes, Total	**1.6**	J	10	1.6	ug/L			01/19/22 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*72 - 119*		*01/19/22 11:38*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/19/22 11:38*	*1*
Toluene-d8 (Surr)	*96*		*64 - 132*		*01/19/22 11:38*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 18:35	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/18/22 10:55	01/20/22 18:35	1
Anthracene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 18:35	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/18/22 10:55	01/20/22 18:35	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/18/22 10:55	01/20/22 18:35	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/18/22 10:55	01/20/22 18:35	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/18/22 10:55	01/20/22 18:35	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/18/22 10:55	01/20/22 18:35	1
Chrysene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 18:35	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/18/22 10:55	01/20/22 18:35	1
Fluoranthene	ND		0.20	0.068	ug/L		01/18/22 10:55	01/20/22 18:35	1
Fluorene	ND		0.20	0.11	ug/L		01/18/22 10:55	01/20/22 18:35	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/18/22 10:55	01/20/22 18:35	1
1-Methylnaphthalene	**12**		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 18:35	1
2-Methylnaphthalene	**7.6**		0.20	0.060	ug/L		01/18/22 10:55	01/20/22 18:35	1
Phenanthrene	ND		0.20	0.036	ug/L		01/18/22 10:55	01/20/22 18:35	1
Pyrene	ND		0.20	0.040	ug/L		01/18/22 10:55	01/20/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/18/22 10:55*	*01/20/22 18:35*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*01/18/22 10:55*	*01/20/22 18:35*	*1*

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Lab Sample ID: 400-214132-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	94		33 - 138	01/18/22 10:55	01/20/22 18:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	10	3.8	ug/L		01/18/22 10:55	01/20/22 14:54	1
Benzenethiol	ND	UJ	10	1.7	ug/L		01/18/22 10:55	01/20/22 14:54	1
Benzoic acid	ND		30	7.3	ug/L		01/18/22 10:55	01/20/22 14:54	1
Benzyl alcohol	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Bis(2-chloroethoxy)methane	ND	UJ	10	0.16	ug/L		01/18/22 10:55	01/20/22 14:54	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 14:54	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 14:54	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/18/22 10:55	01/20/22 14:54	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Chloroaniline	ND		10	3.4	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 14:54	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 14:54	1
2-Chlorophenol	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Dibenzofuran	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:54	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Diethyl phthalate	ND		10	0.24	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:54	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:54	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 14:54	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/18/22 10:55	01/20/22 14:54	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:54	1
1,4-Dioxane	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 14:54	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/18/22 10:55	01/20/22 14:54	1
Hexachloroethane	ND		10	4.2	ug/L		01/18/22 10:55	01/20/22 14:54	1
Indene	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 14:54	1
Isophorone	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 14:54	1
2-Methylphenol	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 14:54	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/18/22 10:55	01/20/22 14:54	1
2-Nitroaniline	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 14:54	1
3-Nitroaniline	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Nitroaniline	ND		10	1.5	ug/L		01/18/22 10:55	01/20/22 14:54	1
Nitrobenzene	ND		10	0.13	ug/L		01/18/22 10:55	01/20/22 14:54	1
2-Nitrophenol	ND		10	5.2	ug/L		01/18/22 10:55	01/20/22 14:54	1
4-Nitrophenol	ND		10	2.1	ug/L		01/18/22 10:55	01/20/22 14:54	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:54	1

Client Sample ID: P57-ROX-011422
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Lab Sample ID: 400-214132-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/18/22 10:55	01/20/22 14:54	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/18/22 10:55	01/20/22 14:54	1
Pentachlorophenol	ND		20	1.4	ug/L		01/18/22 10:55	01/20/22 14:54	1
Phenol	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 14:54	1
Pyridine	ND	UJ	10	3.2	ug/L		01/18/22 10:55	01/20/22 14:54	1
Quinoline	ND	UJ	10	4.5	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/18/22 10:55	01/20/22 14:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*46 - 124*	*01/18/22 10:55*	*01/20/22 14:54*	*1*
2-Fluorophenol	*14*		*13 - 113*	*01/18/22 10:55*	*01/20/22 14:54*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/18/22 10:55*	*01/20/22 14:54*	*1*
Phenol-d5	*46*		*17 - 127*	*01/18/22 10:55*	*01/20/22 14:54*	*1*
Terphenyl-d14	*63*		*44 - 149*	*01/18/22 10:55*	*01/20/22 14:54*	*1*
2,4,6-Tribromophenol	*84*		*26 - 150*	*01/18/22 10:55*	*01/20/22 14:54*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 15:21	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/21/22 12:37*	*01/24/22 15:21*	*1*

Client Sample ID: P93D-ROX-011422
Date Collected: 01/14/22 11:55
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Lab Sample ID: 400-214132-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/22 14:15	1
Acrolein	ND		20	3.3	ug/L			01/19/22 14:15	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/22 14:15	1
Benzene	ND		1.0	0.13	ug/L			01/19/22 14:15	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/22 14:15	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/19/22 14:15	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Bromoform	ND		5.0	0.25	ug/L			01/19/22 14:15	1
Bromomethane	ND	*+	1.0	0.98	ug/L			01/19/22 14:15	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/22 14:15	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/19/22 14:15	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/19/22 14:15	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 14:15	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/22 14:15	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/22 14:15	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 14:15	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/19/22 14:15	1
Chloromethane	ND		1.0	0.32	ug/L			01/19/22 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/19/22 14:15	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/22 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/22 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/22 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/22 14:15	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/22 14:15	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/19/22 14:15	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 14:15	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/22 14:15	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/22 14:15	1
2-Hexanone	ND		25	1.4	ug/L			01/19/22 14:15	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/22 14:15	1
Methylene bromide	ND		5.0	0.22	ug/L			01/19/22 14:15	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/22 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/22 14:15	1
Methyl tert-butyl ether	0.82	J	1.0	0.22	ug/L			01/19/22 14:15	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/19/22 14:15	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/22 14:15	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/22 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/22 14:15	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/22 14:15	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/22 14:15	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/22 14:15	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/22 14:15	1

Client Sample ID: P93D-ROX-011422
Date Collected: 01/14/22 11:55
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Lab Sample ID: 400-214132-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/22 14:15	1
Styrene	ND		1.0	1.0	ug/L			01/19/22 14:15	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/22 14:15	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/19/22 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/19/22 14:15	1
Toluene	ND		1.0	0.41	ug/L			01/19/22 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 14:15	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/19/22 14:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/19/22 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/22 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/19/22 14:15	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/19/22 14:15	1
Trichloroethene	ND		1.0	0.15	ug/L			01/19/22 14:15	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/22 14:15	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/22 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/22 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/22 14:15	1
Vinyl acetate	ND		25	0.93	ug/L			01/19/22 14:15	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/22 14:15	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/22 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*72 - 119*		*01/19/22 14:15*	*1*
Dibromofluoromethane	*105*		*75 - 126*		*01/19/22 14:15*	*1*
Toluene-d8 (Surr)	*94*		*64 - 132*		*01/19/22 14:15*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/18/22 10:55	01/20/22 18:52	1
Acenaphthylene	ND		0.19	0.044	ug/L		01/18/22 10:55	01/20/22 18:52	1
Anthracene	ND		0.19	0.031	ug/L		01/18/22 10:55	01/20/22 18:52	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		01/18/22 10:55	01/20/22 18:52	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		01/18/22 10:55	01/20/22 18:52	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/18/22 10:55	01/20/22 18:52	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		01/18/22 10:55	01/20/22 18:52	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		01/18/22 10:55	01/20/22 18:52	1
Chrysene	ND		0.19	0.072	ug/L		01/18/22 10:55	01/20/22 18:52	1
Dibenz(a,h)anthracene	ND		0.19	0.049	ug/L		01/18/22 10:55	01/20/22 18:52	1
Fluoranthene	ND		0.19	0.066	ug/L		01/18/22 10:55	01/20/22 18:52	1
Fluorene	ND		0.19	0.11	ug/L		01/18/22 10:55	01/20/22 18:52	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.042	ug/L		01/18/22 10:55	01/20/22 18:52	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		01/18/22 10:55	01/20/22 18:52	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/18/22 10:55	01/20/22 18:52	1
Phenanthrene	ND		0.19	0.035	ug/L		01/18/22 10:55	01/20/22 18:52	1
Pyrene	ND		0.19	0.039	ug/L		01/18/22 10:55	01/20/22 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*15 - 122*	*01/18/22 10:55*	*01/20/22 18:52*	*1*
Nitrobenzene-d5	*105*		*19 - 130*	*01/18/22 10:55*	*01/20/22 18:52*	*1*

Client Sample ID: P93D-ROX-011422
Date Collected: 01/14/22 11:55
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	128		33 - 138	01/18/22 10:55	01/20/22 18:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	UJ	9.7	3.7	ug/L		01/18/22 10:55	01/20/22 15:15	1
Benzenethiol	ND	*- UJ	9.7	1.7	ug/L		01/18/22 10:55	01/20/22 15:15	1
Benzoic acid	ND		29	7.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
Benzyl alcohol	ND		9.7	1.9	ug/L		01/18/22 10:55	01/20/22 15:15	1
Bis(2-chloroethoxy)methane	ND	UJ	9.7	0.16	ug/L		01/18/22 10:55	01/20/22 15:15	1
Bis(2-chloroethyl)ether	ND		9.7	2.6	ug/L		01/18/22 10:55	01/20/22 15:15	1
bis (2-chloroisopropyl) ether	ND		9.7	0.16	ug/L		01/18/22 10:55	01/20/22 15:15	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Bromophenyl phenyl ether	ND		9.7	0.19	ug/L		01/18/22 10:55	01/20/22 15:15	1
Butyl benzyl phthalate	ND		9.7	0.18	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Chloroaniline	ND		9.7	3.3	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		01/18/22 10:55	01/20/22 15:15	1
2-Chloronaphthalene	ND		9.7	0.14	ug/L		01/18/22 10:55	01/20/22 15:15	1
2-Chlorophenol	ND		9.7	2.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		01/18/22 10:55	01/20/22 15:15	1
Dibenz[a,h]acridine	ND		9.7	0.97	ug/L		01/18/22 10:55	01/20/22 15:15	1
Dibenzofuran	ND		9.7	0.17	ug/L		01/18/22 10:55	01/20/22 15:15	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		01/18/22 10:55	01/20/22 15:15	1
Diethyl phthalate	ND		9.7	0.23	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		01/18/22 10:55	01/20/22 15:15	1
Dimethyl phthalate	ND		9.7	0.17	ug/L		01/18/22 10:55	01/20/22 15:15	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		01/18/22 10:55	01/20/22 15:15	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.6	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,6-Dinitrotoluene	ND	UJ	9.7	1.8	ug/L		01/18/22 10:55	01/20/22 15:15	1
Di-n-octyl phthalate	ND		9.7	0.17	ug/L		01/18/22 10:55	01/20/22 15:15	1
1,4-Dioxane	ND		9.7	0.97	ug/L		01/18/22 10:55	01/20/22 15:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		01/18/22 10:55	01/20/22 15:15	1
Hexachlorobenzene	ND		9.7	0.17	ug/L		01/18/22 10:55	01/20/22 15:15	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/18/22 10:55	01/20/22 15:15	1
Hexachloroethane	ND		9.7	4.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
Indene	ND		9.7	0.97	ug/L		01/18/22 10:55	01/20/22 15:15	1
Isophorone	ND		9.7	0.14	ug/L		01/18/22 10:55	01/20/22 15:15	1
2-Methylphenol	ND		9.7	1.7	ug/L		01/18/22 10:55	01/20/22 15:15	1
3 & 4 Methylphenol	ND		19	0.38	ug/L		01/18/22 10:55	01/20/22 15:15	1
2-Nitroaniline	ND		9.7	2.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
3-Nitroaniline	ND		9.7	1.7	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Nitroaniline	ND		9.7	1.5	ug/L		01/18/22 10:55	01/20/22 15:15	1
Nitrobenzene	ND		9.7	0.13	ug/L		01/18/22 10:55	01/20/22 15:15	1
2-Nitrophenol	ND		9.7	5.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
4-Nitrophenol	ND		9.7	2.0	ug/L		01/18/22 10:55	01/20/22 15:15	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		01/18/22 10:55	01/20/22 15:15	1

Client Sample ID: P93D-ROX-011422
Date Collected: 01/14/22 11:55
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214132-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		01/18/22 10:55	01/20/22 15:15	1
N-Nitrosodiphenylamine	ND		9.7	0.17	ug/L		01/18/22 10:55	01/20/22 15:15	1
Pentachlorophenol	ND		19	1.4	ug/L		01/18/22 10:55	01/20/22 15:15	1
Phenol	ND		9.7	2.5	ug/L		01/18/22 10:55	01/20/22 15:15	1
Pyridine	ND	UJ	9.7	3.1	ug/L		01/18/22 10:55	01/20/22 15:15	1
Quinoline	ND	UJ	9.7	4.4	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		01/18/22 10:55	01/20/22 15:15	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		01/18/22 10:55	01/20/22 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*46 - 124*	*01/18/22 10:55*	*01/20/22 15:15*	*1*
2-Fluorophenol	*6*	*S1-*	*13 - 113*	*01/18/22 10:55*	*01/20/22 15:15*	*1*
Nitrobenzene-d5	*64*		*36 - 126*	*01/18/22 10:55*	*01/20/22 15:15*	*1*
Phenol-d5	*34*		*17 - 127*	*01/18/22 10:55*	*01/20/22 15:15*	*1*
Terphenyl-d14	*96*		*44 - 149*	*01/18/22 10:55*	*01/20/22 15:15*	*1*
2,4,6-Tribromophenol	*70*		*26 - 150*	*01/18/22 10:55*	*01/20/22 15:15*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 15:41	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*51 - 149*	*01/21/22 12:37*	*01/24/22 15:41*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc. Job ID: 400-214132-1
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, low biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

Glossary

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

Surrogate Summary

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

Job ID: 400-214132-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-214132-1	TB-ROX-011422-8260	92	104	94
400-214132-1 - RA	TB-ROX-011422-8260	105	102	101
400-214132-3	T12-ROX-011422	93	103	94
400-214132-3 - DL	T12-ROX-011422	105	100	104
400-214132-4	P57-ROX-011422	95	101	96
400-214132-4 MS	P57-ROX-011422	93	103	95
400-214132-4 MSD	P57-ROX-011422	95	103	93
400-214132-5	P93D-ROX-011422	93	105	94
LCS 400-563634/1002	Lab Control Sample	92	106	92
LCS 400-563776/1002	Lab Control Sample	91	104	96
MB 400-563634/5	Method Blank	91	107	93
MB 400-563776/5	Method Blank	105	98	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-214132-3	T12-ROX-011422	33 S1-	14	44	33	56	55
400-214132-4	P57-ROX-011422	54	14	63	46	63	84
400-214132-5	P93D-ROX-011422	57	6 S1-	64	34	96	70
LCS 400-563528/2-A	Lab Control Sample	75	25	63	54	99	82
LCS 400-563528/6-A	Lab Control Sample	59	37	68	57	118	53
LCSD 400-563528/3-A	Lab Control Sample Dup	67	21	60	54	91	89
LCSD 400-563528/7-A	Lab Control Sample Dup	58	25	68	52	103	48
MB 400-563528/1-A	Method Blank	53	13	61	42	118	58

Surrogate Legend

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

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-214132-3	T12-ROX-011422	101	103	113
400-214132-4	P57-ROX-011422	103	108	94
400-214132-5	P93D-ROX-011422	106	105	128
LCS 400-563528/2-A	Lab Control Sample	111	126	123

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-214132-1
Project/Site: ROXANA QUARTERLY GW

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

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

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
LCSD 400-563528/3-A	Lab Control Sample Dup	92	128	114
MB 400-563528/1-A	Method Blank	96	98	131

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)
400-214132-2	TB-ROX-011422-8011	79
400-214132-3	T12-ROX-011422	68
400-214132-4	P57-ROX-011422	79
400-214132-5	P93D-ROX-011422	83
LCS 400-563945/2-A	Lab Control Sample	93
MB 400-563945/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-214132-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Lab Chronicle

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

Job ID: 400-214132-1

Client Sample ID: TB-ROX-011422-8260

Lab Sample ID: 400-214132-1
Matrix: Water
Date Collected: 01/14/22 00:00
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	563776	01/20/22 19:01	BPO	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 13:49	BPO	TAL PEN

Client Sample ID: TB-ROX-011422-8011

Lab Sample ID: 400-214132-2
Matrix: Water
Date Collected: 01/14/22 00:00
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 14:41	DS	TAL PEN

Client Sample ID: T12-ROX-011422

Lab Sample ID: 400-214132-3
Matrix: Water
Date Collected: 01/14/22 10:10
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	5	5 mL	5 mL	563776	01/20/22 19:27	BPO	TAL PEN
Total/NA	Analysis	8260B		2	5 mL	5 mL	563634	01/19/22 16:01	BPO	TAL PEN
Total/NA	Prep	3520C			248.8 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 14:33	S1B	TAL PEN
Total/NA	Prep	3520C			248.8 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 18:18	PP1	TAL PEN
Total/NA	Prep	8011			33.9 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 15:01	DS	TAL PEN

Client Sample ID: P57-ROX-011422

Lab Sample ID: 400-214132-4
Matrix: Water
Date Collected: 01/14/22 11:10
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 11:38	BPO	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 14:54	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 18:35	PP1	TAL PEN
Total/NA	Prep	8011			34.9 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 15:21	DS	TAL PEN

Client Sample ID: P93D-ROX-011422

Lab Sample ID: 400-214132-5
Matrix: Water
Date Collected: 01/14/22 11:55
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 14:15	BPO	TAL PEN

Lab Chronicle

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

Job ID: 400-214132-1

Client Sample ID: P93D-ROX-011422

Lab Sample ID: 400-214132-5

Date Collected: 01/14/22 11:55
Matrix: Water
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			257.4 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 15:15	S1B	TAL PEN
Total/NA	Prep	3520C			257.4 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 18:52	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 15:41	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563528/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 12:29	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563844	01/20/22 16:01	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563634/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 10:45	BPO	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563776/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563776	01/20/22 11:25	BPO	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563945/1-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	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 13:00	DS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-563528/2-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 12:50	S1B	TAL PEN

Lab Chronicle

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

Job ID: 400-214132-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563528/2-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563844	01/20/22 16:18	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563528/6-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:31	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563634/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 09:16	BPO	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563776/1002
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563776	01/20/22 09:26	BPO	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-563945/2-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	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 13:20	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-563528/3-A
Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:10	S1B	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563844	01/20/22 16:35	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-214132-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-563528/7-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563528	01/18/22 10:55	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563808	01/20/22 13:52	S1B	TAL PEN

Client Sample ID: P57-ROX-011422

Lab Sample ID: 400-214132-4 MS

Date Collected: 01/14/22 11:10
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 12:04	BPO	TAL PEN

Client Sample ID: P57-ROX-011422

Lab Sample ID: 400-214132-4 MSD

Date Collected: 01/14/22 11:10
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563634	01/19/22 12:30	BPO	TAL PEN

Laboratory References:

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

QC Association Summary

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

Job ID: 400-214132-1

GC/MS VOA

Analysis Batch: 563634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-1	TB-ROX-011422-8260	Total/NA	Water	8260B	
400-214132-3	T12-ROX-011422	Total/NA	Water	8260B	
400-214132-4	P57-ROX-011422	Total/NA	Water	8260B	
400-214132-5	P93D-ROX-011422	Total/NA	Water	8260B	
MB 400-563634/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563634/1002	Lab Control Sample	Total/NA	Water	8260B	
400-214132-4 MS	P57-ROX-011422	Total/NA	Water	8260B	
400-214132-4 MSD	P57-ROX-011422	Total/NA	Water	8260B	

Analysis Batch: 563776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-1 - RA	TB-ROX-011422-8260	Total/NA	Water	8260B	
400-214132-3 - DL	T12-ROX-011422	Total/NA	Water	8260B	
MB 400-563776/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563776/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 563528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-3	T12-ROX-011422	Total/NA	Water	3520C	
400-214132-4	P57-ROX-011422	Total/NA	Water	3520C	
400-214132-5	P93D-ROX-011422	Total/NA	Water	3520C	
MB 400-563528/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563528/6-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-563528/7-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 563808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-3	T12-ROX-011422	Total/NA	Water	8270D	563528
400-214132-4	P57-ROX-011422	Total/NA	Water	8270D	563528
400-214132-5	P93D-ROX-011422	Total/NA	Water	8270D	563528
MB 400-563528/1-A	Method Blank	Total/NA	Water	8270D	563528
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	8270D	563528
LCS 400-563528/6-A	Lab Control Sample	Total/NA	Water	8270D	563528
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	563528
LCSD 400-563528/7-A	Lab Control Sample Dup	Total/NA	Water	8270D	563528

Analysis Batch: 563844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-3	T12-ROX-011422	Total/NA	Water	8270D LL	563528
400-214132-4	P57-ROX-011422	Total/NA	Water	8270D LL	563528
400-214132-5	P93D-ROX-011422	Total/NA	Water	8270D LL	563528
MB 400-563528/1-A	Method Blank	Total/NA	Water	8270D LL	563528
LCS 400-563528/2-A	Lab Control Sample	Total/NA	Water	8270D LL	563528
LCSD 400-563528/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	563528

QC Association Summary

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

Job ID: 400-214132-1

GC Semi VOA

Prep Batch: 563945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-2	TB-ROX-011422-8011	Total/NA	Water	8011	
400-214132-3	T12-ROX-011422	Total/NA	Water	8011	
400-214132-4	P57-ROX-011422	Total/NA	Water	8011	
400-214132-5	P93D-ROX-011422	Total/NA	Water	8011	
MB 400-563945/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563945/2-A	Lab Control Sample	Total/NA	Water	8011	

Analysis Batch: 564103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214132-2	TB-ROX-011422-8011	Total/NA	Water	8011	563945
400-214132-3	T12-ROX-011422	Total/NA	Water	8011	563945
400-214132-4	P57-ROX-011422	Total/NA	Water	8011	563945
400-214132-5	P93D-ROX-011422	Total/NA	Water	8011	563945
MB 400-563945/1-A	Method Blank	Total/NA	Water	8011	563945
LCS 400-563945/2-A	Lab Control Sample	Total/NA	Water	8011	563945

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563634/5
Matrix: Water
Analysis Batch: 563634

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/19/22 10:45	1
Acrolein	ND		20	3.3	ug/L			01/19/22 10:45	1
Acrylonitrile	ND		10	2.8	ug/L			01/19/22 10:45	1
Benzene	ND		1.0	0.13	ug/L			01/19/22 10:45	1
Bromobenzene	ND		1.0	0.54	ug/L			01/19/22 10:45	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/19/22 10:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Bromoform	ND		5.0	0.25	ug/L			01/19/22 10:45	1
Bromomethane	ND		1.0	0.98	ug/L			01/19/22 10:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/19/22 10:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/19/22 10:45	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/19/22 10:45	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/19/22 10:45	1
Chloroethane	ND		1.0	0.76	ug/L			01/19/22 10:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/19/22 10:45	1
Chloroform	ND		1.0	0.60	ug/L			01/19/22 10:45	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/19/22 10:45	1
Chloromethane	ND		1.0	0.32	ug/L			01/19/22 10:45	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/19/22 10:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/19/22 10:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/19/22 10:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/19/22 10:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/19/22 10:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/19/22 10:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/19/22 10:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 10:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/19/22 10:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/19/22 10:45	1
2-Hexanone	ND		25	1.4	ug/L			01/19/22 10:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/19/22 10:45	1
Methylene bromide	ND		5.0	0.22	ug/L			01/19/22 10:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/19/22 10:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/19/22 10:45	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/19/22 10:45	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/19/22 10:45	1
Naphthalene	ND		1.0	1.0	ug/L			01/19/22 10:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/19/22 10:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/19/22 10:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/19/22 10:45	1
o-Xylene	ND		5.0	0.60	ug/L			01/19/22 10:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/19/22 10:45	1

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

Lab Sample ID: MB 400-563634/5
Matrix: Water
Analysis Batch: 563634

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/19/22 10:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/19/22 10:45	1
Styrene	ND		1.0	1.0	ug/L			01/19/22 10:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/19/22 10:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/19/22 10:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/19/22 10:45	1
Toluene	ND		1.0	0.41	ug/L			01/19/22 10:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/19/22 10:45	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/19/22 10:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/19/22 10:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/19/22 10:45	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/19/22 10:45	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/19/22 10:45	1
Trichloroethene	ND		1.0	0.15	ug/L			01/19/22 10:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/19/22 10:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/19/22 10:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/19/22 10:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/19/22 10:45	1
Vinyl acetate	ND		25	0.93	ug/L			01/19/22 10:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/19/22 10:45	1
Xylenes, Total	ND		10	1.6	ug/L			01/19/22 10:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*72 - 119*		*01/19/22 10:45*	*1*
Dibromofluoromethane	*107*		*75 - 126*		*01/19/22 10:45*	*1*
Toluene-d8 (Surr)	*93*		*64 - 132*		*01/19/22 10:45*	*1*

Lab Sample ID: LCS 400-563634/1002
Matrix: Water
Analysis Batch: 563634

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	209		ug/L		104	43 - 160
Acrolein	500	516		ug/L		103	38 - 160
Acrylonitrile	500	519		ug/L		104	64 - 142
Benzene	50.0	58.1		ug/L		116	70 - 130
Bromobenzene	50.0	48.4		ug/L		97	70 - 132
Bromochloromethane	50.0	58.4		ug/L		117	70 - 130
Bromodichloromethane	50.0	55.6		ug/L		111	67 - 133
Bromoform	50.0	45.0		ug/L		90	57 - 140
Bromomethane	50.0	81.2	*+	ug/L		162	10 - 160
2-Butanone (MEK)	200	202		ug/L		101	61 - 145
Carbon disulfide	50.0	58.4		ug/L		117	61 - 137
Carbon tetrachloride	50.0	57.4		ug/L		115	61 - 137
Chlorobenzene	50.0	52.6		ug/L		105	70 - 130
Dibromochloromethane	50.0	48.7		ug/L		97	67 - 135
Chloroethane	50.0	62.6		ug/L		125	55 - 141

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

Lab Sample ID: LCS 400-563634/1002
Matrix: Water
Analysis Batch: 563634

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	51.6		ug/L		103	10 - 160
Chloroform	50.0	57.8		ug/L		116	69 - 130
1-Chlorohexane	50.0	53.9		ug/L		108	69 - 130
Chloromethane	50.0	56.9		ug/L		114	58 - 137
cis-1,2-Dichloroethene	50.0	56.0		ug/L		112	68 - 130
cis-1,3-Dichloropropene	50.0	54.2		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130
Dichlorodifluoromethane	50.0	56.4		ug/L		113	41 - 146
1,1-Dichloroethane	50.0	56.9		ug/L		114	70 - 130
1,2-Dichloroethane	50.0	54.4		ug/L		109	69 - 130
1,1-Dichloroethene	50.0	56.1		ug/L		112	63 - 134
1,2-Dichloropropane	50.0	56.9		ug/L		114	70 - 130
1,3-Dichloropropane	50.0	49.0		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	53.6		ug/L		107	52 - 135
1,1-Dichloropropene	50.0	58.7		ug/L		117	70 - 130
Ethylbenzene	50.0	52.8		ug/L		106	70 - 130
Ethyl methacrylate	50.0	44.0		ug/L		88	68 - 130
Hexachlorobutadiene	50.0	58.6		ug/L		117	53 - 140
2-Hexanone	200	172		ug/L		86	65 - 137
Isopropylbenzene	50.0	54.0		ug/L		108	70 - 130
Methylene bromide	50.0	55.9		ug/L		112	70 - 130
Methylene Chloride	50.0	54.5		ug/L		109	66 - 135
4-Methyl-2-pentanone (MIBK)	200	197		ug/L		99	69 - 138
Methyl tert-butyl ether	50.0	51.1		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	50.6		ug/L		101	70 - 130
Naphthalene	50.0	43.7		ug/L		87	47 - 149
n-Butylbenzene	50.0	55.6		ug/L		111	67 - 130
N-Propylbenzene	50.0	52.2		ug/L		104	70 - 130
o-Chlorotoluene	50.0	50.5		ug/L		101	70 - 130
o-Xylene	50.0	51.5		ug/L		103	70 - 130
p-Chlorotoluene	50.0	48.5		ug/L		97	70 - 130
p-Isopropyltoluene	50.0	51.6		ug/L		103	65 - 130
sec-Butylbenzene	50.0	53.2		ug/L		106	66 - 130
Styrene	50.0	51.7		ug/L		103	70 - 130
tert-Butylbenzene	50.0	49.9		ug/L		100	64 - 139
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/L		100	67 - 131
1,1,2,2-Tetrachloroethane	50.0	45.3		ug/L		91	70 - 131
Tetrachloroethene	50.0	53.8		ug/L		108	65 - 130
Toluene	50.0	48.9		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	56.8		ug/L		114	70 - 130
trans-1,3-Dichloropropene	50.0	47.6		ug/L		95	63 - 130
1,2,3-Trichlorobenzene	50.0	50.1		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	51.4		ug/L		103	60 - 140
1,1,1-Trichloroethane	50.0	57.8		ug/L		116	68 - 130
1,1,2-Trichloroethane	50.0	48.1		ug/L		96	70 - 130
Trichloroethene	50.0	59.8		ug/L		120	70 - 130
Trichlorofluoromethane	50.0	59.2		ug/L		118	65 - 138

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

Lab Sample ID: LCS 400-563634/1002
Matrix: Water
Analysis Batch: 563634

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	44.9		ug/L		90	70 - 130
1,2,4-Trimethylbenzene	50.0	51.1		ug/L		102	70 - 130
1,3,5-Trimethylbenzene	50.0	51.0		ug/L		102	69 - 130
Vinyl acetate	100	110		ug/L		110	26 - 160
Vinyl chloride	50.0	58.9		ug/L		118	59 - 136
Xylenes, Total	100	102		ug/L		102	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*72 - 119*
Dibromofluoromethane	*106*		*75 - 126*
Toluene-d8 (Surr)	*92*		*64 - 132*

Lab Sample ID: 400-214132-4 MS
Matrix: Water
Analysis Batch: 563634

Client Sample ID: P57-ROX-011422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	151		ug/L		76	43 - 150
Acrolein	ND		500	398		ug/L		80	38 - 150
Acrylonitrile	ND		500	401		ug/L		80	62 - 149
Benzene	11		50.0	53.9		ug/L		86	56 - 142
Bromobenzene	ND		50.0	37.1		ug/L		74	59 - 136
Bromochloromethane	ND		50.0	43.6		ug/L		87	64 - 140
Bromodichloromethane	ND		50.0	42.8		ug/L		86	59 - 143
Bromoform	ND		50.0	33.0		ug/L		66	50 - 140
Bromomethane	ND	*+	50.0	62.3		ug/L		125	10 - 150
2-Butanone (MEK)	ND		200	151		ug/L		75	55 - 150
Carbon disulfide	ND		50.0	43.6		ug/L		87	48 - 150
Carbon tetrachloride	ND		50.0	42.4		ug/L		85	55 - 145
Chlorobenzene	ND		50.0	40.2		ug/L		80	64 - 130
Dibromochloromethane	ND		50.0	36.2		ug/L		72	56 - 143
Chloroethane	ND		50.0	50.5		ug/L		101	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	3.52	J F1	ug/L		7	10 - 150
Chloroform	ND		50.0	46.1		ug/L		92	60 - 141
1-Chlorohexane	ND		50.0	41.7		ug/L		83	56 - 136
Chloromethane	ND		50.0	46.8		ug/L		94	49 - 148
cis-1,2-Dichloroethene	ND		50.0	42.2		ug/L		84	59 - 143
cis-1,3-Dichloropropene	ND		50.0	41.0		ug/L		82	57 - 140
1,2-Dichlorobenzene	ND		50.0	37.8		ug/L		76	52 - 137
1,3-Dichlorobenzene	ND		50.0	38.5		ug/L		77	54 - 135
1,4-Dichlorobenzene	ND		50.0	38.6		ug/L		77	53 - 135
Dichlorodifluoromethane	ND		50.0	44.9		ug/L		90	16 - 150
1,1-Dichloroethane	ND		50.0	43.1		ug/L		86	61 - 144
1,2-Dichloroethane	ND		50.0	41.4		ug/L		83	60 - 141
1,1-Dichloroethene	ND		50.0	41.8		ug/L		84	54 - 147
1,2-Dichloropropane	ND		50.0	45.2		ug/L		90	66 - 137
1,3-Dichloropropane	ND		50.0	38.2		ug/L		76	66 - 133
2,2-Dichloropropane	ND		50.0	39.5		ug/L		79	42 - 144

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

Lab Sample ID: 400-214132-4 MS
Matrix: Water
Analysis Batch: 563634

Client Sample ID: P57-ROX-011422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	44.0		ug/L		88	65 - 136
Ethylbenzene	0.54	J	50.0	40.7		ug/L		80	58 - 131
Ethyl methacrylate	ND		50.0	37.7		ug/L		75	64 - 130
Hexachlorobutadiene	ND		50.0	44.0		ug/L		88	31 - 149
2-Hexanone	ND		200	132		ug/L		66	65 - 140
Isopropylbenzene	17		50.0	57.7		ug/L		81	56 - 133
Methylene bromide	ND		50.0	43.7		ug/L		87	63 - 138
Methylene Chloride	ND		50.0	41.8		ug/L		84	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	157		ug/L		79	63 - 146
Methyl tert-butyl ether	ND		50.0	39.1		ug/L		78	59 - 137
m-Xylene & p-Xylene	1.3	J	50.0	39.6		ug/L		77	57 - 130
Naphthalene	11		50.0	46.9		ug/L		71	25 - 150
n-Butylbenzene	2.5		50.0	43.2		ug/L		81	41 - 142
N-Propylbenzene	17		50.0	54.0		ug/L		73	51 - 138
o-Chlorotoluene	ND		50.0	38.2		ug/L		76	53 - 134
o-Xylene	ND		50.0	39.1		ug/L		78	61 - 130
p-Chlorotoluene	ND		50.0	36.7		ug/L		73	54 - 133
p-Isopropyltoluene	0.86	J	50.0	39.2		ug/L		77	48 - 139
sec-Butylbenzene	3.9		50.0	43.0		ug/L		78	50 - 138
Styrene	ND		50.0	39.1		ug/L		78	58 - 131
tert-Butylbenzene	6.4		50.0	43.5		ug/L		74	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	38.6		ug/L		77	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	35.7		ug/L		71	66 - 135
Tetrachloroethene	ND		50.0	40.6		ug/L		81	52 - 133
Toluene	3.7		50.0	41.2		ug/L		75	65 - 130
trans-1,2-Dichloroethene	ND		50.0	43.1		ug/L		86	61 - 143
trans-1,3-Dichloropropene	ND		50.0	36.1		ug/L		72	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	39.1		ug/L		78	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	39.7		ug/L		79	39 - 148
1,1,1-Trichloroethane	ND		50.0	43.1		ug/L		86	57 - 142
1,1,2-Trichloroethane	ND		50.0	38.7		ug/L		77	66 - 131
Trichloroethene	ND		50.0	44.2		ug/L		88	64 - 136
Trichlorofluoromethane	ND		50.0	46.1		ug/L		92	54 - 150
1,2,3-Trichloropropane	ND		50.0	34.5		ug/L		69	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	38.2		ug/L		76	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.0		ug/L		76	52 - 135
Vinyl acetate	ND		100	82.8		ug/L		83	26 - 150
Vinyl chloride	ND		50.0	47.0		ug/L		94	46 - 150
Xylenes, Total	1.6	J	100	78.6		ug/L		77	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*95*		*64 - 132*

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

Lab Sample ID: 400-214132-4 MSD
Matrix: Water
Analysis Batch: 563634

Client Sample ID: P57-ROX-011422
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		200	160		ug/L		80	43 - 150	5	30
Acrolein	ND		500	419		ug/L		84	38 - 150	5	31
Acrylonitrile	ND		500	415		ug/L		83	62 - 149	3	30
Benzene	11		50.0	55.7		ug/L		89	56 - 142	3	30
Bromobenzene	ND		50.0	38.2		ug/L		76	59 - 136	3	30
Bromochloromethane	ND		50.0	44.3		ug/L		89	64 - 140	2	30
Bromodichloromethane	ND		50.0	43.2		ug/L		86	59 - 143	1	30
Bromoform	ND		50.0	35.2		ug/L		70	50 - 140	7	30
Bromomethane	ND	*+	50.0	72.8		ug/L		146	10 - 150	16	50
2-Butanone (MEK)	ND		200	158		ug/L		79	55 - 150	4	30
Carbon disulfide	ND		50.0	44.6		ug/L		89	48 - 150	2	30
Carbon tetrachloride	ND		50.0	44.4		ug/L		89	55 - 145	5	30
Chlorobenzene	ND		50.0	40.4		ug/L		81	64 - 130	1	30
Dibromochloromethane	ND		50.0	37.5		ug/L		75	56 - 143	4	30
Chloroethane	ND		50.0	50.4		ug/L		101	50 - 150	0	30
2-Chloroethyl vinyl ether	ND	F1	50.0	2.15	J F1	ug/L		4	10 - 150	48	50
Chloroform	ND		50.0	46.7		ug/L		93	60 - 141	1	30
1-Chlorohexane	ND		50.0	42.5		ug/L		85	56 - 136	2	30
Chloromethane	ND		50.0	47.3		ug/L		95	49 - 148	1	31
cis-1,2-Dichloroethene	ND		50.0	42.8		ug/L		86	59 - 143	1	30
cis-1,3-Dichloropropene	ND		50.0	41.9		ug/L		84	57 - 140	2	30
1,2-Dichlorobenzene	ND		50.0	38.6		ug/L		77	52 - 137	2	30
1,3-Dichlorobenzene	ND		50.0	39.1		ug/L		78	54 - 135	2	30
1,4-Dichlorobenzene	ND		50.0	38.7		ug/L		77	53 - 135	0	30
Dichlorodifluoromethane	ND		50.0	46.4		ug/L		93	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	43.9		ug/L		88	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	43.8		ug/L		88	60 - 141	6	30
1,1-Dichloroethene	ND		50.0	43.1		ug/L		86	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	44.0		ug/L		88	66 - 137	3	30
1,3-Dichloropropane	ND		50.0	38.9		ug/L		78	66 - 133	2	30
2,2-Dichloropropane	ND		50.0	40.9		ug/L		82	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	45.4		ug/L		91	65 - 136	3	30
Ethylbenzene	0.54	J	50.0	41.2		ug/L		81	58 - 131	1	30
Ethyl methacrylate	ND		50.0	37.5		ug/L		75	64 - 130	1	30
Hexachlorobutadiene	ND		50.0	44.7		ug/L		89	31 - 149	1	36
2-Hexanone	ND		200	140		ug/L		70	65 - 140	6	30
Isopropylbenzene	17		50.0	57.9		ug/L		82	56 - 133	0	30
Methylene bromide	ND		50.0	43.7		ug/L		87	63 - 138	0	30
Methylene Chloride	ND		50.0	40.8		ug/L		82	60 - 146	2	32
4-Methyl-2-pentanone (MIBK)	ND		200	166		ug/L		83	63 - 146	6	30
Methyl tert-butyl ether	ND		50.0	40.5		ug/L		81	59 - 137	4	30
m-Xylene & p-Xylene	1.3	J	50.0	39.8		ug/L		77	57 - 130	1	30
Naphthalene	11		50.0	49.3		ug/L		76	25 - 150	5	30
n-Butylbenzene	2.5		50.0	44.4		ug/L		84	41 - 142	3	31
N-Propylbenzene	17		50.0	55.6		ug/L		77	51 - 138	3	30
o-Chlorotoluene	ND		50.0	39.2		ug/L		78	53 - 134	2	30
o-Xylene	ND		50.0	39.2		ug/L		78	61 - 130	0	30
p-Chlorotoluene	ND		50.0	37.9		ug/L		76	54 - 133	3	30

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

Lab Sample ID: 400-214132-4 MSD
Matrix: Water
Analysis Batch: 563634

Client Sample ID: P57-ROX-011422
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	0.86	J	50.0	40.1		ug/L		78	48 - 139	2	30
sec-Butylbenzene	3.9		50.0	44.7		ug/L		82	50 - 138	4	30
Styrene	ND		50.0	39.3		ug/L		79	58 - 131	0	30
tert-Butylbenzene	6.4		50.0	44.4		ug/L		76	54 - 146	2	30
1,1,1,2-Tetrachloroethane	ND		50.0	38.7		ug/L		77	59 - 137	0	30
1,1,2,2-Tetrachloroethane	ND		50.0	37.2		ug/L		74	66 - 135	4	30
Tetrachloroethene	ND		50.0	41.2		ug/L		82	52 - 133	1	30
Toluene	3.7		50.0	41.5		ug/L		76	65 - 130	1	30
trans-1,2-Dichloroethene	ND		50.0	43.6		ug/L		87	61 - 143	1	30
trans-1,3-Dichloropropene	ND		50.0	37.1		ug/L		74	53 - 133	3	30
1,2,3-Trichlorobenzene	ND		50.0	39.3		ug/L		79	43 - 145	0	30
1,2,4-Trichlorobenzene	ND		50.0	41.2		ug/L		82	39 - 148	4	30
1,1,1-Trichloroethane	ND		50.0	44.4		ug/L		89	57 - 142	3	30
1,1,2-Trichloroethane	ND		50.0	38.5		ug/L		77	66 - 131	0	30
Trichloroethene	ND		50.0	46.3		ug/L		93	64 - 136	5	30
Trichlorofluoromethane	ND		50.0	49.8		ug/L		100	54 - 150	8	30
1,2,3-Trichloropropane	ND		50.0	37.1		ug/L		74	65 - 133	7	30
1,2,4-Trimethylbenzene	ND		50.0	39.3		ug/L		79	50 - 139	3	30
1,3,5-Trimethylbenzene	ND		50.0	38.8		ug/L		78	52 - 135	2	30
Vinyl acetate	ND		100	88.9		ug/L		89	26 - 150	7	33
Vinyl chloride	ND		50.0	48.4		ug/L		97	46 - 150	3	30
Xylenes, Total	1.6	J	100	79.0		ug/L		77	59 - 130	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*93*		*64 - 132*

Lab Sample ID: MB 400-563776/5
Matrix: Water
Analysis Batch: 563776

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	0.13	ug/L			01/20/22 11:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/20/22 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/20/22 11:25*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*01/20/22 11:25*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/20/22 11:25*	*1*

Lab Sample ID: LCS 400-563776/1002
Matrix: Water
Analysis Batch: 563776

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	52.6		ug/L		105	70 - 130
1,2,4-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 130

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

Lab Sample ID: LCS 400-563776/1002
Matrix: Water
Analysis Batch: 563776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*72 - 119*
Dibromofluoromethane	*104*		*75 - 126*
Toluene-d8 (Surr)	*96*		*64 - 132*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzenethiol	ND		10	1.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzoic acid	ND		30	7.3	ug/L		01/18/22 10:55	01/20/22 12:29	1
Benzyl alcohol	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/18/22 10:55	01/20/22 12:29	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/18/22 10:55	01/20/22 12:29	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chloroaniline	ND		10	3.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Chlorophenol	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dibenzofuran	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Diethyl phthalate	ND		10	0.24	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/18/22 10:55	01/20/22 12:29	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
1,4-Dioxane	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/18/22 10:55	01/20/22 12:29	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
Hexachloroethane	ND		10	4.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
Indene	ND		10	1.0	ug/L		01/18/22 10:55	01/20/22 12:29	1
Isophorone	ND		10	0.14	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Methylphenol	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/18/22 10:55	01/20/22 12:29	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
3-Nitroaniline	ND		10	1.8	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Nitroaniline	ND		10	1.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
Nitrobenzene	ND		10	0.13	ug/L		01/18/22 10:55	01/20/22 12:29	1
2-Nitrophenol	ND		10	5.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
4-Nitrophenol	ND		10	2.1	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/18/22 10:55	01/20/22 12:29	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/18/22 10:55	01/20/22 12:29	1
Pentachlorophenol	ND		20	1.4	ug/L		01/18/22 10:55	01/20/22 12:29	1
Phenol	ND		10	2.6	ug/L		01/18/22 10:55	01/20/22 12:29	1
Pyridine	ND		10	3.2	ug/L		01/18/22 10:55	01/20/22 12:29	1
Quinoline	ND		10	4.5	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/18/22 10:55	01/20/22 12:29	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/18/22 10:55	01/20/22 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*46 - 124*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2-Fluorophenol	*13*		*13 - 113*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Nitrobenzene-d5	*61*		*36 - 126*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Phenol-d5	*42*		*17 - 127*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
Terphenyl-d14	*118*		*44 - 149*	*01/18/22 10:55*	*01/20/22 12:29*	*1*
2,4,6-Tribromophenol	*58*		*26 - 150*	*01/18/22 10:55*	*01/20/22 12:29*	*1*

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	67.9		ug/L		57	21 - 120
Benzoic acid	498	201		ug/L		40	10 - 144
Benzyl alcohol	120	98.9		ug/L		82	28 - 120
Bis(2-chloroethoxy)methane	120	65.9		ug/L		55	47 - 120
Bis(2-chloroethyl)ether	120	77.2		ug/L		64	44 - 120
bis (2-chloroisopropyl) ether	120	91.4		ug/L		76	33 - 121
Bis(2-ethylhexyl) phthalate	120	114		ug/L		95	52 - 147
4-Bromophenyl phenyl ether	120	106		ug/L		88	54 - 122
Butyl benzyl phthalate	120	106		ug/L		88	54 - 133
4-Chloroaniline	120	68.3		ug/L		57	26 - 120
4-Chloro-3-methylphenol	120	87.0		ug/L		72	48 - 131
2-Chloronaphthalene	120	90.5		ug/L		75	52 - 121
2-Chlorophenol	120	57.3		ug/L		48	40 - 120
4-Chlorophenyl phenyl ether	120	91.8		ug/L		76	56 - 125
Dibenz[a,h]acridine	120	138		ug/L		116	31 - 150
Dibenzofuran	120	90.4		ug/L		75	56 - 122
3,3'-Dichlorobenzidine	160	152		ug/L		95	36 - 132
2,4-Dichlorophenol	120	67.2		ug/L		56	49 - 120
Diethyl phthalate	120	115		ug/L		96	50 - 137

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	120	91.3		ug/L		76	48 - 120
Dimethyl phthalate	120	93.6		ug/L		78	57 - 124
Di-n-butyl phthalate	120	113		ug/L		94	58 - 126
4,6-Dinitro-ortho-cresol	240	246		ug/L		102	23 - 148
2,4-Dinitrophenol	240	282		ug/L		117	10 - 150
2,4-Dinitrotoluene	120	79.6		ug/L		66	54 - 142
2,6-Dinitrotoluene	120	78.4		ug/L		65	55 - 130
Di-n-octyl phthalate	120	113		ug/L		94	57 - 138
1,4-Dioxane	120	61.4		ug/L		51	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	94.6		ug/L		79	45 - 124
Hexachlorobenzene	120	142		ug/L		119	52 - 129
Hexachlorocyclopentadiene	120	90.5		ug/L		75	10 - 134
Hexachloroethane	120	88.1		ug/L		73	20 - 120
Indene	120	89.8		ug/L		75	49 - 120
Isophorone	120	74.2		ug/L		62	48 - 120
2-Methylphenol	120	91.7		ug/L		76	46 - 124
3 & 4 Methylphenol	120	98.1		ug/L		82	45 - 120
2-Nitroaniline	120	93.8		ug/L		78	51 - 145
3-Nitroaniline	120	83.6		ug/L		70	37 - 127
4-Nitroaniline	120	94.4		ug/L		79	36 - 137
Nitrobenzene	120	74.0		ug/L		62	45 - 120
2-Nitrophenol	120	58.2		ug/L		49	40 - 124
4-Nitrophenol	240	250		ug/L		104	23 - 146
N-Nitrosodimethylamine	120	123		ug/L		102	29 - 137
N-Nitrosodi-n-propylamine	120	101		ug/L		84	45 - 120
N-Nitrosodiphenylamine	119	85.5		ug/L		72	54 - 120
Pentachlorophenol	240	201		ug/L		84	31 - 130
Phenol	120	70.1		ug/L		58	11 - 120
Pyridine	240	118		ug/L		49	16 - 120
Quinoline	120	84.3		ug/L		70	49 - 130
2,4,5-Trichlorophenol	120	96.8		ug/L		81	51 - 136
2,4,6-Trichlorophenol	120	86.0		ug/L		72	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*75*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*99*		*44 - 149*
2,4,6-Tribromophenol	*82*		*26 - 150*

Lab Sample ID: LCS 400-563528/6-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	5.06	J *-	ug/L		4	10 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563528/6-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	59		46 - 124
2-Fluorophenol	37		13 - 113
Nitrobenzene-d5	68		36 - 126
Phenol-d5	57		17 - 127
Terphenyl-d14	118		44 - 149
2,4,6-Tribromophenol	53		26 - 150

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	120	66.0		ug/L		55	21 - 120	3	30
Benzoic acid	498	223		ug/L		45	10 - 144	10	30
Benzyl alcohol	120	91.2		ug/L		76	28 - 120	8	30
Bis(2-chloroethoxy)methane	120	62.9		ug/L		52	47 - 120	5	30
Bis(2-chloroethyl)ether	120	72.2		ug/L		60	44 - 120	7	30
bis (2-chloroisopropyl) ether	120	86.7		ug/L		72	33 - 121	5	30
Bis(2-ethylhexyl) phthalate	120	108		ug/L		90	52 - 147	6	30
4-Bromophenyl phenyl ether	120	98.5		ug/L		82	54 - 122	7	30
Butyl benzyl phthalate	120	99.4		ug/L		83	54 - 133	6	30
4-Chloroaniline	120	65.8		ug/L		55	26 - 120	4	30
4-Chloro-3-methylphenol	120	84.1		ug/L		70	48 - 131	3	30
2-Chloronaphthalene	120	84.0		ug/L		70	52 - 121	7	30
2-Chlorophenol	120	59.9		ug/L		50	40 - 120	4	30
4-Chlorophenyl phenyl ether	120	89.0		ug/L		74	56 - 125	3	30
Dibenz[a,h]acridine	120	136		ug/L		114	31 - 150	1	30
Dibenzofuran	120	87.2		ug/L		73	56 - 122	4	30
3,3'-Dichlorobenzidine	160	140		ug/L		88	36 - 132	8	30
2,4-Dichlorophenol	120	74.0		ug/L		62	49 - 120	10	30
Diethyl phthalate	120	111		ug/L		92	50 - 137	4	30
2,4-Dimethylphenol	120	85.8		ug/L		71	48 - 120	6	30
Dimethyl phthalate	120	90.2		ug/L		75	57 - 124	4	30
Di-n-butyl phthalate	120	103		ug/L		86	58 - 126	10	30
4,6-Dinitro-ortho-cresol	240	290		ug/L		121	23 - 148	16	30
2,4-Dinitrophenol	240	323		ug/L		135	10 - 150	14	30
2,4-Dinitrotoluene	120	86.1		ug/L		72	54 - 142	8	30
2,6-Dinitrotoluene	120	75.8		ug/L		63	55 - 130	3	30
Di-n-octyl phthalate	120	104		ug/L		86	57 - 138	8	30
1,4-Dioxane	120	58.2		ug/L		49	31 - 120	5	30
1,2-Diphenylhydrazine (as Azobenzene)	120	88.6		ug/L		74	45 - 124	7	30
Hexachlorobenzene	120	124		ug/L		104	52 - 129	13	30
Hexachlorocyclopentadiene	120	88.8		ug/L		74	10 - 134	2	30
Hexachloroethane	120	86.8		ug/L		72	20 - 120	2	30
Indene	120	86.9		ug/L		72	49 - 120	3	30
Isophorone	120	70.3		ug/L		59	48 - 120	5	30
2-Methylphenol	120	88.8		ug/L		74	46 - 124	3	30
3 & 4 Methylphenol	120	95.4		ug/L		80	45 - 120	3	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Nitroaniline	120	93.5		ug/L		78	51 - 145	0	30
3-Nitroaniline	120	89.2		ug/L		74	37 - 127	6	30
4-Nitroaniline	120	107		ug/L		89	36 - 137	13	30
Nitrobenzene	120	72.5		ug/L		60	45 - 120	2	30
2-Nitrophenol	120	69.4		ug/L		58	40 - 124	18	30
4-Nitrophenol	240	276		ug/L		115	23 - 146	10	30
N-Nitrosodimethylamine	120	126		ug/L		105	29 - 137	3	30
N-Nitrosodi-n-propylamine	120	95.4		ug/L		80	45 - 120	6	30
N-Nitrosodiphenylamine	119	81.6		ug/L		69	54 - 120	5	30
Pentachlorophenol	240	208		ug/L		87	31 - 130	3	30
Phenol	120	71.4		ug/L		60	11 - 120	2	30
Pyridine	240	107		ug/L		45	16 - 120	10	30
Quinoline	120	78.0		ug/L		65	49 - 130	8	30
2,4,5-Trichlorophenol	120	101		ug/L		84	51 - 136	4	30
2,4,6-Trichlorophenol	120	88.4		ug/L		74	50 - 127	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*46 - 124*
2-Fluorophenol	*21*		*13 - 113*
Nitrobenzene-d5	*60*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*91*		*44 - 149*
2,4,6-Tribromophenol	*89*		*26 - 150*

Lab Sample ID: LCSD 400-563528/7-A
Matrix: Water
Analysis Batch: 563808

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	4.22	J *-	ug/L		4	10 - 120	18	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*68*		*36 - 126*
Phenol-d5	*52*		*17 - 127*
Terphenyl-d14	*103*		*44 - 149*
2,4,6-Tribromophenol	*48*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 16:01	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/18/22 10:55	01/20/22 16:01	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-563528/1-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.032	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/18/22 10:55	01/20/22 16:01	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/18/22 10:55	01/20/22 16:01	1
Chrysene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 16:01	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/18/22 10:55	01/20/22 16:01	1
Fluoranthene	ND		0.20	0.068	ug/L		01/18/22 10:55	01/20/22 16:01	1
Fluorene	ND		0.20	0.11	ug/L		01/18/22 10:55	01/20/22 16:01	1
Indeno[1,2,3-cd]pyrene	0.160	J	0.20	0.043	ug/L		01/18/22 10:55	01/20/22 16:01	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/18/22 10:55	01/20/22 16:01	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/18/22 10:55	01/20/22 16:01	1
Phenanthrene	ND		0.20	0.036	ug/L		01/18/22 10:55	01/20/22 16:01	1
Pyrene	ND		0.20	0.040	ug/L		01/18/22 10:55	01/20/22 16:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*15 - 122*	*01/18/22 10:55*	*01/20/22 16:01*	*1*
Nitrobenzene-d5	*98*		*19 - 130*	*01/18/22 10:55*	*01/20/22 16:01*	*1*
Terphenyl-d14	*131*		*33 - 138*	*01/18/22 10:55*	*01/20/22 16:01*	*1*

Lab Sample ID: LCS 400-563528/2-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	138		ug/L		115	41 - 120
Acenaphthylene	120	125		ug/L		104	44 - 120
Anthracene	120	127		ug/L		106	49 - 120
Benzo[a]anthracene	120	133		ug/L		110	61 - 135
Benzo[a]pyrene	120	124		ug/L		103	52 - 120
Benzo[b]fluoranthene	120	133		ug/L		111	53 - 134
Benzo[g,h,i]perylene	120	121		ug/L		101	47 - 133
Benzo[k]fluoranthene	120	133		ug/L		111	57 - 134
Chrysene	120	129		ug/L		107	55 - 122
Dibenz(a,h)anthracene	120	135		ug/L		112	48 - 146
Fluoranthene	120	134		ug/L		112	54 - 128
Fluorene	120	146		ug/L		122	45 - 125
Indeno[1,2,3-cd]pyrene	120	130		ug/L		108	43 - 142
1-Methylnaphthalene	120	124		ug/L		104	41 - 120
2-Methylnaphthalene	120	119		ug/L		99	32 - 124
Phenanthrene	120	127		ug/L		106	48 - 120
Pyrene	120	123		ug/L		103	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*111*		*15 - 122*
Nitrobenzene-d5	*126*		*19 - 130*
Terphenyl-d14	*123*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: LCSD 400-563528/3-A
Matrix: Water
Analysis Batch: 563844

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563528

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	121		ug/L		101	41 - 120	13	56
Acenaphthylene	120	111		ug/L		92	44 - 120	13	56
Anthracene	120	121		ug/L		101	49 - 120	5	51
Benzo[a]anthracene	120	116		ug/L		97	61 - 135	13	49
Benzo[a]pyrene	120	100		ug/L		84	52 - 120	21	50
Benzo[b]fluoranthene	120	116		ug/L		97	53 - 134	14	54
Benzo[g,h,i]perylene	120	110		ug/L		91	47 - 133	10	50
Benzo[k]fluoranthene	120	114		ug/L		95	57 - 134	16	52
Chrysene	120	112		ug/L		93	55 - 122	14	50
Dibenz(a,h)anthracene	120	123		ug/L		103	48 - 146	9	50
Fluoranthene	120	118		ug/L		99	54 - 128	12	52
Fluorene	120	127		ug/L		106	45 - 125	14	56
Indeno[1,2,3-cd]pyrene	120	108		ug/L		90	43 - 142	19	51
1-Methylnaphthalene	120	120		ug/L		100	41 - 120	3	55
2-Methylnaphthalene	120	118		ug/L		98	32 - 124	1	57
Phenanthrene	120	115		ug/L		96	48 - 120	10	56
Pyrene	120	117		ug/L		98	48 - 132	5	52

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*92*		*15 - 122*
Nitrobenzene-d5	*128*		*19 - 130*
Terphenyl-d14	*114*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-563945/1-A
Matrix: Water
Analysis Batch: 564103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*01/21/22 12:37*	*01/24/22 13:00*	*1*

Lab Sample ID: LCS 400-563945/2-A
Matrix: Water
Analysis Batch: 564103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.102		ug/L		101	60 - 140
1,2-Dibromoethane	0.101	0.112		ug/L		111	60 - 140

Surrogate	*LCS %Recovery*	*LCS 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 (_____)

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**
60674381 – 3.1.2	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/14/2022

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60674381 – 3.1.2

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Order ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

SAMPLER NAME(S) (Print): J. Mayer, M. D'Angelo

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 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) _EDD_____

TEMPERATURE ON RECEIPT C°: Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

400-214132 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011422-8260	1/14/2022	0000	Water	X					2	X			
	TB-ROX-011422-8011	1/14/2022	0000	Water	X					2		X		
	T12-ROX-011422	1/14/2022	1010	Water	X			X		8	X	X	X	X
	P57-ROX-011422	1/14/2022	1110	Water	X			X		8	X	X	X	X
	P93D-ROX-011422	1/14/2022	1155	Water	X			X		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT 0.0 C° IR8

Container PID Readings or Laboratory Notes

Relinquished by (Signature)	Received by (Signature)	Date	Time
Mary D'Angelo	FEDEX: 9509 0059 2086	1/14/2022	1600
		1.15.22	09:03

CUSTODY SEALS: 1699416, 1699417

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-214132-1

Login Number: 214132
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-214132-1
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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

Roxana Groundwater Quarterly – 1st Quarter 2022 Data Review

Laboratory SDG: 400-214137-1-Rev.1

Data Reviewer: Melissa Remiger

Peer Reviewer: Paula DiMattei

Date Reviewed: 2/25/2022

Guidance: USEPA National Functional Guidelines for Organic Superfund Methods Data Review 2020

Sample Identification	Sample Identification
TB-ROX-01322-8260-A	TB-ROX-011322-8011-A
MW14-ROX-011322-EB	MW14-ROX-011322
P66-ROX-011322	TB-ROX-011322-8011-B
TB-ROX-011322-8260-B	P74-ROX-011322
P74-ROX-011322-Dup	P59-ROX-011322
P58-ROX-011322	P58-ROX-011322-Dup
P93B-ROX-011322	

1.0 Data Package Completeness

Were all items delivered as specified in the QAPP and COC as appropriate?

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated chrysene was detected in the method blank, and 2-butanone (MEK) was detected in the equipment blank. The LCS recovery, and LCS/LCSD RPD, for benzenethiol were outside evaluation criteria. Several PAH surrogate recoveries were outside criteria in sample P74-ROX-011322 and matrix spike MW14-ROX-011322-MS. The MS/MSD recoveries for 2-chloroethyl vinyl ether were outside evaluation criteria in sample MW14-ROX-011322. Although not narrated, it should be noted that the difference in fluorene and pyrene results in field duplicate pair P58-ROX-011322/P58-ROX-011322-Dup was greater than two times (2X) the reporting level; therefore, results were qualified as estimated (**UJ**/**J**). VOCs in several samples, and phenol in field duplicate pair P58-ROX-011322/P58-ROX-011322-Dup, were diluted to bring target analytes into calibration range of the instrument. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for 1,2-dichloroethane in sample P59-ROX-011322, which was identified as a false positive.

Three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any problems.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

Were any analytes detected in the Method Blanks, Field Blanks or Trip Blanks?

Yes

Blank ID	Parameter	Analyte	Concentration /Amount
MW14-ROX-011322-EB	VOCs	2-Butanone (MEK)	4.6 µg/L
MB 400-536773/1-A	PAHs	Chrysene	0.0947 µg/L

Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration did not require qualification. No qualification of data was required.

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-563773/3-A/4-A	SVOCs	Benzenethiol	**4**/30	**153**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-011322	SVOCs	Benzenethiol	**UJ**
P66-ROX-011322	SVOCs	Benzenethiol	**UJ**
P74-ROX-011322	SVOCs	Benzenethiol	**UJ**
P74-ROX-011322-Dup	SVOCs	Benzenethiol	**UJ**
P59-ROX-011322	SVOCs	Benzenethiol	**UJ**
P58-ROX-011322	SVOCs	Benzenethiol	**UJ**
P58-ROX-011322-Dup	SVOCs	Benzenethiol	**UJ**
P93B-ROX-011322	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P74-ROX-011322	PAHs	2-Fluorobiphenyl	**125**	15-122
MW14-ROX-011322 MS	PAHs	Nitrobenzene-d_5	**133**	19-130

Qualifications due to surrogate recoveries were not required if only one of three base/neutral PAH surrogate recoveries were outside evaluation criteria. Matrix spikes are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

Yes, sample MW14-ROX-011322 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW14-ROX-011322	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-011322	VOCs	2-Chloroethyl vinyl ether	**UJ**

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P74-ROX-011322	P74-ROX-011322-Dup
P58-ROX-011322	P58-ROX-011322-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P58-ROX-011322	P58-ROX-011322-Dup	PAHs	Fluorene	**> 2X RL**	**UJ/J**
P58-ROX-011322	P58-ROX-011322-Dup	PAHs	Pyrene	**> 2X RL**	**UJ/J**

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for several analytes were outside evaluation criteria, biased low. Analytes are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-011322	VOCs	Vinyl chloride	**UJ**
P66-ROX-011322	VOCs	Vinyl chloride	**UJ**
P74-ROX-011322	VOCs	Vinyl chloride	**UJ**
P74-ROX-011322-Dup	VOCs	Vinyl chloride	**UJ**
P59-ROX-011322	VOCs	Vinyl chloride	**UJ**
P58-ROX-011322	VOCs	Vinyl chloride	**UJ**
P58-ROX-011322-Dup	VOCs	Vinyl chloride	**UJ**
P93B-ROX-011322	VOCs	Vinyl chloride	**UJ**
MW14-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
MW14-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW14-ROX-011322	SVOCs	Quinoline	**UJ**
P66-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P66-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P66-ROX-011322	SVOCs	Quinoline	**UJ**
P74-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P74-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-011322	SVOCs	Quinoline	**UJ**
P74-ROX-011322-Dup	SVOCs	2,6-Dinitrotoluene	**UJ**
P74-ROX-011322-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-011322-Dup	SVOCs	Quinoline	**UJ**
P59-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P59-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P59-ROX-011322	SVOCs	Quinoline	**UJ**
P58-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P58-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P58-ROX-011322	SVOCs	Quinoline	**UJ**

Sample ID	Parameter	Analyte	Qualification
P58-ROX-011322-Dup	SVOCs	2,6-Dinitrotoluene	**UJ**
P58-ROX-011322-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**
P58-ROX-011322-Dup	SVOCs	Quinoline	**UJ**
P93B-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P93B-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P93B-ROX-011322	SVOCs	Quinoline	**UJ**

1.0 VALIDATION OF DBCP AND EDB DATA – SDG 400-214137-1-R1

This section describes the validation for six investigative groundwater samples, two field duplicate samples, one equipment blank, and two trip blanks that were prepared and analyzed for 1,2-dibromo-3-chloropropane (DBCP) and 1,2-dibromoethane (EDB) by USEPA SW-846 Method 8011. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-214137-1-R1. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-011322-8011-B	TB-ROX-011322-8011-A
MW14-ROX-011322-EB	MW14-ROX-011322
P66-ROX-011322	P74-ROX-011322
P74-ROX-011322-Dup	P59-ROX-011322
P58-ROX-011322	P58-ROX-011322-Dup
P93B-ROX-011322	

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Field duplicate results
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative did not indicate any quality control issues.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms, and the raw data forms for accuracy, consistency, and holding time compliance. The samples were received in good condition and were received and maintained at temperatures of ≤ 6ºC. In addition, the samples were analyzed within 14 days of collection. No qualifications to the data were required based on holding times and sample preservation.

1.4 Initial Calibration

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for EDB/DBCP analyses. Validated samples included in SDG 400-214137-1-R1 were analyzed using instrument Toto. The ICAL for instrument Toto was established on 10/21/2021. At least five standard concentrations were used to establish the ICAL curve as required by Method 8011.

Review of the ICAL summary forms indicated percent relative standard deviations (%RSDs) were ≤ 15% for target compounds or were determined using linear regression and correlation coefficients (r^2) were greater than 0.990. A recalculation of the %RSDs was performed from the raw data and no errors in calculation were noted.

Review of the summary forms indicated that an initial calibration verification (ICV) was performed following the initial calibration. Review of ICV summary forms indicated percent differences (%Ds) were within the evaluation criterion of ≤ 30% for both target compounds. No qualification of data was required.

Summary forms and raw data are provided for the primary column only since all target compounds were reported as non-detect in the samples and did not require confirmation.

1.5 Calibration Verification (CV)

Review of the CV summary forms indicated that all CVs were performed before the start of sample analysis, every ten sample injections, and at the end of sample analysis. %Ds met the evaluation criteria of ≤ 15% for both target compounds with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-563945/26-A / 01/24/2021 20:03	1,2-Dibromo-3-chloropropane	**23.6**

The results for the validated samples were non-detect and were associated with a positive %D, indicating a potential high bias; therefore, qualification of data was not required.

Summary forms and raw data are provided for the primary column only since all target compounds were reported as non-detect in the samples and did not require confirmation.

Recalculations of the %D for one target compound was completed for the CV, and no errors in calculation were noted.

1.6 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by USEPA SW-846 Method 8011. Also, trip blanks were analyzed to evaluate the existence and magnitude of contamination problems emanating from sample shipment to the laboratory. Equipment blank samples were used to evaluate the efficiency of the decontamination of sampling equipment. Target compounds were reported as non-detect in all blanks. No qualification of data was required.

1.7 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within the evaluation criteria. No qualification of data was required.

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.8 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples. No qualification of data was required.

Approximately 10% of the recoveries were recalculated and no calculation or transcription errors were noted.

1.9 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW14-ROX-011322 was spiked and analyzed for Method 8011. MS/MSD data were within evaluation criteria.

1.10 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P74-ROX-011322/P74-ROX-011322-Dup and P58-ROX-011322/P58-ROX-011322-Dup were the field duplicate samples in this data set. Target compounds were not detected in either sample of both field duplicate pairs. Field duplicate precision was deemed acceptable.

1.11 Target Compound Identification and Quantification

For validation of the compound identification, chromatograms were reviewed to verify the major peaks were identified, and the relative retention time was no greater than 0.06 minutes different from the associated CV retention times. Target compounds were not detected in any of the investigative groundwater samples in this data set.

For the validation of compound quantitation, the LCS results were recalculated from the raw data since all target compounds were non-detect, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions when applicable.

1.12 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results reported for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF VOC DATA – SDG 400-214137-1-R1

This section describes the validation for six investigative groundwater samples, two field duplicates, one equipment blank, and two trip blanks which were prepared by USEPA SW-846 Method 5030B and analyzed for Volatile Organic Compounds (VOCs) by USEPA SW-846 Method 8260B. The samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of the sample delivery group (SDG) 400-214137-1-R1-1. The samples included as part of this validation are listed below.

Sample Identification	Sample Identification
TB-ROX-01322-8260-A	TB-ROX-011322-8260-B
MW14-ROX-011322-EB	MW14-ROX-011322
P66-ROX-011322	P74-ROX-011322
P74-ROX-011322-Dup	P59-ROX-011322
P58-ROX-011322	P58-ROX-011322-Dup
P93B-ROX-011322	

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control spike (LCS) samples
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standards
- Field duplicate results
- Target compound identification and quantification
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the

analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated that 2-butanone (MEK) was detected in the equipment blank. The MS/MSD recoveries for 2-chloroethyl vinyl ether were outside evaluation criteria in sample MW14-ROX-011322. VOCs in several samples were diluted to bring target compounds into the calibration range of the instrument. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for 1,2-dichloroethane in sample P59-ROX-011322, which was identified as a false positive.

Additionally, the laboratory case narrative indicated three of 69 (2-chloroethyl vinyl ether, acrolein, and acrylonitrile) 8260 VOCs are acid-reactive compounds; results may be biased low due to the presence of HCl in the preservative.

The cooler receipt form did not indicate any issues.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the sample chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC and samples were preserved at a pH < 2.0. Additionally, samples were analyzed within the analysis holding time (14 days).

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against criteria established in USEPA SW-846 Method 8260B.

Based on the summary forms, the ion abundance criteria were within evaluation criteria for all masses. No qualifications to the data were required based on instrument performance criteria.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for volatiles analyses. Validated samples included in SDG 400-214137-1-R1 were analyzed using instrument CH_TAN. The ICAL for instrument CH_TAN was established on 12/17/2021. At least five standard concentrations were used to establish the ICAL curves as required by Method 8260B.

The ICAL response factors (RFs) were reviewed and were greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Review of the initial calibration summary forms indicated %RSDs were $\leq$ 30% for calibration check compounds (CCCs) [1,1-dichloroethene, toluene, chloroform, ethylbenzene, 1,2-dichloropropane, and vinyl chloride], and $\leq$ 15% for non-CCCs.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the laboratory quality control criteria.

A recalculation of the %RSDs and RFs for a compound associated with each internal standard was performed from the raw data and no errors in calculation were noted.

1.6 Calibration Verification (CV)

Review of CV summary forms indicated RFs met the evaluation criteria of greater than 0.10 for chloromethane, 0.10 for 1,1-dichloroethane, 0.10 for bromoform, 0.30 for chlorobenzene, and 0.30 for 1,1,2,2-tetrachloroethane. No qualification of data was required.

Percent differences or percent drifts (%D) met the evaluation criteria of ≤ 20% for target analytes with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-563489/2 1/18/2022 8:30	Vinyl chloride	**-20.4**
	Bromomethane	**-27.5**
	Chloroethane	**-25.0**
	Acrolein	**-25.3**
	2,2-Dichloropropane	**-24.5**
	Bromoform	**-22.7**
	1,1,2,2-Tetrachloroethane	**-21.6**
Associated samples: MW14-ROX-011322, TB-ROX-01322-8260-A, MW14-ROX-011322-EB, TB-ROX-011222-8260-B, P74-ROX-011322, P74-ROX-011322-DUP, P59-ROX-011322, P66-ROX-011322, P58-ROX-011322, P58-ROX-011322-DUP, P93B-ROX-011322		

Analytes are qualified as summarized in the following table. Equipment blanks and trip blanks are quality control samples and do not require qualification.

Sample ID	Compound	Qualification
MW14-ROX-011322	Vinyl chloride	**UJ**
MW14-ROX-011322	Bromomethane	**UJ**
MW14-ROX-011322	Chloroethane	**UJ**
MW14-ROX-011322	Acrolein	**UJ**
MW14-ROX-011322	2,2-Dichloropropane	**UJ**
MW14-ROX-011322	Bromoform	**UJ**
MW14-ROX-011322	1,1,2,2-Tetrachloroethane	**UJ**
P74-ROX-011322	Vinyl chloride	**UJ**
P74-ROX-011322	Bromomethane	**UJ**
P74-ROX-011322	Chloroethane	**UJ**
P74-ROX-011322	Acrolein	**UJ**
P74-ROX-011322	2,2-Dichloropropane	**UJ**
P74-ROX-011322	Bromoform	**UJ**
P74-ROX-011322	1,1,2,2-Tetrachloroethane	**UJ**
P74-ROX-011322-DUP	Vinyl chloride	**UJ**
P74-ROX-011322-DUP	Bromomethane	**UJ**

Sample ID	Compound	Qualification
P74-ROX-011322-DUP	Chloroethane	UJ
P74-ROX-011322-DUP	Acrolein	UJ
P74-ROX-011322-DUP	2,2-Dichloropropane	UJ
P74-ROX-011322-DUP	Bromoform	UJ
P74-ROX-011322-DUP	1,1,2,2-Tetrachloroethane	UJ
P59-ROX-011322	Vinyl chloride	UJ
P59-ROX-011322	Bromomethane	UJ
P59-ROX-011322	Chloroethane	UJ
P59-ROX-011322	Acrolein	UJ
P59-ROX-011322	2,2-Dichloropropane	UJ
P59-ROX-011322	Bromoform	UJ
P59-ROX-011322	1,1,2,2-Tetrachloroethane	UJ
P66-ROX-011322	Vinyl chloride	UJ
P66-ROX-011322	Bromomethane	UJ
P66-ROX-011322	Chloroethane	UJ
P66-ROX-011322	Acrolein	UJ
P66-ROX-011322	2,2-Dichloropropane	UJ
P66-ROX-011322	Bromoform	UJ
P66-ROX-011322	1,1,2,2-Tetrachloroethane	UJ
P58-ROX-011322	Vinyl chloride	UJ
P58-ROX-011322	Bromomethane	UJ
P58-ROX-011322	Chloroethane	UJ
P58-ROX-011322	Acrolein	UJ
P58-ROX-011322	2,2-Dichloropropane	UJ
P58-ROX-011322	Bromoform	UJ
P58-ROX-011322	1,1,2,2-Tetrachloroethane	UJ
P58-ROX-011322-DUP	Vinyl chloride	UJ
P58-ROX-011322-DUP	Bromomethane	UJ
P58-ROX-011322-DUP	Chloroethane	UJ
P58-ROX-011322-DUP	Acrolein	UJ
P58-ROX-011322-DUP	2,2-Dichloropropane	UJ
P58-ROX-011322-DUP	Bromoform	UJ
P58-ROX-011322-DUP	1,1,2,2-Tetrachloroethane	UJ
P93B-ROX-011322	Vinyl chloride	UJ
P93B-ROX-011322	Bromomethane	UJ
P93B-ROX-011322	Chloroethane	UJ
P93B-ROX-011322	Acrolein	UJ
P93B-ROX-011322	2,2-Dichloropropane	UJ
P93B-ROX-011322	Bromoform	UJ
P93B-ROX-011322	1,1,2,2-Tetrachloroethane	UJ

Recalculations of the RFs and %Ds for select target compounds were completed for each CV, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of the method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were analyzed with each analytical batch as required by Method 8260B. The purpose of trip blank samples is to evaluate the existence and magnitude of contamination emanating from field and transport activities. The purpose of equipment blank samples is to evaluate the existence and magnitude of contamination emanating from field activities. Compounds detected in the blanks are summarized below.

Blank ID	Parameter	Analyte	Concentration /Amount
MW14-ROX-011322-EB	VOCs	2-Butanone (MEK)	4.6 µg/L

2-Butanone was not detected in the associated sample; therefore, qualification of the data is not required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS data were within evaluation

Approximately 10% of spiking compound recoveries for the LCS were recalculated and verified using the LCS summary forms, and no calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per sample basis. All surrogate recoveries were within the method acceptance criteria for the validated samples. Approximately 10% of the samples were recalculated, and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW14-ROX-011322 was spiked and analyzed for VOCs. MS/MSD data were within evaluation criteria with the exception summarized in the following table.

MS/MSD ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW14-ROX-011322	VOCs	2-Chloroethyl vinyl ether	**0/0**	NC	10-150/50

Analytical data that required qualification based on MS/MSD data are included in the table below. Professional judgement was used to qualify; however, not reject the compound 2-chloroethyl vinyl ether due to acceptable LCS recoveries for this compound and to the acid reactive nature of 2-chloroethyl vinyl ether.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-011322	VOCs	2-Chloroethyl vinyl ether	**UJ**

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. IS areas must be within -50% to +100%, and the IS retention times must be within 30 seconds of the IS continuing calibration retention time. IS areas and retention times for the validated samples in this SDG were within evaluation criteria.

The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P74-ROX-011322/P74-ROX-011322-Dup and P58-ROX-011322/P58-ROX-011322-Dup were the field duplicate samples in this data set.

Field duplicate results were within the evaluation criteria of $\leq$ 25% relative percent difference (RPD) when both results are $\geq$ 5x the quantitation limit (QL) or $\leq$ 2x the QL when one or both results is <5x.

1.13 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, approximately 10% of the detected target compounds were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions.

1.14 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

1.0 VALIDATION OF SVOC DATA – SDG 400-214137-1-R1

This section describes the validation for six investigative groundwater samples, two field duplicates, and one equipment blank which were prepared by USEPA SW-846 Method 3520C and analyzed for Semi-Volatile Organic Compounds (SVOCs) by USEPA SW-846 Method 8270D and for Polycyclic Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270D Low Level. Samples were analyzed by TestAmerica Laboratories, Inc. of Pensacola, Florida, and submitted as part of sample delivery group (SDG) 400-214137-1-R1. Samples included as part of this validation are listed below:

Sample Identification	Sample Identification
MW14-ROX-011322-EB	MW14-ROX-011322
P66-ROX-011322	P74-ROX-011322
P74-ROX-011322-Dup	P59-ROX-011322
P58-ROX-011322	P58-ROX-011322-Dup
P93B-ROX-011322	

Evaluation of the analytical data followed procedures outlined in the USEPA Contract Laboratory National Functional Guidelines for Superfund Organic Methods Data Review (EPA 2020).

Criteria evaluated included the following method performance criteria:

- Data package completeness
- Laboratory case narrative/cooler receipt form
- Holding times and sample preservation
- GC/MS instrument performance
- Initial calibration (ICAL)
- Calibration verification (CV)
- Blank samples
- Laboratory control sample (LCS)
- Surrogate spike recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Internal standard areas
- Field duplicate results
- Target compound identification and quantitation
- Overall data assessment

1.1 Data Package Completeness

The data package was reviewed to make certain it contained the data contractually required in the deliverable. This included checking the data package for the results against the analyses requested on the chain-of custody, along with requested QC documentation for the respective methods.

1.2 Laboratory Case Narrative/Cooler Receipt Form

The laboratory case narrative indicated chrysene was detected in the method blank. The LCS recovery, and LCS/LCSD RPD, for benzenethiol were outside evaluation criteria. Several PAH surrogate recoveries were outside criteria in sample P74-ROX-011322 and matrix spike MW14-ROX-011322-MS. The continuing calibration verifications for several analytes were outside evaluation criteria, biased low. These issues are addressed further in the appropriate sections of this data review. The laboratory report was revised on January 28, 2022 to correct the result for 1,2-dichloroethane in sample P59-ROX-011322, which was identified as a false positive.

No issues were indicated in the cooler receipt form.

1.3 Holding Times and Sample Preservation

Review of the sample collection and analysis dates involved comparing the chain-of-custody, the summary forms and the raw data forms for accuracy, consistency, and holding time compliance. The samples were in good condition and were received and maintained at temperatures of ≤ 6ºC and were extracted within seven days of collection and analyzed within 40 days of extraction.

1.4 GC/MS Instrument Performance

GC/MS instrument performance checks were performed to ensure mass resolution, identification, and instrument sensitivity. Criteria for evaluation of instrument performance included possible transcription/calculation errors, adherence to instrument tuning frequency requirements, mass assignments, and ion abundance criteria. Instrument performance check samples were evaluated against the laboratory tuning criteria established in Method 8270D.

Based on the raw data, the ion abundance criteria were within evaluation criteria for all masses, therefore; no qualification of the data was required. The raw data forms were checked against the summary forms and no calculation or transcription errors were noted.

1.5 Initial Calibration (ICAL)

An ICAL was established to assess whether the instrument was capable of producing acceptable qualitative and quantitative data for semi-volatile analysis. SVOC samples as part of SDG 400-214137-1-R1 were analyzed using instrument Marianne. PAH samples were analyzed using instrument Chuck and was established on 12/03/2021. The ICAL for instrument Marianne was established on 12/07-08/2021. The ICALs for instruments Chuck and Marianne were established prior to sample analysis and using at least five concentration standards to establish the initial calibration curve as required by Method 8270D and 8270D Low Level. An average response factor (RF) was determined for each target compound, and the RFs were reviewed and verified as greater than the minimum RF as specified in Method 8270D.

Review of the initial calibration summary forms for SVOCs and PAHs indicated target compounds had percent relative standard deviations (%RSDs) $\leq$ the maximum RSD of $\leq$ 20% specified in Method 8270D. Linear regression or quadratic equations were applied to data for select target analytes and the resulting correlation coefficients (r) were greater than 0.990.

An initial calibration verification (ICV) was analyzed following the initial calibration. Percent difference (%D) values from comparing ICV RF to the average ICAL RFs were within the Method 8270D quality control criteria.

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.6 Calibration Verification (CV)

Review of continuing calibration summary forms for SVOCs and PAHs indicated all RFs met the evaluation criteria of greater than the method specified minimum RF for all target compounds. In addition, %Ds met the evaluation criteria of ≤ 20% specified in Method 8270D with the exceptions summarized in the table below.

CV (Date/Time)	Compound	%D
400-563937/3 1/21/2022 12:14	N-Nitrosodimethylamine	**45.9**
	Hexachlorocyclopentadiene	**-32.4**
	2,6-Dinitrotoluene	**-22.1**
	2,4-Dinitrophenol	**23.6**
	4-Nitrophenol	**33.4**
	Diethyl phthalate	**21.4**
	4,6-Dinitro-o-cresol	**26.9**
	Hexachlorobenzene	**27.1**
400-563937/4 1/21/2022 12:34	Benzoic acid	**-40.3**
400-563937/5 1/21/2022 12:55	Quinoline	**-23.3**
	Dibenz(a,h)acridine	**28.6**
Associated samples: MW14-ROX-011322, MW14-ROX-011322-EB, P66-ROX-011322, P74-ROX-011322, P74-ROX-011322-DUP, P59-ROX-011322, P58-ROX-011322, P58-ROX-011322-DUP, P93B-ROX-011322		

Analytical data that required qualification based on CV %D data are included in the table below. Analytical data reported as non-detect and associated with CV results above evaluation criteria, indicating a possible high bias, did not require qualification. Equipment blanks are quality control samples and do not require qualification.

Sample ID	Parameter	Compound	Qualification
MW14-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
MW14-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
MW14-ROX-011322	SVOCs	Benzoic acid	**UJ**
MW14-ROX-011322	SVOCs	Quinoline	**UJ**
P66-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P66-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P66-ROX-011322	SVOCs	Benzoic acid	**UJ**
P66-ROX-011322	SVOCs	Quinoline	**UJ**
P74-ROX-011322	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-011322	SVOCs	2,6-Dinitrotoluene	**UJ**
P74-ROX-011322	SVOCs	Benzoic acid	**UJ**
P74-ROX-011322	SVOCs	Quinoline	**UJ**
P74-ROX-011322-DUP	SVOCs	Hexachlorocyclopentadiene	**UJ**
P74-ROX-011322-DUP	SVOCs	2,6-Dinitrotoluene	**UJ**

Sample ID	Parameter	Compound	Qualification
P74-ROX-011322-DUP	SVOCs	Benzoic acid	UJ
P74-ROX-011322-DUP	SVOCs	Quinoline	UJ
P59-ROX-011322	SVOCs	Hexachlorocyclopentadiene	UJ
P59-ROX-011322	SVOCs	2,6-Dinitrotoluene	UJ
P59-ROX-011322	SVOCs	Benzoic acid	UJ
P59-ROX-011322	SVOCs	Quinoline	UJ
P58-ROX-011322	SVOCs	Hexachlorocyclopentadiene	UJ
P58-ROX-011322	SVOCs	2,6-Dinitrotoluene	UJ
P58-ROX-011322	SVOCs	Benzoic acid	UJ
P58-ROX-011322	SVOCs	Quinoline	UJ
P58-ROX-011322-DUP	SVOCs	Hexachlorocyclopentadiene	UJ
P58-ROX-011322-DUP	SVOCs	2,6-Dinitrotoluene	UJ
P58-ROX-011322-DUP	SVOCs	Benzoic acid	UJ
P58-ROX-011322-DUP	SVOCs	Quinoline	UJ
P93B-ROX-011322	SVOCs	Hexachlorocyclopentadiene	UJ
P93B-ROX-011322	SVOCs	2,6-Dinitrotoluene	UJ
P93B-ROX-011322	SVOCs	Benzoic acid	UJ
P93B-ROX-011322	SVOCs	Quinoline	UJ

Recalculations of the RFs and %RSD for one compound per internal standard were performed, and no errors in calculation were noted.

1.7 Blank Samples

The purpose of method blank samples is to evaluate the existence and magnitude of contamination problems emanating from laboratory activities. Method blank samples were prepared with each preparation batch as required by Method 8270D. Target compounds in the method blank were reported as non-detect with the exceptions summarized in the table below. An equipment blank sample was analyzed to evaluate contamination problems emanating from field activities. Target compounds were reported as non-detect.

Blank ID	Parameter	Analyte	Concentration /Amount
MB 400-536773/1-A	PAHs	Chrysene	0.0947 µg/L

Chrysene was not detected in the samples in this data set; qualification of the data was not required.

1.8 Laboratory Control Spike (LCS) Samples

Laboratory control samples (LCS) and laboratory control sample duplicates (LCSD) were analyzed with each analytical batch to assess the accuracy of the analytical process. LCS/LCSD recoveries and LCS/LCSD RPDs were within evaluation criteria with the exceptions summarized in the table below.

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS/LCSD 400-563773/3-A/4-A	SVOCs	Benzenethiol	**4**/30	**153**	10-120/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Professional judgment was used to qualify, however not reject, data associated with benzenethiol below evaluation criteria; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-011322	SVOCs	Benzenethiol	**UJ**
P66-ROX-011322	SVOCs	Benzenethiol	**UJ**
P74-ROX-011322	SVOCs	Benzenethiol	**UJ**
P74-ROX-011322-Dup	SVOCs	Benzenethiol	**UJ**
P59-ROX-011322	SVOCs	Benzenethiol	**UJ**
P58-ROX-011322	SVOCs	Benzenethiol	**UJ**
P58-ROX-011322-Dup	SVOCs	Benzenethiol	**UJ**
P93B-ROX-011322	SVOCs	Benzenethiol	**UJ**

Approximately 10% of the laboratory control spike recoveries were recalculated, and the summary forms versus the raw data were verified. No calculation or transcription errors were noted.

1.9 Surrogate Spike Recoveries

Surrogate compounds were used to evaluate the overall laboratory sample preparation efficiency on a per-sample basis. Surrogate recoveries were within the method acceptance criteria for the validated samples with the exceptions summarized in the following table.

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P74-ROX-011322	PAHs	2-Fluorobiphenyl	**125**	15-122
MW14-ROX-011322 MS	PAHs	Nitrobenzene-d_5	**133**	19-130

Qualifications due to surrogate recoveries were not required if only one of three base/neutral PAH surrogate recoveries were outside evaluation criteria. Matrix spikes are quality control samples and do not require qualification. No qualification of data was required.

Approximately 10% of the sample recoveries were recalculated and no calculation or transcription errors were noted.

1.10 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples

MS/MSD samples are analyzed to assess potential matrix effects. Sample MW14-ROX-011322 was spiked and analyzed for SVOCs and PAHs. MS/MSD data were within evaluation criteria.

Approximately 10% of the recoveries were recalculated, and no calculation or transcription errors were noted.

1.11 Internal Standards

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during each analytical run. Following Method 8270C, the IS areas for the samples and CVs must be within –50% to +100% and retention times must be within 30 seconds of the IS area and retention time of the midpoint of the ICAL or the CCV on days when the ICAL does not precede the samples.

The IS areas for the CVs and the validated samples in this SDG were within evaluation criteria. No qualification of data was required. The summary forms versus the raw data were verified and no transcription errors were noted.

1.12 Field Duplicate Results

Field duplicates are used to assess the field precision. Samples P74-ROX-011322/P74-ROX-011322-Dup and P58-ROX-011322/P58-ROX-011322-Dup were the field duplicate samples in this data set.

Field duplicate results were within the evaluation criteria of $\leq$ 25% relative percent difference (RPD) when both results are $\geq$ 5x the quantitation limit (QL) or $\leq$ 2x the QL when one or both results is <5x QL with the exceptions summarized in the following table.

Field ID	Field Duplicate ID	Parameter	Analyte	RPD or Absolute difference	Qualification
P58-ROX-011322	P58-ROX-011322-Dup	PAHs	Fluorene	**> 2X RL**	**UJ/J**
P58-ROX-011322	P58-ROX-011322-Dup	PAHs	Pyrene	**> 2X RL**	**UJ/J**

1.13 Target Compound Identification and Quantification

For validation of the compound identification, method specified compound identification criteria were reviewed in approximately 10% of the samples. No anomalies were noted with the identification of the target compounds in the samples.

For the validation of compound quantitation, 10% of the samples were recalculated from the raw data, and no calculation errors were noted. Additionally, the reporting limits (RLs) were verified to determine if RLs were adjusted for dilutions. No qualification of the data was required and review of the data indicated the correct RLs were reported.

1.14 Overall Data Assessment

Based on the criteria outlined, it is recommended that the results for these analyses are accepted for their intended use. Acceptable levels of accuracy and precision based on the method performance criteria were achieved for this SDG.

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ANALYTICAL REPORT

Eurofins Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Tel: (850)474-1001

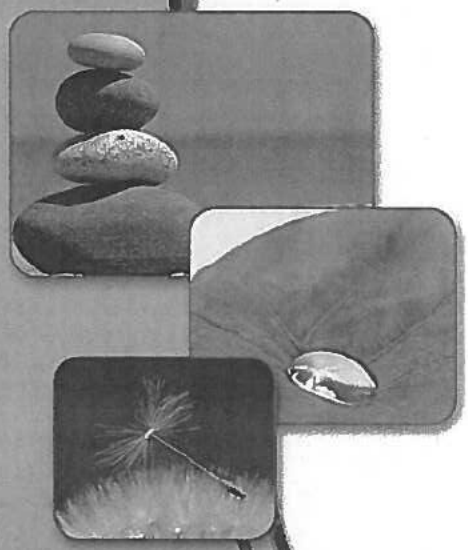
Laboratory Job ID: 400-214137-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Melissa Remiger

Authorized for release by:
1/28/2022 2:22:49 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
Leah.Klingensmith@Eurofinset.com



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Reviewed 2-25-2022 MR

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 400-214137-1

Laboratory: Eurofins Pensacola

Narrative

Job Narrative
400-214137-1

Comments
Revised Report
Report revised to correct the 1,2-DCA results reported for P59-ROX-011322 (400-214137-10), which was identified as a false positive. Supersedes report dated 1-26-2022.

Receipt
The samples were received on 1/15/2022 9:03 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, 0.7° C and 2.0° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-563489 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-563489 recovered outside acceptance criteria, low biased, for Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260B: The RPD for the matrix spike / matrix spike duplicate (MS/MSD) for 2-Chloroethyl vinyl ether was not calculable for analytical batch 400-563489 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The preservative used in the sample containers provided is not compatible with some of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-01322-8260-A (400-214137-1), MW14-ROX-011322-EB (400-214137-3), MW14-ROX-011322 (400-214137-4), P66-ROX-011322 (400-214137-5), TB-ROX-011322-8260-B (400-214137-7), P74-ROX-011322 (400-214137-8), P74-ROX-011322-DUP (400-214137-9), P59-ROX-011322 (400-214137-10), P58-ROX-011322 (400-214137-11), P58-ROX-011322-DUP (400-214137-12) and P93B-ROX-011322 (400-214137-13). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P66-ROX-011322 (400-214137-5), P58-ROX-011322 (400-214137-11), P58-ROX-011322-DUP (400-214137-12) and P93B-ROX-011322 (400-214137-13). Elevated reporting limits (RLs) are provided.

Method 8260B: Sample MW14-ROX-011322-EB (400-214137-3) contained 2-Butanone (MEK) between the method detection limit and the reporting limit. Reanalysis was performed with concurring results.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-563773 and analytical batch 400-563937 recovered outside control limits for the following analyte(s): Benzenethiol. Benzenethiol has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. Batch precision also exceeded control limits for these analyte(s). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-563773 and analytical batch 400-563937 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563937 recovered above the upper control limit for N-Nitrosodimethylamine, 4-Nitrophenol, Diethyl phthalate, Hexachlorobenzene and 4,6-Dinitro-2-methylphenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563937 recovered above the upper control limit for Dibenz[a,h]acridine. The samples associated with this CCV were non-detect for the affected analytes; therefore, the data have been

Job ID: 400-214137-1 (Continued)

Laboratory: Eurofins Pensacola (Continued)

reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-563937 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene, Quinoline and 2,6-Dinitrotoluene. 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 8270D LL: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW14-ROX-011322-MS (400-214137-4[MS]) and P74-ROX-011322 (400-214137-8). These results have been reported and qualified.

Method 8270D LL: The method blank for preparation batch 400-563773 and analytical batch 400-563966 contained Chrysene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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 400-564103 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-214137-1	TB-ROX-01322-8260-A	Water	01/13/22 00:00	01/15/22 09:03
400-214137-2	TB-ROX-011322-8011-A	Water	01/13/22 00:00	01/15/22 09:03
400-214137-3	MW14-ROX-011322-EB	Water	01/13/22 08:20	01/15/22 09:03
400-214137-4	MW14-ROX-011322	Water	01/13/22 10:10	01/15/22 09:03
400-214137-5	P66-ROX-011322	Water	01/13/22 11:25	01/15/22 09:03
400-214137-6	TB-ROX-011322-8011-B	Water	01/13/22 00:00	01/15/22 09:03
400-214137-7	TB-ROX-011322-8260-B	Water	01/13/22 00:00	01/15/22 09:03
400-214137-8	P74-ROX-011322	Water	01/13/22 10:10	01/15/22 09:03
400-214137-9	P74-ROX-011322-DUP	Water	01/13/22 10:10	01/15/22 09:03
400-214137-10	P59-ROX-011322	Water	01/13/22 11:05	01/15/22 09:03
400-214137-11	P58-ROX-011322	Water	01/13/22 11:50	01/15/22 09:03
400-214137-12	P58-ROX-011322-DUP	Water	01/13/22 11:50	01/15/22 09:03
400-214137-13	P93B-ROX-011322	Water	01/13/22 12:40	01/15/22 09:03

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: TB-ROX-01322-8260-A — Lab Sample ID: 400-214137-1

No Detections.

Client Sample ID: TB-ROX-011322-8011-A — Lab Sample ID: 400-214137-2

No Detections.

Client Sample ID: MW14-ROX-011322-EB — Lab Sample ID: 400-214137-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.6	J	25	2.6	ug/L	1		8260B	Total/NA

Client Sample ID: MW14-ROX-011322 — Lab Sample ID: 400-214137-4

No Detections.

Client Sample ID: P66-ROX-011322 — Lab Sample ID: 400-214137-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	600		5.0	0.65	ug/L	5		8260B	Total/NA
Ethylbenzene	62		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	33		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	220		25	3.2	ug/L	5		8260B	Total/NA
N-Propylbenzene	41		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	110		25	3.0	ug/L	5		8260B	Total/NA
sec-Butylbenzene	4.4	J	5.0	3.5	ug/L	5		8260B	Total/NA
Toluene	780		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	13		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	4.2	J	5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	330		50	8.0	ug/L	5		8260B	Total/NA
Naphthalene - RA	8.2		5.0	5.0	ug/L	5		8260B	Total/NA
Acenaphthene	1.6		0.19	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	2.5		0.19	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	82		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	29		0.19	0.058	ug/L	1		8270D LL	Total/NA
Benzoic acid	41		29	7.0	ug/L	1		8270D	Total/NA
Dibenzofuran	0.86	J	9.6	0.16	ug/L	1		8270D	Total/NA
2-Methylphenol	6.2	J	9.6	1.7	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	10	J	19	0.37	ug/L	1		8270D	Total/NA
Phenol	19		9.6	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-011322-8011-B — Lab Sample ID: 400-214137-6

No Detections.

Client Sample ID: TB-ROX-011322-8260-B — Lab Sample ID: 400-214137-7

No Detections.

Client Sample ID: P74-ROX-011322 — Lab Sample ID: 400-214137-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	180		1.0	0.13	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.54	J	1.0	0.22	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	3.1	J	5.0	0.63	ug/L	1		8260B	Total/NA
Toluene	1.4		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	1.1		1.0	0.82	ug/L	1		8260B	Total/NA
Xylenes, Total	3.6	J	10	1.6	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: P74-ROX-011322-DUP — Lab Sample ID: 400-214137-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	150		1.0	0.13	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	0.53	J	1.0	0.22	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	2.1	J	5.0	0.63	ug/L	1		8260B	Total/NA
Toluene	1.2		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	2.4	J	10	1.6	ug/L	1		8260B	Total/NA
Phenol	3.2	J	10	2.7	ug/L	1		8270D	Total/NA

Client Sample ID: P59-ROX-011322 — Lab Sample ID: 400-214137-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	160		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	44		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	160		5.0	0.63	ug/L	1		8260B	Total/NA
Naphthalene	180		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	66		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	7.0		5.0	0.60	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.3		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	130		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	46		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	48		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	160		10	1.6	ug/L	1		8260B	Total/NA
Benzene - DL	4100		20	2.6	ug/L	20		8260B	Total/NA
1-Methylnaphthalene	18		0.20	0.075	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	25		0.20	0.061	ug/L	1		8270D LL	Total/NA
Benzoic acid	34		30	7.4	ug/L	1		8270D	Total/NA
Phenol	59		10	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: P58-ROX-011322 — Lab Sample ID: 400-214137-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	180000		1000	130	ug/L	1000		8260B	Total/NA
Acenaphthene	0.88		0.19	0.030	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	55		0.19	0.070	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	24		0.19	0.057	ug/L	1		8270D LL	Total/NA
Phenanthrene	1.5		0.19	0.034	ug/L	1		8270D LL	Total/NA
Phenol - DL	570		47	12	ug/L	5		8270D	Total/NA

Client Sample ID: P58-ROX-011322-DUP — Lab Sample ID: 400-214137-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	170000		1000	130	ug/L	1000		8260B	Total/NA
Acenaphthene	0.94		0.20	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	2.0	J	0.20	0.11	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	56		0.20	0.072	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	25		0.20	0.059	ug/L	1		8270D LL	Total/NA
Phenanthrene	1.8		0.20	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.87	J	0.20	0.039	ug/L	1		8270D LL	Total/NA
Phenol - DL	450		49	13	ug/L	5		8270D	Total/NA

Client Sample ID: P93B-ROX-011322 — Lab Sample ID: 400-214137-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	870000		5000	650	ug/L	5000		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: P93B-ROX-011322 (Continued)

Lab Sample ID: 400-214137-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2,4-Dimethylphenol	3.9	J	9.8	3.4	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	2.0	J	20	0.38	ug/L	1		8270D	Total/NA
Phenol	370		9.8	2.5	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-01322-8260-A
Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 11:39	1
Acrolein	ND		20	3.3	ug/L			01/18/22 11:39	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 11:39	1
Benzene	ND		1.0	0.13	ug/L			01/18/22 11:39	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 11:39	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 11:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 11:39	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 11:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 11:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 11:39	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 11:39	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 11:39	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 11:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 11:39	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 11:39	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 11:39	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 11:39	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 11:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 11:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 11:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 11:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 11:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 11:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 11:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 11:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 11:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 11:39	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 11:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 11:39	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 11:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 11:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 11:39	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 11:39	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/22 11:39	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 11:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 11:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 11:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 11:39	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 11:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 11:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 11:39	1

Client Sample ID: TB-ROX-01322-8260-A
Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-1
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 11:39	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 11:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 11:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 11:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 11:39	1
Toluene	ND		1.0	0.41	ug/L			01/18/22 11:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 11:39	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 11:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 11:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 11:39	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 11:39	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 11:39	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 11:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 11:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 11:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 11:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 11:39	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 11:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/22 11:39	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/22 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/18/22 11:39*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/18/22 11:39*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/18/22 11:39*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: TB-ROX-011322-8011-A
Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 16:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*87*		*51 - 149*	*01/21/22 12:37*	*01/24/22 16:02*	*1*

Client Sample ID: MW14-ROX-011322-EB
Date Collected: 01/13/22 08:20
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 12:05	1
Acrolein	ND		20	3.3	ug/L			01/18/22 12:05	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 12:05	1
Benzene	ND		1.0	0.13	ug/L			01/18/22 12:05	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 12:05	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 12:05	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 12:05	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 12:05	1
2-Butanone (MEK)	4.6	J	25	2.6	ug/L			01/18/22 12:05	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 12:05	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 12:05	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 12:05	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 12:05	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 12:05	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 12:05	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 12:05	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 12:05	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 12:05	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 12:05	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 12:05	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 12:05	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 12:05	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 12:05	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 12:05	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 12:05	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 12:05	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 12:05	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 12:05	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 12:05	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 12:05	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 12:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 12:05	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 12:05	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/22 12:05	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 12:05	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 12:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 12:05	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 12:05	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 12:05	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 12:05	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 12:05	1

Client Sample ID: MW14-ROX-011322-EB
Date Collected: 01/13/22 08:20
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 12:05	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 12:05	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 12:05	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 12:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 12:05	1
Toluene	ND		1.0	0.41	ug/L			01/18/22 12:05	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 12:05	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 12:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 12:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 12:05	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 12:05	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 12:05	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 12:05	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 12:05	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 12:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 12:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 12:05	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 12:05	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/22 12:05	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/22 12:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 119*		*01/18/22 12:05*	*1*
Dibromofluoromethane	*100*		*75 - 126*		*01/18/22 12:05*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/18/22 12:05*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.030	ug/L		01/20/22 08:27	01/21/22 16:45	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 16:45	1
Anthracene	ND		0.19	0.030	ug/L		01/20/22 08:27	01/21/22 16:45	1
Benzo[a]anthracene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 16:45	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/20/22 08:27	01/21/22 16:45	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/20/22 08:27	01/21/22 16:45	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/20/22 08:27	01/21/22 16:45	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/20/22 08:27	01/21/22 16:45	1
Chrysene	ND		0.19	0.070	ug/L		01/20/22 08:27	01/21/22 16:45	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/20/22 08:27	01/21/22 16:45	1
Fluoranthene	ND		0.19	0.064	ug/L		01/20/22 08:27	01/21/22 16:45	1
Fluorene	ND		0.19	0.10	ug/L		01/20/22 08:27	01/21/22 16:45	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/20/22 08:27	01/21/22 16:45	1
1-Methylnaphthalene	ND		0.19	0.070	ug/L		01/20/22 08:27	01/21/22 16:45	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/20/22 08:27	01/21/22 16:45	1
Phenanthrene	ND		0.19	0.034	ug/L		01/20/22 08:27	01/21/22 16:45	1
Pyrene	ND		0.19	0.038	ug/L		01/20/22 08:27	01/21/22 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*15 - 122*	*01/20/22 08:27*	*01/21/22 16:45*	*1*
Nitrobenzene-d5	*113*		*19 - 130*	*01/20/22 08:27*	*01/21/22 16:45*	*1*

Client Sample ID: MW14-ROX-011322-EB

Lab Sample ID: 400-214137-3

Date Collected: 01/13/22 08:20
Date Received: 01/15/22 09:03

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	132		33 - 138	01/20/22 08:27	01/21/22 16:45	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 16:42	1
Benzenethiol	ND	*- *1	9.5	1.6	ug/L		01/20/22 08:27	01/21/22 16:42	1
Benzoic acid	ND		28	6.9	ug/L		01/20/22 08:27	01/21/22 16:42	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 16:42	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 16:42	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 16:42	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 16:42	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/20/22 08:27	01/21/22 16:42	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 16:42	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 16:42	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 16:42	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 16:42	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 16:42	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/20/22 08:27	01/21/22 16:42	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 16:42	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 16:42	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 16:42	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,6-Dinitrotoluene	ND		9.5	1.8	ug/L		01/20/22 08:27	01/21/22 16:42	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 16:42	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 16:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 16:42	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 16:42	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		01/20/22 08:27	01/21/22 16:42	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/20/22 08:27	01/21/22 16:42	1
Indene	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 16:42	1
Isophorone	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 16:42	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 16:42	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/20/22 08:27	01/21/22 16:42	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 16:42	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/20/22 08:27	01/21/22 16:42	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/20/22 08:27	01/21/22 16:42	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/20/22 08:27	01/21/22 16:42	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/20/22 08:27	01/21/22 16:42	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 16:42	1

Client Sample ID: MW14-ROX-011322-EB

Date Collected: 01/13/22 08:20
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/20/22 08:27	01/21/22 16:42	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/20/22 08:27	01/21/22 16:42	1
Pentachlorophenol	ND		19	1.3	ug/L		01/20/22 08:27	01/21/22 16:42	1
Phenol	ND		9.5	2.5	ug/L		01/20/22 08:27	01/21/22 16:42	1
Pyridine	ND		9.5	3.0	ug/L		01/20/22 08:27	01/21/22 16:42	1
Quinoline	ND		9.5	4.3	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/20/22 08:27	01/21/22 16:42	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*01/20/22 08:27*	*01/21/22 16:42*	*1*
2-Fluorophenol	*19*		*13 - 113*	*01/20/22 08:27*	*01/21/22 16:42*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/20/22 08:27*	*01/21/22 16:42*	*1*
Phenol-d5	*56*		*17 - 127*	*01/20/22 08:27*	*01/21/22 16:42*	*1*
Terphenyl-d14	*103*		*44 - 149*	*01/20/22 08:27*	*01/21/22 16:42*	*1*
2,4,6-Tribromophenol	*62*		*26 - 150*	*01/20/22 08:27*	*01/21/22 16:42*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.017	ug/L		01/21/22 12:37	01/24/22 16:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*01/21/22 12:37*	*01/24/22 16:42*	*1*

Client Sample ID: MW14-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 09:55	1
Acrolein	ND		20	3.3	ug/L			01/18/22 09:55	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 09:55	1
Benzene	ND		1.0	0.13	ug/L			01/18/22 09:55	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 09:55	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 09:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 09:55	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 09:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 09:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 09:55	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 09:55	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 09:55	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 09:55	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 09:55	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			01/18/22 09:55	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 09:55	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 09:55	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 09:55	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 09:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 09:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 09:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 09:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 09:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 09:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 09:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 09:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 09:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 09:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 09:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 09:55	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 09:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 09:55	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 09:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 09:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 09:55	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 09:55	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/22 09:55	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 09:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 09:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 09:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 09:55	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 09:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 09:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 09:55	1

Client Sample ID: MW14-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 09:55	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 09:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 09:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 09:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 09:55	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 09:55	1
Toluene	ND		1.0	0.41	ug/L			01/18/22 09:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 09:55	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 09:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 09:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 09:55	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 09:55	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 09:55	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 09:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 09:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 09:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 09:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 09:55	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 09:55	1
Vinyl chloride	ND	U5	1.0	0.50	ug/L			01/18/22 09:55	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/22 09:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 119*		*01/18/22 09:55*	*1*
Dibromofluoromethane	*97*		*75 - 126*		*01/18/22 09:55*	*1*
Toluene-d8 (Surr)	*101*		*64 - 132*		*01/18/22 09:55*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 16:28	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 16:28	1
Anthracene	ND		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 16:28	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/20/22 08:27	01/21/22 16:28	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/20/22 08:27	01/21/22 16:28	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/20/22 08:27	01/21/22 16:28	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/20/22 08:27	01/21/22 16:28	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/20/22 08:27	01/21/22 16:28	1
Chrysene	ND		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 16:28	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/20/22 08:27	01/21/22 16:28	1
Fluoranthene	ND		0.19	0.065	ug/L		01/20/22 08:27	01/21/22 16:28	1
Fluorene	ND		0.19	0.11	ug/L		01/20/22 08:27	01/21/22 16:28	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/20/22 08:27	01/21/22 16:28	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 16:28	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		01/20/22 08:27	01/21/22 16:28	1
Phenanthrene	ND		0.19	0.035	ug/L		01/20/22 08:27	01/21/22 16:28	1
Pyrene	ND		0.19	0.038	ug/L		01/20/22 08:27	01/21/22 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*116*		*15 - 122*	*01/20/22 08:27*	*01/21/22 16:28*	*1*
Nitrobenzene-d5	*107*		*19 - 130*	*01/20/22 08:27*	*01/21/22 16:28*	*1*

Client Sample ID: MW14-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-4
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	121		33 - 138	01/20/22 08:27	01/21/22 16:28	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/20/22 08:27	01/21/22 15:20	1
Benzenethiol	ND	*1 *- UJ	9.6	1.6	ug/L		01/20/22 08:27	01/21/22 15:20	1
Benzoic acid	ND		29	7.0	ug/L		01/20/22 08:27	01/21/22 15:20	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/20/22 08:27	01/21/22 15:20	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/20/22 08:27	01/21/22 15:20	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/20/22 08:27	01/21/22 15:20	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/20/22 08:27	01/21/22 15:20	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/20/22 08:27	01/21/22 15:20	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/20/22 08:27	01/21/22 15:20	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/20/22 08:27	01/21/22 15:20	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/20/22 08:27	01/21/22 15:20	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 15:20	1
Dibenzofuran	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 15:20	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/20/22 08:27	01/21/22 15:20	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 15:20	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 15:20	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/20/22 08:27	01/21/22 15:20	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/20/22 08:27	01/21/22 15:20	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 15:20	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 15:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 15:20	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 15:20	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/20/22 08:27	01/21/22 15:20	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/20/22 08:27	01/21/22 15:20	1
Indene	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 15:20	1
Isophorone	ND		9.6	0.13	ug/L		01/20/22 08:27	01/21/22 15:20	1
2-Methylphenol	ND		9.6	1.7	ug/L		01/20/22 08:27	01/21/22 15:20	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/20/22 08:27	01/21/22 15:20	1
2-Nitroaniline	ND		9.6	2.1	ug/L		01/20/22 08:27	01/21/22 15:20	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/20/22 08:27	01/21/22 15:20	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/20/22 08:27	01/21/22 15:20	1
2-Nitrophenol	ND		9.6	5.0	ug/L		01/20/22 08:27	01/21/22 15:20	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/20/22 08:27	01/21/22 15:20	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 15:20	1

Client Sample ID: MW14-ROX-011322

Lab Sample ID: 400-214137-4

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/20/22 08:27	01/21/22 15:20	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/20/22 08:27	01/21/22 15:20	1
Pentachlorophenol	ND		19	1.3	ug/L		01/20/22 08:27	01/21/22 15:20	1
Phenol	ND		9.6	2.5	ug/L		01/20/22 08:27	01/21/22 15:20	1
Pyridine	ND		9.6	3.1	ug/L		01/20/22 08:27	01/21/22 15:20	1
Quinoline	ND	UJ	9.6	4.3	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/20/22 08:27	01/21/22 15:20	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 15:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*46 - 124*	*01/20/22 08:27*	*01/21/22 15:20*	*1*
2-Fluorophenol	*17*		*13 - 113*	*01/20/22 08:27*	*01/21/22 15:20*	*1*
Nitrobenzene-d5	*67*		*36 - 126*	*01/20/22 08:27*	*01/21/22 15:20*	*1*
Phenol-d5	*51*		*17 - 127*	*01/20/22 08:27*	*01/21/22 15:20*	*1*
Terphenyl-d14	*105*		*44 - 149*	*01/20/22 08:27*	*01/21/22 15:20*	*1*
2,4,6-Tribromophenol	*60*		*26 - 150*	*01/20/22 08:27*	*01/21/22 15:20*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 14:21	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*51 - 149*	*01/21/22 12:37*	*01/24/22 14:21*	*1*

Client Sample ID: P66-ROX-011322
Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130	50	ug/L			01/18/22 18:36	5
Acrolein	ND		100	17	ug/L			01/18/22 18:36	5
Acrylonitrile	ND		50	14	ug/L			01/18/22 18:36	5
Benzene	**600**		5.0	0.65	ug/L			01/18/22 18:36	5
Bromobenzene	ND		5.0	2.7	ug/L			01/18/22 18:36	5
Bromochloromethane	ND		5.0	1.1	ug/L			01/18/22 18:36	5
Bromodichloromethane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
Bromoform	ND		25	1.3	ug/L			01/18/22 18:36	5
Bromomethane	ND		5.0	4.9	ug/L			01/18/22 18:36	5
2-Butanone (MEK)	ND		130	13	ug/L			01/18/22 18:36	5
Carbon disulfide	ND		5.0	2.5	ug/L			01/18/22 18:36	5
Carbon tetrachloride	ND		5.0	0.95	ug/L			01/18/22 18:36	5
Chlorobenzene	ND		5.0	0.75	ug/L			01/18/22 18:36	5
Dibromochloromethane	ND		5.0	1.2	ug/L			01/18/22 18:36	5
Chloroethane	ND		5.0	3.8	ug/L			01/18/22 18:36	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			01/18/22 18:36	5
Chloroform	ND		5.0	3.0	ug/L			01/18/22 18:36	5
1-Chlorohexane	ND		5.0	1.6	ug/L			01/18/22 18:36	5
Chloromethane	ND		5.0	1.6	ug/L			01/18/22 18:36	5
cis-1,2-Dichloroethene	ND		5.0	1.0	ug/L			01/18/22 18:36	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			01/18/22 18:36	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			01/18/22 18:36	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			01/18/22 18:36	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			01/18/22 18:36	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			01/18/22 18:36	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
1,2-Dichloroethane	ND		5.0	0.95	ug/L			01/18/22 18:36	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			01/18/22 18:36	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			01/18/22 18:36	5
Ethylbenzene	**62**		5.0	2.5	ug/L			01/18/22 18:36	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			01/18/22 18:36	5
Hexachlorobutadiene	ND		25	4.5	ug/L			01/18/22 18:36	5
2-Hexanone	ND		130	7.0	ug/L			01/18/22 18:36	5
Isopropylbenzene	**33**		5.0	2.7	ug/L			01/18/22 18:36	5
Methylene bromide	ND		25	1.1	ug/L			01/18/22 18:36	5
Methylene Chloride	ND		25	15	ug/L			01/18/22 18:36	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			01/18/22 18:36	5
Methyl tert-butyl ether	ND		5.0	1.1	ug/L			01/18/22 18:36	5
m-Xylene & p-Xylene	**220**		25	3.2	ug/L			01/18/22 18:36	5
n-Butylbenzene	ND		5.0	3.8	ug/L			01/18/22 18:36	5
N-Propylbenzene	**41**		5.0	3.5	ug/L			01/18/22 18:36	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			01/18/22 18:36	5
o-Xylene	**110**		25	3.0	ug/L			01/18/22 18:36	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			01/18/22 18:36	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			01/18/22 18:36	5
sec-Butylbenzene	**4.4**	**J**	5.0	3.5	ug/L			01/18/22 18:36	5

Client Sample ID: P66-ROX-011322
Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	5.0	ug/L			01/18/22 18:36	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			01/18/22 18:36	5
1,1,1,2-Tetrachloroethane	ND		5.0	0.80	ug/L			01/18/22 18:36	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			01/18/22 18:36	5
Tetrachloroethene	ND		5.0	0.60	ug/L			01/18/22 18:36	5
Toluene	780		5.0	2.1	ug/L			01/18/22 18:36	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			01/18/22 18:36	5
trans-1,3-Dichloropropene	ND		25	1.0	ug/L			01/18/22 18:36	5
1,2,3-Trichlorobenzene	ND		5.0	0.95	ug/L			01/18/22 18:36	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			01/18/22 18:36	5
1,1,1-Trichloroethane	ND		5.0	0.90	ug/L			01/18/22 18:36	5
1,1,2-Trichloroethane	ND		25	1.1	ug/L			01/18/22 18:36	5
Trichloroethene	ND		5.0	0.75	ug/L			01/18/22 18:36	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			01/18/22 18:36	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			01/18/22 18:36	5
1,2,4-Trimethylbenzene	13		5.0	4.1	ug/L			01/18/22 18:36	5
1,3,5-Trimethylbenzene	4.2	J	5.0	2.8	ug/L			01/18/22 18:36	5
Vinyl acetate	ND		130	4.7	ug/L			01/18/22 18:36	5
Vinyl chloride	ND	UJ	5.0	2.5	ug/L			01/18/22 18:36	5
Xylenes, Total	330		50	8.0	ug/L			01/18/22 18:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*72 - 119*		*01/18/22 18:36*	*5*
Dibromofluoromethane	*98*		*75 - 126*		*01/18/22 18:36*	*5*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/18/22 18:36*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	8.2		5.0	5.0	ug/L			01/19/22 19:45	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*72 - 119*		*01/19/22 19:45*	*5*
Dibromofluoromethane	*98*		*75 - 126*		*01/19/22 19:45*	*5*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/19/22 19:45*	*5*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1.6		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 17:02	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 17:02	1
Anthracene	ND		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 17:02	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/20/22 08:27	01/21/22 17:02	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/20/22 08:27	01/21/22 17:02	1
Benzo[b]fluoranthene	ND		0.19	0.033	ug/L		01/20/22 08:27	01/21/22 17:02	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/20/22 08:27	01/21/22 17:02	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		01/20/22 08:27	01/21/22 17:02	1
Chrysene	ND		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 17:02	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/20/22 08:27	01/21/22 17:02	1
Fluoranthene	ND		0.19	0.065	ug/L		01/20/22 08:27	01/21/22 17:02	1
Fluorene	2.5		0.19	0.11	ug/L		01/20/22 08:27	01/21/22 17:02	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/20/22 08:27	01/21/22 17:02	1

Client Sample ID: P66-ROX-011322

Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-5
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	82		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 17:02	1
2-Methylnaphthalene	29		0.19	0.058	ug/L		01/20/22 08:27	01/21/22 17:02	1
Phenanthrene	ND		0.19	0.035	ug/L		01/20/22 08:27	01/21/22 17:02	1
Pyrene	ND		0.19	0.038	ug/L		01/20/22 08:27	01/21/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*111*		*15 - 122*	*01/20/22 08:27*	*01/21/22 17:02*	*1*
Nitrobenzene-d5	*112*		*19 - 130*	*01/20/22 08:27*	*01/21/22 17:02*	*1*
Terphenyl-d14	*99*		*33 - 138*	*01/20/22 08:27*	*01/21/22 17:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.6	ug/L		01/20/22 08:27	01/21/22 17:03	1
Benzenethiol	ND	*-*1 UJ	9.6	1.6	ug/L		01/20/22 08:27	01/21/22 17:03	1
Benzoic acid	41		29	7.0	ug/L		01/20/22 08:27	01/21/22 17:03	1
Benzyl alcohol	ND		9.6	1.9	ug/L		01/20/22 08:27	01/21/22 17:03	1
Bis(2-chloroethoxy)methane	ND		9.6	0.15	ug/L		01/20/22 08:27	01/21/22 17:03	1
Bis(2-chloroethyl)ether	ND		9.6	2.6	ug/L		01/20/22 08:27	01/21/22 17:03	1
bis (2-chloroisopropyl) ether	ND		9.6	0.15	ug/L		01/20/22 08:27	01/21/22 17:03	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Bromophenyl phenyl ether	ND		9.6	0.19	ug/L		01/20/22 08:27	01/21/22 17:03	1
Butyl benzyl phthalate	ND		9.6	0.18	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Chloroaniline	ND		9.6	3.3	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		01/20/22 08:27	01/21/22 17:03	1
2-Chloronaphthalene	ND		9.6	0.13	ug/L		01/20/22 08:27	01/21/22 17:03	1
2-Chlorophenol	ND		9.6	2.1	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		01/20/22 08:27	01/21/22 17:03	1
Dibenz[a,h]acridine	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 17:03	1
Dibenzofuran	0.86	J	9.6	0.16	ug/L		01/20/22 08:27	01/21/22 17:03	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		01/20/22 08:27	01/21/22 17:03	1
Diethyl phthalate	ND		9.6	0.23	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 17:03	1
Dimethyl phthalate	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 17:03	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		01/20/22 08:27	01/21/22 17:03	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.5	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,6-Dinitrotoluene	ND	UJ	9.6	1.8	ug/L		01/20/22 08:27	01/21/22 17:03	1
Di-n-octyl phthalate	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 17:03	1
1,4-Dioxane	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 17:03	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 17:03	1
Hexachlorobenzene	ND		9.6	0.16	ug/L		01/20/22 08:27	01/21/22 17:03	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/20/22 08:27	01/21/22 17:03	1
Hexachloroethane	ND		9.6	4.0	ug/L		01/20/22 08:27	01/21/22 17:03	1
Indene	ND		9.6	0.96	ug/L		01/20/22 08:27	01/21/22 17:03	1
Isophorone	ND		9.6	0.13	ug/L		01/20/22 08:27	01/21/22 17:03	1
2-Methylphenol	6.2	J	9.6	1.7	ug/L		01/20/22 08:27	01/21/22 17:03	1
3 & 4 Methylphenol	10	J	19	0.37	ug/L		01/20/22 08:27	01/21/22 17:03	1

Client Sample ID: P66-ROX-011322
Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-5
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.6	2.1	ug/L		01/20/22 08:27	01/21/22 17:03	1
3-Nitroaniline	ND		9.6	1.7	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Nitroaniline	ND		9.6	1.4	ug/L		01/20/22 08:27	01/21/22 17:03	1
Nitrobenzene	ND		9.6	0.12	ug/L		01/20/22 08:27	01/21/22 17:03	1
2-Nitrophenol	ND		9.6	5.0	ug/L		01/20/22 08:27	01/21/22 17:03	1
4-Nitrophenol	ND		9.6	2.0	ug/L		01/20/22 08:27	01/21/22 17:03	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 17:03	1
N-Nitrosodi-n-propylamine	ND		9.6	3.2	ug/L		01/20/22 08:27	01/21/22 17:03	1
N-Nitrosodiphenylamine	ND		9.6	0.17	ug/L		01/20/22 08:27	01/21/22 17:03	1
Pentachlorophenol	ND		19	1.3	ug/L		01/20/22 08:27	01/21/22 17:03	1
Phenol	19		9.6	2.5	ug/L		01/20/22 08:27	01/21/22 17:03	1
Pyridine	ND		9.6	3.1	ug/L		01/20/22 08:27	01/21/22 17:03	1
Quinoline	ND	U5	9.6	4.3	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		01/20/22 08:27	01/21/22 17:03	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		01/20/22 08:27	01/21/22 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*46 - 124*	*01/20/22 08:27*	*01/21/22 17:03*	*1*
2-Fluorophenol	*67*		*13 - 113*	*01/20/22 08:27*	*01/21/22 17:03*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/20/22 08:27*	*01/21/22 17:03*	*1*
Phenol-d5	*67*		*17 - 127*	*01/20/22 08:27*	*01/21/22 17:03*	*1*
Terphenyl-d14	*82*		*44 - 149*	*01/20/22 08:27*	*01/21/22 17:03*	*1*
2,4,6-Tribromophenol	*98*		*26 - 150*	*01/20/22 08:27*	*01/21/22 17:03*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 17:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*01/21/22 12:37*	*01/24/22 17:02*	*1*

Client Sample ID: TB-ROX-011322-8011-B
Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-6
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 17:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*77*		*51 - 149*	*01/21/22 12:37*	*01/24/22 17:22*	*1*

Client Sample ID: TB-ROX-011322-8260-B

Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 12:32	1
Acrolein	ND		20	3.3	ug/L			01/18/22 12:32	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 12:32	1
Benzene	ND		1.0	0.13	ug/L			01/18/22 12:32	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 12:32	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 12:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 12:32	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 12:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 12:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 12:32	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 12:32	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 12:32	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 12:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 12:32	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 12:32	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 12:32	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 12:32	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 12:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 12:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 12:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 12:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 12:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 12:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 12:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 12:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 12:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 12:32	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 12:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 12:32	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 12:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 12:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 12:32	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 12:32	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/22 12:32	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 12:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 12:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 12:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 12:32	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 12:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 12:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 12:32	1

Client Sample ID: TB-ROX-011322-8260-B
Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 12:32	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 12:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 12:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 12:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 12:32	1
Toluene	ND		1.0	0.41	ug/L			01/18/22 12:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 12:32	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 12:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 12:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 12:32	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 12:32	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 12:32	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 12:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 12:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 12:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 12:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 12:32	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 12:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/22 12:32	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/22 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/18/22 12:32*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/18/22 12:32*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/18/22 12:32*	*1*

Client Sample ID: P74-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 17:18	1
Acrolein	ND		20	3.3	ug/L			01/18/22 17:18	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 17:18	1
Benzene	**180**		1.0	0.13	ug/L			01/18/22 17:18	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 17:18	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 17:18	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 17:18	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 17:18	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 17:18	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 17:18	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 17:18	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 17:18	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 17:18	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 17:18	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 17:18	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 17:18	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 17:18	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 17:18	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 17:18	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 17:18	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 17:18	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 17:18	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 17:18	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 17:18	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 17:18	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 17:18	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 17:18	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 17:18	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 17:18	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 17:18	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 17:18	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 17:18	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 17:18	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 17:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 17:18	1
Methyl tert-butyl ether	**0.54**	**J**	1.0	0.22	ug/L			01/18/22 17:18	1
m-Xylene & p-Xylene	**3.1**	**J**	5.0	0.63	ug/L			01/18/22 17:18	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 17:18	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 17:18	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 17:18	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 17:18	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 17:18	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 17:18	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 17:18	1

Client Sample ID: P74-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-8
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 17:18	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 17:18	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 17:18	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 17:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 17:18	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 17:18	1
Toluene	1.4		1.0	0.41	ug/L			01/18/22 17:18	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 17:18	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 17:18	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 17:18	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 17:18	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 17:18	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 17:18	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 17:18	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 17:18	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 17:18	1
1,2,4-Trimethylbenzene	1.1		1.0	0.82	ug/L			01/18/22 17:18	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 17:18	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 17:18	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			01/18/22 17:18	1
Xylenes, Total	3.6	J	10	1.6	ug/L			01/18/22 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 119*		*01/18/22 17:18*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*01/18/22 17:18*	*1*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/18/22 17:18*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 17:19	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 17:19	1
Anthracene	ND		0.19	0.031	ug/L		01/20/22 08:27	01/21/22 17:19	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/20/22 08:27	01/21/22 17:19	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/20/22 08:27	01/21/22 17:19	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/20/22 08:27	01/21/22 17:19	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/20/22 08:27	01/21/22 17:19	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/20/22 08:27	01/21/22 17:19	1
Chrysene	ND		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 17:19	1
Dibenz(a,h)anthracene	ND		0.19	0.048	ug/L		01/20/22 08:27	01/21/22 17:19	1
Fluoranthene	ND		0.19	0.065	ug/L		01/20/22 08:27	01/21/22 17:19	1
Fluorene	ND		0.19	0.10	ug/L		01/20/22 08:27	01/21/22 17:19	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/20/22 08:27	01/21/22 17:19	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		01/20/22 08:27	01/21/22 17:19	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		01/20/22 08:27	01/21/22 17:19	1
Phenanthrene	ND		0.19	0.034	ug/L		01/20/22 08:27	01/21/22 17:19	1
Pyrene	ND		0.19	0.038	ug/L		01/20/22 08:27	01/21/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*125*	*S1+*	*15 - 122*	*01/20/22 08:27*	*01/21/22 17:19*	*1*
Nitrobenzene-d5	*123*		*19 - 130*	*01/20/22 08:27*	*01/21/22 17:19*	*1*

Client Sample ID: P74-ROX-011322

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-8

Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*135*		*33 - 138*	*01/20/22 08:27*	*01/21/22 17:19*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 17:23	1
Benzenethiol	ND	*- *1 UJ	9.5	1.6	ug/L		01/20/22 08:27	01/21/22 17:23	1
Benzoic acid	ND		29	7.0	ug/L		01/20/22 08:27	01/21/22 17:23	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 17:23	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 17:23	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 17:23	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 17:23	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.8	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/20/22 08:27	01/21/22 17:23	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 17:23	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 17:23	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 17:23	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 17:23	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 17:23	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4-Dichlorophenol	ND		9.5	2.9	ug/L		01/20/22 08:27	01/21/22 17:23	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 17:23	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 17:23	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 17:23	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4-Dinitrophenol	ND		29	3.2	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/20/22 08:27	01/21/22 17:23	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 17:23	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 17:23	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 17:23	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 17:23	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/20/22 08:27	01/21/22 17:23	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/20/22 08:27	01/21/22 17:23	1
Indene	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 17:23	1
Isophorone	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 17:23	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 17:23	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/20/22 08:27	01/21/22 17:23	1
2-Nitroaniline	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 17:23	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/20/22 08:27	01/21/22 17:23	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/20/22 08:27	01/21/22 17:23	1
2-Nitrophenol	ND		9.5	5.0	ug/L		01/20/22 08:27	01/21/22 17:23	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/20/22 08:27	01/21/22 17:23	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 17:23	1

Client Sample ID: P74-ROX-011322
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/20/22 08:27	01/21/22 17:23	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/20/22 08:27	01/21/22 17:23	1
Pentachlorophenol	ND		19	1.3	ug/L		01/20/22 08:27	01/21/22 17:23	1
Phenol	ND		9.5	2.5	ug/L		01/20/22 08:27	01/21/22 17:23	1
Pyridine	ND		9.5	3.1	ug/L		01/20/22 08:27	01/21/22 17:23	1
Quinoline	ND	UJ	9.5	4.3	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/20/22 08:27	01/21/22 17:23	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*46 - 124*	*01/20/22 08:27*	*01/21/22 17:23*	*1*
2-Fluorophenol	*68*		*13 - 113*	*01/20/22 08:27*	*01/21/22 17:23*	*1*
Nitrobenzene-d5	*71*		*36 - 126*	*01/20/22 08:27*	*01/21/22 17:23*	*1*
Phenol-d5	*68*		*17 - 127*	*01/20/22 08:27*	*01/21/22 17:23*	*1*
Terphenyl-d14	*100*		*44 - 149*	*01/20/22 08:27*	*01/21/22 17:23*	*1*
2,4,6-Tribromophenol	*74*		*26 - 150*	*01/20/22 08:27*	*01/21/22 17:23*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.017	ug/L		01/21/22 12:37	01/24/22 17:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*68*		*51 - 149*	*01/21/22 12:37*	*01/24/22 17:42*	*1*

Client Sample ID: P74-ROX-011322-DUP
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 17:44	1
Acrolein	ND		20	3.3	ug/L			01/18/22 17:44	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 17:44	1
Benzene	**150**		1.0	0.13	ug/L			01/18/22 17:44	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 17:44	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 17:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 17:44	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 17:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 17:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 17:44	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 17:44	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 17:44	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 17:44	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 17:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 17:44	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 17:44	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 17:44	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 17:44	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 17:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 17:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 17:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 17:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 17:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 17:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 17:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 17:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 17:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 17:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 17:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 17:44	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 17:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 17:44	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 17:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 17:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 17:44	1
Methyl tert-butyl ether	**0.53**	**J**	1.0	0.22	ug/L			01/18/22 17:44	1
m-Xylene & p-Xylene	**2.1**	**J**	5.0	0.63	ug/L			01/18/22 17:44	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 17:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 17:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 17:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 17:44	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 17:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 17:44	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 17:44	1

Client Sample ID: P74-ROX-011322-DUP
Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 17:44	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 17:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 17:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 17:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 17:44	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 17:44	1
Toluene	1.2		1.0	0.41	ug/L			01/18/22 17:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 17:44	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 17:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 17:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 17:44	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 17:44	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 17:44	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 17:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 17:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 17:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 17:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 17:44	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 17:44	1
Vinyl chloride	ND	UJ	1.0	0.50	ug/L			01/18/22 17:44	1
Xylenes, Total	2.4	J	10	1.6	ug/L			01/18/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 119*		*01/18/22 17:44*	*1*
Dibromofluoromethane	*98*		*75 - 126*		*01/18/22 17:44*	*1*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/18/22 17:44*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.21	0.033	ug/L		01/20/22 08:27	01/21/22 17:36	1
Acenaphthylene	ND		0.21	0.046	ug/L		01/20/22 08:27	01/21/22 17:36	1
Anthracene	ND		0.21	0.033	ug/L		01/20/22 08:27	01/21/22 17:36	1
Benzo[a]anthracene	ND		0.21	0.047	ug/L		01/20/22 08:27	01/21/22 17:36	1
Benzo[a]pyrene	ND		0.21	0.043	ug/L		01/20/22 08:27	01/21/22 17:36	1
Benzo[b]fluoranthene	ND		0.21	0.035	ug/L		01/20/22 08:27	01/21/22 17:36	1
Benzo[g,h,i]perylene	ND		0.21	0.13	ug/L		01/20/22 08:27	01/21/22 17:36	1
Benzo[k]fluoranthene	ND		0.21	0.10	ug/L		01/20/22 08:27	01/21/22 17:36	1
Chrysene	ND		0.21	0.076	ug/L		01/20/22 08:27	01/21/22 17:36	1
Dibenz(a,h)anthracene	ND		0.21	0.051	ug/L		01/20/22 08:27	01/21/22 17:36	1
Fluoranthene	ND		0.21	0.070	ug/L		01/20/22 08:27	01/21/22 17:36	1
Fluorene	ND		0.21	0.11	ug/L		01/20/22 08:27	01/21/22 17:36	1
Indeno[1,2,3-cd]pyrene	ND		0.21	0.044	ug/L		01/20/22 08:27	01/21/22 17:36	1
1-Methylnaphthalene	ND		0.21	0.076	ug/L		01/20/22 08:27	01/21/22 17:36	1
2-Methylnaphthalene	ND		0.21	0.062	ug/L		01/20/22 08:27	01/21/22 17:36	1
Phenanthrene	ND		0.21	0.037	ug/L		01/20/22 08:27	01/21/22 17:36	1
Pyrene	ND		0.21	0.041	ug/L		01/20/22 08:27	01/21/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*15 - 122*	*01/20/22 08:27*	*01/21/22 17:36*	*1*
Nitrobenzene-d5	*110*		*19 - 130*	*01/20/22 08:27*	*01/21/22 17:36*	*1*

Client Sample ID: P74-ROX-011322-DUP

Lab Sample ID: 400-214137-9

Date Collected: 01/13/22 10:10
Matrix: Water
Date Received: 01/15/22 09:03

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	137		33 - 138	01/20/22 08:27	01/21/22 17:36	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.9	ug/L		01/20/22 08:27	01/21/22 17:44	1
Benzenethiol	ND	*- *1 UJ	10	1.7	ug/L		01/20/22 08:27	01/21/22 17:44	1
Benzoic acid	ND		31	7.5	ug/L		01/20/22 08:27	01/21/22 17:44	1
Benzyl alcohol	ND		10	2.1	ug/L		01/20/22 08:27	01/21/22 17:44	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 17:44	1
Bis(2-chloroethyl)ether	ND		10	2.8	ug/L		01/20/22 08:27	01/21/22 17:44	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 17:44	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Bromophenyl phenyl ether	ND		10	0.21	ug/L		01/20/22 08:27	01/21/22 17:44	1
Butyl benzyl phthalate	ND		10	0.20	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Chloroaniline	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		01/20/22 08:27	01/21/22 17:44	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 17:44	1
2-Chlorophenol	ND		10	2.3	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Chlorophenyl phenyl ether	ND		10	2.1	ug/L		01/20/22 08:27	01/21/22 17:44	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
Dibenzofuran	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 17:44	1
3,3'-Dichlorobenzidine	ND		10	2.7	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		01/20/22 08:27	01/21/22 17:44	1
Diethyl phthalate	ND		10	0.25	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		01/20/22 08:27	01/21/22 17:44	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 17:44	1
Di-n-butyl phthalate	ND		10	2.8	ug/L		01/20/22 08:27	01/21/22 17:44	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4-Dinitrotoluene	ND		10	2.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,6-Dinitrotoluene	ND	UJ	10	2.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 17:44	1
1,4-Dioxane	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 17:44	1
Hexachlorocyclopentadiene	ND	UJ	21	2.7	ug/L		01/20/22 08:27	01/21/22 17:44	1
Hexachloroethane	ND		10	4.3	ug/L		01/20/22 08:27	01/21/22 17:44	1
Indene	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 17:44	1
Isophorone	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 17:44	1
2-Methylphenol	ND		10	1.9	ug/L		01/20/22 08:27	01/21/22 17:44	1
3 & 4 Methylphenol	ND		21	0.40	ug/L		01/20/22 08:27	01/21/22 17:44	1
2-Nitroaniline	ND		10	2.3	ug/L		01/20/22 08:27	01/21/22 17:44	1
3-Nitroaniline	ND		10	1.9	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Nitroaniline	ND		10	1.5	ug/L		01/20/22 08:27	01/21/22 17:44	1
Nitrobenzene	ND		10	0.13	ug/L		01/20/22 08:27	01/21/22 17:44	1
2-Nitrophenol	ND		10	5.3	ug/L		01/20/22 08:27	01/21/22 17:44	1
4-Nitrophenol	ND		10	2.2	ug/L		01/20/22 08:27	01/21/22 17:44	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		01/20/22 08:27	01/21/22 17:44	1

Client Sample ID: P74-ROX-011322-DUP

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		10	3.4	ug/L		01/20/22 08:27	01/21/22 17:44	1
N-Nitrosodiphenylamine	ND		10	0.19	ug/L		01/20/22 08:27	01/21/22 17:44	1
Pentachlorophenol	ND		21	1.4	ug/L		01/20/22 08:27	01/21/22 17:44	1
Phenol	3.2	J	10	2.7	ug/L		01/20/22 08:27	01/21/22 17:44	1
Pyridine	ND		10	3.3	ug/L		01/20/22 08:27	01/21/22 17:44	1
Quinoline	ND	U	10	4.6	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		01/20/22 08:27	01/21/22 17:44	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		01/20/22 08:27	01/21/22 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*46 - 124*	*01/20/22 08:27*	*01/21/22 17:44*	*1*
2-Fluorophenol	*66*		*13 - 113*	*01/20/22 08:27*	*01/21/22 17:44*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/20/22 08:27*	*01/21/22 17:44*	*1*
Phenol-d5	*66*		*17 - 127*	*01/20/22 08:27*	*01/21/22 17:44*	*1*
Terphenyl-d14	*110*		*44 - 149*	*01/20/22 08:27*	*01/21/22 17:44*	*1*
2,4,6-Tribromophenol	*75*		*26 - 150*	*01/20/22 08:27*	*01/21/22 17:44*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 18:02	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*69*		*51 - 149*	*01/21/22 12:37*	*01/24/22 18:02*	*1*

Client Sample ID: P59-ROX-011322
Date Collected: 01/13/22 11:05
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 18:10	1
Acrolein	ND		20	3.3	ug/L			01/18/22 18:10	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 18:10	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 18:10	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 18:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 18:10	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 18:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 18:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 18:10	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 18:10	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 18:10	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 18:10	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 18:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 18:10	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 18:10	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 18:10	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 18:10	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 18:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 18:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 18:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 18:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 18:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 18:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 18:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 18:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 18:10	1
Ethylbenzene	**160**		1.0	0.50	ug/L			01/18/22 18:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 18:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 18:10	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 18:10	1
Isopropylbenzene	**44**		1.0	0.53	ug/L			01/18/22 18:10	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 18:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 18:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 18:10	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 18:10	1
m-Xylene & p-Xylene	**160**		5.0	0.63	ug/L			01/18/22 18:10	1
Naphthalene	**180**		1.0	1.0	ug/L			01/18/22 18:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 18:10	1
N-Propylbenzene	**66**		1.0	0.69	ug/L			01/18/22 18:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 18:10	1
o-Xylene	**7.0**		5.0	0.60	ug/L			01/18/22 18:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 18:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 18:10	1
sec-Butylbenzene	**2.3**		1.0	0.70	ug/L			01/18/22 18:10	1

Client Sample ID: P59-ROX-011322
Date Collected: 01/13/22 11:05
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-10
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	1.0	ug/L			01/18/22 18:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 18:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 18:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 18:10	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 18:10	1
Toluene	130		1.0	0.41	ug/L			01/18/22 18:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 18:10	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 18:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 18:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 18:10	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 18:10	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 18:10	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 18:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 18:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 18:10	1
1,2,4-Trimethylbenzene	46		1.0	0.82	ug/L			01/18/22 18:10	1
1,3,5-Trimethylbenzene	48		1.0	0.56	ug/L			01/18/22 18:10	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 18:10	1
Vinyl chloride	ND	U5	1.0	0.50	ug/L			01/18/22 18:10	1
Xylenes, Total	160		10	1.6	ug/L			01/18/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 119*		*01/18/22 18:10*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/18/22 18:10*	*1*
Toluene-d8 (Surr)	*105*		*64 - 132*		*01/18/22 18:10*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	4100		20	2.6	ug/L			01/20/22 19:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 119*		*01/20/22 19:53*	*20*
Dibromofluoromethane	*96*		*75 - 126*		*01/20/22 19:53*	*20*
Toluene-d8 (Surr)	*102*		*64 - 132*		*01/20/22 19:53*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/20/22 08:27	01/21/22 17:53	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/20/22 08:27	01/21/22 17:53	1
Anthracene	ND		0.20	0.032	ug/L		01/20/22 08:27	01/21/22 17:53	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/20/22 08:27	01/21/22 17:53	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/20/22 08:27	01/21/22 17:53	1
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/20/22 08:27	01/21/22 17:53	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/20/22 08:27	01/21/22 17:53	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/20/22 08:27	01/21/22 17:53	1
Chrysene	ND		0.20	0.075	ug/L		01/20/22 08:27	01/21/22 17:53	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/20/22 08:27	01/21/22 17:53	1
Fluoranthene	ND		0.20	0.069	ug/L		01/20/22 08:27	01/21/22 17:53	1
Fluorene	ND		0.20	0.11	ug/L		01/20/22 08:27	01/21/22 17:53	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/20/22 08:27	01/21/22 17:53	1

Client Sample ID: P59-ROX-011322
Date Collected: 01/13/22 11:05
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-10
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	18		0.20	0.075	ug/L		01/20/22 08:27	01/21/22 17:53	1
2-Methylnaphthalene	25		0.20	0.061	ug/L		01/20/22 08:27	01/21/22 17:53	1
Phenanthrene	ND		0.20	0.036	ug/L		01/20/22 08:27	01/21/22 17:53	1
Pyrene	ND		0.20	0.040	ug/L		01/20/22 08:27	01/21/22 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*107*		*15 - 122*	*01/20/22 08:27*	*01/21/22 17:53*	*1*
Nitrobenzene-d5	*107*		*19 - 130*	*01/20/22 08:27*	*01/21/22 17:53*	*1*
Terphenyl-d14	*89*		*33 - 138*	*01/20/22 08:27*	*01/21/22 17:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/20/22 08:27	01/21/22 18:04	1
Benzenethiol	ND	*-*1 UJ	10	1.7	ug/L		01/20/22 08:27	01/21/22 18:04	1
Benzoic acid	34		30	7.4	ug/L		01/20/22 08:27	01/21/22 18:04	1
Benzyl alcohol	ND		10	2.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 18:04	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/20/22 08:27	01/21/22 18:04	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 18:04	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/20/22 08:27	01/21/22 18:04	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Chloroaniline	ND		10	3.4	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/20/22 08:27	01/21/22 18:04	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 18:04	1
2-Chlorophenol	ND		10	2.2	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Dibenzofuran	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 18:04	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Diethyl phthalate	ND		10	0.24	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 18:04	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 18:04	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/20/22 08:27	01/21/22 18:04	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,6-Dinitrotoluene	ND	UJ	10	1.9	ug/L		01/20/22 08:27	01/21/22 18:04	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 18:04	1
1,4-Dioxane	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 18:04	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		01/20/22 08:27	01/21/22 18:04	1
Hexachloroethane	ND		10	4.2	ug/L		01/20/22 08:27	01/21/22 18:04	1
Indene	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 18:04	1
Isophorone	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 18:04	1
2-Methylphenol	ND		10	1.8	ug/L		01/20/22 08:27	01/21/22 18:04	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/20/22 08:27	01/21/22 18:04	1

Client Sample ID: P59-ROX-011322
Date Collected: 01/13/22 11:05
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-10
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		01/20/22 08:27	01/21/22 18:04	1
3-Nitroaniline	ND		10	1.8	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Nitroaniline	ND		10	1.5	ug/L		01/20/22 08:27	01/21/22 18:04	1
Nitrobenzene	ND		10	0.13	ug/L		01/20/22 08:27	01/21/22 18:04	1
2-Nitrophenol	ND		10	5.3	ug/L		01/20/22 08:27	01/21/22 18:04	1
4-Nitrophenol	ND		10	2.1	ug/L		01/20/22 08:27	01/21/22 18:04	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 18:04	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/20/22 08:27	01/21/22 18:04	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/20/22 08:27	01/21/22 18:04	1
Pentachlorophenol	ND		20	1.4	ug/L		01/20/22 08:27	01/21/22 18:04	1
Phenol	59		10	2.6	ug/L		01/20/22 08:27	01/21/22 18:04	1
Pyridine	ND		10	3.2	ug/L		01/20/22 08:27	01/21/22 18:04	1
Quinoline	ND	UJ	10	4.5	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/20/22 08:27	01/21/22 18:04	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*46 - 124*	*01/20/22 08:27*	*01/21/22 18:04*	*1*
2-Fluorophenol	*56*		*13 - 113*	*01/20/22 08:27*	*01/21/22 18:04*	*1*
Nitrobenzene-d5	*63*		*36 - 126*	*01/20/22 08:27*	*01/21/22 18:04*	*1*
Phenol-d5	*64*		*17 - 127*	*01/20/22 08:27*	*01/21/22 18:04*	*1*
Terphenyl-d14	*52*		*44 - 149*	*01/20/22 08:27*	*01/21/22 18:04*	*1*
2,4,6-Tribromophenol	*98*		*26 - 150*	*01/20/22 08:27*	*01/21/22 18:04*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 18:22	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*72*		*51 - 149*	*01/21/22 12:37*	*01/24/22 18:22*	*1*

Client Sample ID: P58-ROX-011322
Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			01/18/22 19:02	1000
Acrolein	ND		20000	3300	ug/L			01/18/22 19:02	1000
Acrylonitrile	ND		10000	2800	ug/L			01/18/22 19:02	1000
Benzene	180000		1000	130	ug/L			01/18/22 19:02	1000
Bromobenzene	ND		1000	540	ug/L			01/18/22 19:02	1000
Bromochloromethane	ND		1000	210	ug/L			01/18/22 19:02	1000
Bromodichloromethane	ND		1000	500	ug/L			01/18/22 19:02	1000
Bromoform	ND		5000	250	ug/L			01/18/22 19:02	1000
Bromomethane	ND		1000	980	ug/L			01/18/22 19:02	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			01/18/22 19:02	1000
Carbon disulfide	ND		1000	500	ug/L			01/18/22 19:02	1000
Carbon tetrachloride	ND		1000	190	ug/L			01/18/22 19:02	1000
Chlorobenzene	ND		1000	150	ug/L			01/18/22 19:02	1000
Dibromochloromethane	ND		1000	240	ug/L			01/18/22 19:02	1000
Chloroethane	ND		1000	760	ug/L			01/18/22 19:02	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			01/18/22 19:02	1000
Chloroform	ND		1000	600	ug/L			01/18/22 19:02	1000
1-Chlorohexane	ND		1000	320	ug/L			01/18/22 19:02	1000
Chloromethane	ND		1000	320	ug/L			01/18/22 19:02	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			01/18/22 19:02	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			01/18/22 19:02	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			01/18/22 19:02	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			01/18/22 19:02	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			01/18/22 19:02	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			01/18/22 19:02	1000
1,1-Dichloroethane	ND		1000	500	ug/L			01/18/22 19:02	1000
1,2-Dichloroethane	ND		1000	190	ug/L			01/18/22 19:02	1000
1,1-Dichloroethene	ND		1000	500	ug/L			01/18/22 19:02	1000
1,2-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:02	1000
1,3-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:02	1000
2,2-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:02	1000
1,1-Dichloropropene	ND		1000	500	ug/L			01/18/22 19:02	1000
Ethylbenzene	ND		1000	500	ug/L			01/18/22 19:02	1000
Ethyl methacrylate	ND		1000	600	ug/L			01/18/22 19:02	1000
Hexachlorobutadiene	ND		5000	900	ug/L			01/18/22 19:02	1000
2-Hexanone	ND		25000	1400	ug/L			01/18/22 19:02	1000
Isopropylbenzene	ND		1000	530	ug/L			01/18/22 19:02	1000
Methylene bromide	ND		5000	220	ug/L			01/18/22 19:02	1000
Methylene Chloride	ND		5000	3000	ug/L			01/18/22 19:02	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			01/18/22 19:02	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			01/18/22 19:02	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			01/18/22 19:02	1000
n-Butylbenzene	ND		1000	760	ug/L			01/18/22 19:02	1000
N-Propylbenzene	ND		1000	690	ug/L			01/18/22 19:02	1000
o-Chlorotoluene	ND		1000	570	ug/L			01/18/22 19:02	1000
o-Xylene	ND		5000	600	ug/L			01/18/22 19:02	1000
p-Chlorotoluene	ND		1000	560	ug/L			01/18/22 19:02	1000
p-Isopropyltoluene	ND		1000	710	ug/L			01/18/22 19:02	1000
sec-Butylbenzene	ND		1000	700	ug/L			01/18/22 19:02	1000

Client Sample ID: P58-ROX-011322
Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-11
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1000	1000	ug/L			01/18/22 19:02	1000
tert-Butylbenzene	ND		1000	630	ug/L			01/18/22 19:02	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			01/18/22 19:02	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			01/18/22 19:02	1000
Tetrachloroethene	ND		1000	120	ug/L			01/18/22 19:02	1000
Toluene	ND		1000	410	ug/L			01/18/22 19:02	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			01/18/22 19:02	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			01/18/22 19:02	1000
1,2,3-Trichlorobenzene	ND		1000	190	ug/L			01/18/22 19:02	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			01/18/22 19:02	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			01/18/22 19:02	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			01/18/22 19:02	1000
Trichloroethene	ND		1000	150	ug/L			01/18/22 19:02	1000
Trichlorofluoromethane	ND		1000	520	ug/L			01/18/22 19:02	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			01/18/22 19:02	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			01/18/22 19:02	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			01/18/22 19:02	1000
Vinyl acetate	ND		25000	930	ug/L			01/18/22 19:02	1000
Vinyl chloride	ND	UJ	1000	500	ug/L			01/18/22 19:02	1000
Xylenes, Total	ND		10000	1600	ug/L			01/18/22 19:02	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 119*		*01/18/22 19:02*	*1000*
Dibromofluoromethane	*96*		*75 - 126*		*01/18/22 19:02*	*1000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/18/22 19:02*	*1000*

Method: 8260B - Volatile Organic Compounds (GC/MS) - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1000	1000	ug/L			01/20/22 20:18	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*72 - 119*		*01/20/22 20:18*	*1000*
Dibromofluoromethane	*95*		*75 - 126*		*01/20/22 20:18*	*1000*
Toluene-d8 (Surr)	*103*		*64 - 132*		*01/20/22 20:18*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.88		0.19	0.030	ug/L		01/20/22 08:27	01/21/22 18:10	1
Acenaphthylene	ND		0.19	0.043	ug/L		01/20/22 08:27	01/21/22 18:10	1
Anthracene	ND		0.19	0.030	ug/L		01/20/22 08:27	01/21/22 18:10	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		01/20/22 08:27	01/21/22 18:10	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		01/20/22 08:27	01/21/22 18:10	1
Benzo[b]fluoranthene	ND		0.19	0.032	ug/L		01/20/22 08:27	01/21/22 18:10	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		01/20/22 08:27	01/21/22 18:10	1
Benzo[k]fluoranthene	ND		0.19	0.095	ug/L		01/20/22 08:27	01/21/22 18:10	1
Chrysene	ND		0.19	0.070	ug/L		01/20/22 08:27	01/21/22 18:10	1
Dibenz(a,h)anthracene	ND		0.19	0.047	ug/L		01/20/22 08:27	01/21/22 18:10	1
Fluoranthene	ND		0.19	0.065	ug/L		01/20/22 08:27	01/21/22 18:10	1
Fluorene	ND	UJ	0.19	0.10	ug/L		01/20/22 08:27	01/21/22 18:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.041	ug/L		01/20/22 08:27	01/21/22 18:10	1

Client Sample ID: P58-ROX-011322
Date Collected: 01/13/22 11:50
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Lab Sample ID: 400-214137-11
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	55		0.19	0.070	ug/L		01/20/22 08:27	01/21/22 18:10	1
2-Methylnaphthalene	24		0.19	0.057	ug/L		01/20/22 08:27	01/21/22 18:10	1
Phenanthrene	1.5		0.19	0.034	ug/L		01/20/22 08:27	01/21/22 18:10	1
Pyrene	ND	UJ	0.19	0.038	ug/L		01/20/22 08:27	01/21/22 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*15 - 122*	*01/20/22 08:27*	*01/21/22 18:10*	*1*
Nitrobenzene-d5	*108*		*19 - 130*	*01/20/22 08:27*	*01/21/22 18:10*	*1*
Terphenyl-d14	*88*		*33 - 138*	*01/20/22 08:27*	*01/21/22 18:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 18:25	1
Benzenethiol	ND	*- *1 UJ	9.5	1.6	ug/L		01/20/22 08:27	01/21/22 18:25	1
Benzoic acid	ND		28	6.9	ug/L		01/20/22 08:27	01/21/22 18:25	1
Benzyl alcohol	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 18:25	1
Bis(2-chloroethoxy)methane	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 18:25	1
Bis(2-chloroethyl)ether	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 18:25	1
bis (2-chloroisopropyl) ether	ND		9.5	0.15	ug/L		01/20/22 08:27	01/21/22 18:25	1
Bis(2-ethylhexyl) phthalate	ND		9.5	4.7	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Bromophenyl phenyl ether	ND		9.5	0.19	ug/L		01/20/22 08:27	01/21/22 18:25	1
Butyl benzyl phthalate	ND		9.5	0.18	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Chloroaniline	ND		9.5	3.2	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Chloro-3-methylphenol	ND		9.5	3.6	ug/L		01/20/22 08:27	01/21/22 18:25	1
2-Chloronaphthalene	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 18:25	1
2-Chlorophenol	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Chlorophenyl phenyl ether	ND		9.5	1.9	ug/L		01/20/22 08:27	01/21/22 18:25	1
Dibenz[a,h]acridine	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 18:25	1
Dibenzofuran	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 18:25	1
3,3'-Dichlorobenzidine	ND		9.5	2.5	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4-Dichlorophenol	ND		9.5	2.8	ug/L		01/20/22 08:27	01/21/22 18:25	1
Diethyl phthalate	ND		9.5	0.23	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4-Dimethylphenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 18:25	1
Dimethyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 18:25	1
Di-n-butyl phthalate	ND		9.5	2.6	ug/L		01/20/22 08:27	01/21/22 18:25	1
4,6-Dinitro-ortho-cresol	ND		9.5	1.5	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4-Dinitrophenol	ND		28	3.2	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4-Dinitrotoluene	ND		9.5	1.8	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,6-Dinitrotoluene	ND	UJ	9.5	1.8	ug/L		01/20/22 08:27	01/21/22 18:25	1
Di-n-octyl phthalate	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 18:25	1
1,4-Dioxane	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 18:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 18:25	1
Hexachlorobenzene	ND		9.5	0.16	ug/L		01/20/22 08:27	01/21/22 18:25	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		01/20/22 08:27	01/21/22 18:25	1
Hexachloroethane	ND		9.5	4.0	ug/L		01/20/22 08:27	01/21/22 18:25	1
Indene	ND		9.5	0.95	ug/L		01/20/22 08:27	01/21/22 18:25	1
Isophorone	ND		9.5	0.13	ug/L		01/20/22 08:27	01/21/22 18:25	1
2-Methylphenol	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 18:25	1
3 & 4 Methylphenol	ND		19	0.37	ug/L		01/20/22 08:27	01/21/22 18:25	1

Client Sample ID: P58-ROX-011322
Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-11
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		9.5	2.1	ug/L		01/20/22 08:27	01/21/22 18:25	1
3-Nitroaniline	ND		9.5	1.7	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Nitroaniline	ND		9.5	1.4	ug/L		01/20/22 08:27	01/21/22 18:25	1
Nitrobenzene	ND		9.5	0.12	ug/L		01/20/22 08:27	01/21/22 18:25	1
2-Nitrophenol	ND		9.5	4.9	ug/L		01/20/22 08:27	01/21/22 18:25	1
4-Nitrophenol	ND		9.5	2.0	ug/L		01/20/22 08:27	01/21/22 18:25	1
N-Nitrosodimethylamine	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 18:25	1
N-Nitrosodi-n-propylamine	ND		9.5	3.1	ug/L		01/20/22 08:27	01/21/22 18:25	1
N-Nitrosodiphenylamine	ND		9.5	0.17	ug/L		01/20/22 08:27	01/21/22 18:25	1
Pentachlorophenol	ND		19	1.3	ug/L		01/20/22 08:27	01/21/22 18:25	1
Pyridine	ND		9.5	3.0	ug/L		01/20/22 08:27	01/21/22 18:25	1
Quinoline	ND	UJ	9.5	4.3	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4,5-Trichlorophenol	ND		9.5	3.5	ug/L		01/20/22 08:27	01/21/22 18:25	1
2,4,6-Trichlorophenol	ND		9.5	3.3	ug/L		01/20/22 08:27	01/21/22 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*46 - 124*	*01/20/22 08:27*	*01/21/22 18:25*	*1*
2-Fluorophenol	*65*		*13 - 113*	*01/20/22 08:27*	*01/21/22 18:25*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/20/22 08:27*	*01/21/22 18:25*	*1*
Phenol-d5	*75*		*17 - 127*	*01/20/22 08:27*	*01/21/22 18:25*	*1*
Terphenyl-d14	*66*		*44 - 149*	*01/20/22 08:27*	*01/21/22 18:25*	*1*
2,4,6-Tribromophenol	*95*		*26 - 150*	*01/20/22 08:27*	*01/21/22 18:25*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	570		47	12	ug/L		01/20/22 08:27	01/24/22 23:18	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 18:42	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 18:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*74*	*p*	*51 - 149*	*01/21/22 12:37*	*01/24/22 18:42*	*1*

Client Sample ID: P58-ROX-011322-DUP
Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25000	10000	ug/L			01/18/22 19:28	1000
Acrolein	ND		20000	3300	ug/L			01/18/22 19:28	1000
Acrylonitrile	ND		10000	2800	ug/L			01/18/22 19:28	1000
Benzene	170000		1000	130	ug/L			01/18/22 19:28	1000
Bromobenzene	ND		1000	540	ug/L			01/18/22 19:28	1000
Bromochloromethane	ND		1000	210	ug/L			01/18/22 19:28	1000
Bromodichloromethane	ND		1000	500	ug/L			01/18/22 19:28	1000
Bromoform	ND		5000	250	ug/L			01/18/22 19:28	1000
Bromomethane	ND		1000	980	ug/L			01/18/22 19:28	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			01/18/22 19:28	1000
Carbon disulfide	ND		1000	500	ug/L			01/18/22 19:28	1000
Carbon tetrachloride	ND		1000	190	ug/L			01/18/22 19:28	1000
Chlorobenzene	ND		1000	150	ug/L			01/18/22 19:28	1000
Dibromochloromethane	ND		1000	240	ug/L			01/18/22 19:28	1000
Chloroethane	ND		1000	760	ug/L			01/18/22 19:28	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			01/18/22 19:28	1000
Chloroform	ND		1000	600	ug/L			01/18/22 19:28	1000
1-Chlorohexane	ND		1000	320	ug/L			01/18/22 19:28	1000
Chloromethane	ND		1000	320	ug/L			01/18/22 19:28	1000
cis-1,2-Dichloroethene	ND		1000	200	ug/L			01/18/22 19:28	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			01/18/22 19:28	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			01/18/22 19:28	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			01/18/22 19:28	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			01/18/22 19:28	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			01/18/22 19:28	1000
1,1-Dichloroethane	ND		1000	500	ug/L			01/18/22 19:28	1000
1,2-Dichloroethane	ND		1000	190	ug/L			01/18/22 19:28	1000
1,1-Dichloroethene	ND		1000	500	ug/L			01/18/22 19:28	1000
1,2-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:28	1000
1,3-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:28	1000
2,2-Dichloropropane	ND		1000	500	ug/L			01/18/22 19:28	1000
1,1-Dichloropropene	ND		1000	500	ug/L			01/18/22 19:28	1000
Ethylbenzene	ND		1000	500	ug/L			01/18/22 19:28	1000
Ethyl methacrylate	ND		1000	600	ug/L			01/18/22 19:28	1000
Hexachlorobutadiene	ND		5000	900	ug/L			01/18/22 19:28	1000
2-Hexanone	ND		25000	1400	ug/L			01/18/22 19:28	1000
Isopropylbenzene	ND		1000	530	ug/L			01/18/22 19:28	1000
Methylene bromide	ND		5000	220	ug/L			01/18/22 19:28	1000
Methylene Chloride	ND		5000	3000	ug/L			01/18/22 19:28	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			01/18/22 19:28	1000
Methyl tert-butyl ether	ND		1000	220	ug/L			01/18/22 19:28	1000
m-Xylene & p-Xylene	ND		5000	630	ug/L			01/18/22 19:28	1000
Naphthalene	ND		1000	1000	ug/L			01/18/22 19:28	1000
n-Butylbenzene	ND		1000	760	ug/L			01/18/22 19:28	1000
N-Propylbenzene	ND		1000	690	ug/L			01/18/22 19:28	1000
o-Chlorotoluene	ND		1000	570	ug/L			01/18/22 19:28	1000
o-Xylene	ND		5000	600	ug/L			01/18/22 19:28	1000
p-Chlorotoluene	ND		1000	560	ug/L			01/18/22 19:28	1000
p-Isopropyltoluene	ND		1000	710	ug/L			01/18/22 19:28	1000

Client Sample ID: P58-ROX-011322-DUP

Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			01/18/22 19:28	1000
Styrene	ND		1000	1000	ug/L			01/18/22 19:28	1000
tert-Butylbenzene	ND		1000	630	ug/L			01/18/22 19:28	1000
1,1,1,2-Tetrachloroethane	ND		1000	160	ug/L			01/18/22 19:28	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			01/18/22 19:28	1000
Tetrachloroethene	ND		1000	120	ug/L			01/18/22 19:28	1000
Toluene	ND		1000	410	ug/L			01/18/22 19:28	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			01/18/22 19:28	1000
trans-1,3-Dichloropropene	ND		5000	200	ug/L			01/18/22 19:28	1000
1,2,3-Trichlorobenzene	ND		1000	190	ug/L			01/18/22 19:28	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			01/18/22 19:28	1000
1,1,1-Trichloroethane	ND		1000	180	ug/L			01/18/22 19:28	1000
1,1,2-Trichloroethane	ND		5000	210	ug/L			01/18/22 19:28	1000
Trichloroethene	ND		1000	150	ug/L			01/18/22 19:28	1000
Trichlorofluoromethane	ND		1000	520	ug/L			01/18/22 19:28	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			01/18/22 19:28	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			01/18/22 19:28	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			01/18/22 19:28	1000
Vinyl acetate	ND		25000	930	ug/L			01/18/22 19:28	1000
Vinyl chloride	ND	UJ	1000	500	ug/L			01/18/22 19:28	1000
Xylenes, Total	ND		10000	1600	ug/L			01/18/22 19:28	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*72 - 119*		*01/18/22 19:28*	*1000*
Dibromofluoromethane	*97*		*75 - 126*		*01/18/22 19:28*	*1000*
Toluene-d8 (Surr)	*100*		*64 - 132*		*01/18/22 19:28*	*1000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.94		0.20	0.031	ug/L		01/20/22 08:27	01/21/22 18:27	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/20/22 08:27	01/21/22 18:27	1
Anthracene	ND		0.20	0.031	ug/L		01/20/22 08:27	01/21/22 18:27	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/20/22 08:27	01/21/22 18:27	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/20/22 08:27	01/21/22 18:27	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/20/22 08:27	01/21/22 18:27	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/20/22 08:27	01/21/22 18:27	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/20/22 08:27	01/21/22 18:27	1
Chrysene	ND		0.20	0.072	ug/L		01/20/22 08:27	01/21/22 18:27	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/20/22 08:27	01/21/22 18:27	1
Fluoranthene	ND		0.20	0.067	ug/L		01/20/22 08:27	01/21/22 18:27	1
Fluorene	2.0	J	0.20	0.11	ug/L		01/20/22 08:27	01/21/22 18:27	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/20/22 08:27	01/21/22 18:27	1
1-Methylnaphthalene	56		0.20	0.072	ug/L		01/20/22 08:27	01/21/22 18:27	1
2-Methylnaphthalene	25		0.20	0.059	ug/L		01/20/22 08:27	01/21/22 18:27	1
Phenanthrene	1.8		0.20	0.035	ug/L		01/20/22 08:27	01/21/22 18:27	1
Pyrene	0.87	J	0.20	0.039	ug/L		01/20/22 08:27	01/21/22 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*97*		*15 - 122*	*01/20/22 08:27*	*01/21/22 18:27*	*1*
Nitrobenzene-d5	*101*		*19 - 130*	*01/20/22 08:27*	*01/21/22 18:27*	*1*

Client Sample ID: P58-ROX-011322-DUP

Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-12
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	78		33 - 138	01/20/22 08:27	01/21/22 18:27	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/20/22 08:27	01/21/22 18:45	1
Benzenethiol	ND	*- *1 UJ	9.8	1.7	ug/L		01/20/22 08:27	01/21/22 18:45	1
Benzoic acid	ND		29	7.1	ug/L		01/20/22 08:27	01/21/22 18:45	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/20/22 08:27	01/21/22 18:45	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		01/20/22 08:27	01/21/22 18:45	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		01/20/22 08:27	01/21/22 18:45	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/20/22 08:27	01/21/22 18:45	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/20/22 08:27	01/21/22 18:45	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/20/22 08:27	01/21/22 18:45	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/20/22 08:27	01/21/22 18:45	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/20/22 08:27	01/21/22 18:45	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 18:45	1
Dibenzofuran	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 18:45	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/20/22 08:27	01/21/22 18:45	1
Diethyl phthalate	ND		9.8	0.23	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		01/20/22 08:27	01/21/22 18:45	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 18:45	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/20/22 08:27	01/21/22 18:45	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,6-Dinitrotoluene	ND	UJ	9.8	1.9	ug/L		01/20/22 08:27	01/21/22 18:45	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 18:45	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 18:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 18:45	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 18:45	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		01/20/22 08:27	01/21/22 18:45	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/20/22 08:27	01/21/22 18:45	1
Indene	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 18:45	1
Isophorone	ND		9.8	0.14	ug/L		01/20/22 08:27	01/21/22 18:45	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/20/22 08:27	01/21/22 18:45	1
3 & 4 Methylphenol	ND		20	0.38	ug/L		01/20/22 08:27	01/21/22 18:45	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/20/22 08:27	01/21/22 18:45	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/20/22 08:27	01/21/22 18:45	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/20/22 08:27	01/21/22 18:45	1
2-Nitrophenol	ND		9.8	5.1	ug/L		01/20/22 08:27	01/21/22 18:45	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/20/22 08:27	01/21/22 18:45	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/20/22 08:27	01/21/22 18:45	1

Client Sample ID: P58-ROX-011322-DUP
Date Collected: 01/13/22 11:50
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/20/22 08:27	01/21/22 18:45	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/20/22 08:27	01/21/22 18:45	1
Pentachlorophenol	ND		20	1.4	ug/L		01/20/22 08:27	01/21/22 18:45	1
Pyridine	ND		9.8	3.1	ug/L		01/20/22 08:27	01/21/22 18:45	1
Quinoline	ND	U5	9.8	4.4	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/20/22 08:27	01/21/22 18:45	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/20/22 08:27	01/21/22 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*51*		*46 - 124*	*01/20/22 08:27*	*01/21/22 18:45*	*1*
2-Fluorophenol	*59*		*13 - 113*	*01/20/22 08:27*	*01/21/22 18:45*	*1*
Nitrobenzene-d5	*58*		*36 - 126*	*01/20/22 08:27*	*01/21/22 18:45*	*1*
Phenol-d5	*69*		*17 - 127*	*01/20/22 08:27*	*01/21/22 18:45*	*1*
Terphenyl-d14	*56*		*44 - 149*	*01/20/22 08:27*	*01/21/22 18:45*	*1*
2,4,6-Tribromophenol	*91*		*26 - 150*	*01/20/22 08:27*	*01/21/22 18:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	450		49	13	ug/L		01/20/22 08:27	01/24/22 23:39	5

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 19:03	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*78*		*51 - 149*	*01/21/22 12:37*	*01/24/22 19:03*	*1*

Client Sample ID: P93B-ROX-011322

Date Collected: 01/13/22 12:40
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-13

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		130000	50000	ug/L			01/18/22 19:55	5000
Acrolein	ND		100000	17000	ug/L			01/18/22 19:55	5000
Acrylonitrile	ND		50000	14000	ug/L			01/18/22 19:55	5000
Benzene	870000		5000	650	ug/L			01/18/22 19:55	5000
Bromobenzene	ND		5000	2700	ug/L			01/18/22 19:55	5000
Bromochloromethane	ND		5000	1100	ug/L			01/18/22 19:55	5000
Bromodichloromethane	ND		5000	2500	ug/L			01/18/22 19:55	5000
Bromoform	ND		25000	1300	ug/L			01/18/22 19:55	5000
Bromomethane	ND		5000	4900	ug/L			01/18/22 19:55	5000
2-Butanone (MEK)	ND		130000	13000	ug/L			01/18/22 19:55	5000
Carbon disulfide	ND		5000	2500	ug/L			01/18/22 19:55	5000
Carbon tetrachloride	ND		5000	950	ug/L			01/18/22 19:55	5000
Chlorobenzene	ND		5000	750	ug/L			01/18/22 19:55	5000
Dibromochloromethane	ND		5000	1200	ug/L			01/18/22 19:55	5000
Chloroethane	ND		5000	3800	ug/L			01/18/22 19:55	5000
2-Chloroethyl vinyl ether	ND		25000	10000	ug/L			01/18/22 19:55	5000
Chloroform	ND		5000	3000	ug/L			01/18/22 19:55	5000
1-Chlorohexane	ND		5000	1600	ug/L			01/18/22 19:55	5000
Chloromethane	ND		5000	1600	ug/L			01/18/22 19:55	5000
cis-1,2-Dichloroethene	ND		5000	1000	ug/L			01/18/22 19:55	5000
cis-1,3-Dichloropropene	ND		25000	2500	ug/L			01/18/22 19:55	5000
1,2-Dichlorobenzene	ND		5000	2500	ug/L			01/18/22 19:55	5000
1,3-Dichlorobenzene	ND		5000	2700	ug/L			01/18/22 19:55	5000
1,4-Dichlorobenzene	ND		5000	3200	ug/L			01/18/22 19:55	5000
Dichlorodifluoromethane	ND		5000	4300	ug/L			01/18/22 19:55	5000
1,1-Dichloroethane	ND		5000	2500	ug/L			01/18/22 19:55	5000
1,2-Dichloroethane	ND		5000	950	ug/L			01/18/22 19:55	5000
1,1-Dichloroethene	ND		5000	2500	ug/L			01/18/22 19:55	5000
1,2-Dichloropropane	ND		5000	2500	ug/L			01/18/22 19:55	5000
1,3-Dichloropropane	ND		5000	2500	ug/L			01/18/22 19:55	5000
2,2-Dichloropropane	ND		5000	2500	ug/L			01/18/22 19:55	5000
1,1-Dichloropropene	ND		5000	2500	ug/L			01/18/22 19:55	5000
Ethylbenzene	ND		5000	2500	ug/L			01/18/22 19:55	5000
Ethyl methacrylate	ND		5000	3000	ug/L			01/18/22 19:55	5000
Hexachlorobutadiene	ND		25000	4500	ug/L			01/18/22 19:55	5000
2-Hexanone	ND		130000	7000	ug/L			01/18/22 19:55	5000
Isopropylbenzene	ND		5000	2700	ug/L			01/18/22 19:55	5000
Methylene bromide	ND		25000	1100	ug/L			01/18/22 19:55	5000
Methylene Chloride	ND		25000	15000	ug/L			01/18/22 19:55	5000
4-Methyl-2-pentanone (MIBK)	ND		130000	9000	ug/L			01/18/22 19:55	5000
Methyl tert-butyl ether	ND		5000	1100	ug/L			01/18/22 19:55	5000
m-Xylene & p-Xylene	ND		25000	3200	ug/L			01/18/22 19:55	5000
Naphthalene	ND		5000	5000	ug/L			01/18/22 19:55	5000
n-Butylbenzene	ND		5000	3800	ug/L			01/18/22 19:55	5000
N-Propylbenzene	ND		5000	3500	ug/L			01/18/22 19:55	5000
o-Chlorotoluene	ND		5000	2900	ug/L			01/18/22 19:55	5000
o-Xylene	ND		25000	3000	ug/L			01/18/22 19:55	5000
p-Chlorotoluene	ND		5000	2800	ug/L			01/18/22 19:55	5000
p-Isopropyltoluene	ND		5000	3600	ug/L			01/18/22 19:55	5000

Client Sample ID: P93B-ROX-011322
Date Collected: 01/13/22 12:40
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5000	3500	ug/L			01/18/22 19:55	5000
Styrene	ND		5000	5000	ug/L			01/18/22 19:55	5000
tert-Butylbenzene	ND		5000	3200	ug/L			01/18/22 19:55	5000
1,1,1,2-Tetrachloroethane	ND		5000	800	ug/L			01/18/22 19:55	5000
1,1,2,2-Tetrachloroethane	ND		5000	2500	ug/L			01/18/22 19:55	5000
Tetrachloroethene	ND		5000	600	ug/L			01/18/22 19:55	5000
Toluene	ND		5000	2100	ug/L			01/18/22 19:55	5000
trans-1,2-Dichloroethene	ND		5000	2500	ug/L			01/18/22 19:55	5000
trans-1,3-Dichloropropene	ND		25000	1000	ug/L			01/18/22 19:55	5000
1,2,3-Trichlorobenzene	ND		5000	950	ug/L			01/18/22 19:55	5000
1,2,4-Trichlorobenzene	ND		5000	4100	ug/L			01/18/22 19:55	5000
1,1,1-Trichloroethane	ND		5000	900	ug/L			01/18/22 19:55	5000
1,1,2-Trichloroethane	ND		25000	1100	ug/L			01/18/22 19:55	5000
Trichloroethene	ND		5000	750	ug/L			01/18/22 19:55	5000
Trichlorofluoromethane	ND		5000	2600	ug/L			01/18/22 19:55	5000
1,2,3-Trichloropropane	ND		25000	4200	ug/L			01/18/22 19:55	5000
1,2,4-Trimethylbenzene	ND		5000	4100	ug/L			01/18/22 19:55	5000
1,3,5-Trimethylbenzene	ND		5000	2800	ug/L			01/18/22 19:55	5000
Vinyl acetate	ND		130000	4700	ug/L			01/18/22 19:55	5000
Vinyl chloride	ND	LCS	5000	2500	ug/L			01/18/22 19:55	5000
Xylenes, Total	ND		50000	8000	ug/L			01/18/22 19:55	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/18/22 19:55*	*5000*
Dibromofluoromethane	*95*		*75 - 126*		*01/18/22 19:55*	*5000*
Toluene-d8 (Surr)	*99*		*64 - 132*		*01/18/22 19:55*	*5000*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.031	ug/L		01/20/22 08:27	01/21/22 18:44	1
Acenaphthylene	ND		0.20	0.044	ug/L		01/20/22 08:27	01/21/22 18:44	1
Anthracene	ND		0.20	0.031	ug/L		01/20/22 08:27	01/21/22 18:44	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		01/20/22 08:27	01/21/22 18:44	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		01/20/22 08:27	01/21/22 18:44	1
Benzo[b]fluoranthene	ND		0.20	0.033	ug/L		01/20/22 08:27	01/21/22 18:44	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/20/22 08:27	01/21/22 18:44	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		01/20/22 08:27	01/21/22 18:44	1
Chrysene	ND		0.20	0.072	ug/L		01/20/22 08:27	01/21/22 18:44	1
Dibenz(a,h)anthracene	ND		0.20	0.049	ug/L		01/20/22 08:27	01/21/22 18:44	1
Fluoranthene	ND		0.20	0.066	ug/L		01/20/22 08:27	01/21/22 18:44	1
Fluorene	ND		0.20	0.11	ug/L		01/20/22 08:27	01/21/22 18:44	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.042	ug/L		01/20/22 08:27	01/21/22 18:44	1
1-Methylnaphthalene	ND		0.20	0.072	ug/L		01/20/22 08:27	01/21/22 18:44	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		01/20/22 08:27	01/21/22 18:44	1
Phenanthrene	ND		0.20	0.035	ug/L		01/20/22 08:27	01/21/22 18:44	1
Pyrene	ND		0.20	0.039	ug/L		01/20/22 08:27	01/21/22 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*104*		*15 - 122*	*01/20/22 08:27*	*01/21/22 18:44*	*1*
Nitrobenzene-d5	*110*		*19 - 130*	*01/20/22 08:27*	*01/21/22 18:44*	*1*

Client Sample ID: P93B-ROX-011322
Date Collected: 01/13/22 12:40
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-13
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	116		33 - 138	01/20/22 08:27	01/21/22 18:44	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.8	3.7	ug/L		01/20/22 08:27	01/21/22 19:06	1
Benzenethiol	ND	*- *1 UJ	9.8	1.7	ug/L		01/20/22 08:27	01/21/22 19:06	1
Benzoic acid	ND		29	7.1	ug/L		01/20/22 08:27	01/21/22 19:06	1
Benzyl alcohol	ND		9.8	2.0	ug/L		01/20/22 08:27	01/21/22 19:06	1
Bis(2-chloroethoxy)methane	ND		9.8	0.16	ug/L		01/20/22 08:27	01/21/22 19:06	1
Bis(2-chloroethyl)ether	ND		9.8	2.6	ug/L		01/20/22 08:27	01/21/22 19:06	1
bis (2-chloroisopropyl) ether	ND		9.8	0.16	ug/L		01/20/22 08:27	01/21/22 19:06	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Bromophenyl phenyl ether	ND		9.8	0.20	ug/L		01/20/22 08:27	01/21/22 19:06	1
Butyl benzyl phthalate	ND		9.8	0.19	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Chloroaniline	ND		9.8	3.3	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		01/20/22 08:27	01/21/22 19:06	1
2-Chloronaphthalene	ND		9.8	0.14	ug/L		01/20/22 08:27	01/21/22 19:06	1
2-Chlorophenol	ND		9.8	2.2	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		01/20/22 08:27	01/21/22 19:06	1
Dibenz[a,h]acridine	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 19:06	1
Dibenzofuran	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 19:06	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		01/20/22 08:27	01/21/22 19:06	1
Diethyl phthalate	ND		9.8	0.23	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4-Dimethylphenol	**3.9**	J	9.8	3.4	ug/L		01/20/22 08:27	01/21/22 19:06	1
Dimethyl phthalate	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 19:06	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		01/20/22 08:27	01/21/22 19:06	1
4,6-Dinitro-ortho-cresol	ND		9.8	1.6	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,6-Dinitrotoluene	ND	UJ	9.8	1.9	ug/L		01/20/22 08:27	01/21/22 19:06	1
Di-n-octyl phthalate	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 19:06	1
1,4-Dioxane	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 19:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 19:06	1
Hexachlorobenzene	ND		9.8	0.17	ug/L		01/20/22 08:27	01/21/22 19:06	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		01/20/22 08:27	01/21/22 19:06	1
Hexachloroethane	ND		9.8	4.1	ug/L		01/20/22 08:27	01/21/22 19:06	1
Indene	ND		9.8	0.98	ug/L		01/20/22 08:27	01/21/22 19:06	1
Isophorone	ND		9.8	0.14	ug/L		01/20/22 08:27	01/21/22 19:06	1
2-Methylphenol	ND		9.8	1.8	ug/L		01/20/22 08:27	01/21/22 19:06	1
3 & 4 Methylphenol	**2.0**	J	20	0.38	ug/L		01/20/22 08:27	01/21/22 19:06	1
2-Nitroaniline	ND		9.8	2.2	ug/L		01/20/22 08:27	01/21/22 19:06	1
3-Nitroaniline	ND		9.8	1.8	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Nitroaniline	ND		9.8	1.5	ug/L		01/20/22 08:27	01/21/22 19:06	1
Nitrobenzene	ND		9.8	0.13	ug/L		01/20/22 08:27	01/21/22 19:06	1
2-Nitrophenol	ND		9.8	5.1	ug/L		01/20/22 08:27	01/21/22 19:06	1
4-Nitrophenol	ND		9.8	2.1	ug/L		01/20/22 08:27	01/21/22 19:06	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		01/20/22 08:27	01/21/22 19:06	1

Client Sample ID: P93B-ROX-011322
Date Collected: 01/13/22 12:40
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-13
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		01/20/22 08:27	01/21/22 19:06	1
N-Nitrosodiphenylamine	ND		9.8	0.18	ug/L		01/20/22 08:27	01/21/22 19:06	1
Pentachlorophenol	ND		20	1.4	ug/L		01/20/22 08:27	01/21/22 19:06	1
Phenol	370		9.8	2.5	ug/L		01/20/22 08:27	01/21/22 19:06	1
Pyridine	ND		9.8	3.1	ug/L		01/20/22 08:27	01/21/22 19:06	1
Quinoline	ND	U5	9.8	4.4	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		01/20/22 08:27	01/21/22 19:06	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		01/20/22 08:27	01/21/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*46 - 124*	*01/20/22 08:27*	*01/21/22 19:06*	*1*
2-Fluorophenol	*73*		*13 - 113*	*01/20/22 08:27*	*01/21/22 19:06*	*1*
Nitrobenzene-d5	*70*		*36 - 126*	*01/20/22 08:27*	*01/21/22 19:06*	*1*
Phenol-d5	*70*		*17 - 127*	*01/20/22 08:27*	*01/21/22 19:06*	*1*
Terphenyl-d14	*104*		*44 - 149*	*01/20/22 08:27*	*01/21/22 19:06*	*1*
2,4,6-Tribromophenol	*92*		*26 - 150*	*01/20/22 08:27*	*01/21/22 19:06*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 19:23	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*01/21/22 12:37*	*01/24/22 19:23*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(72-119)	(75-126)	(64-132)
400-214137-1	TB-ROX-01322-8260-A	105	101	101
400-214137-3	MW14-ROX-011322-EB	107	100	99
400-214137-4	MW14-ROX-011322	107	97	101
400-214137-4 MS	MW14-ROX-011322-MS	99	102	98
400-214137-4 MSD	MW14-ROX-011322-MSD	99	103	98
400-214137-5	P66-ROX-011322	107	98	99
400-214137-5 - RA	P66-ROX-011322	108	98	97
400-214137-7	TB-ROX-011322-8260-B	105	101	100
400-214137-8	P74-ROX-011322	109	98	99
400-214137-9	P74-ROX-011322-DUP	106	98	100
400-214137-10	P59-ROX-011322	104	101	105
400-214137-10 - DL	P59-ROX-011322	106	96	102
400-214137-11	P58-ROX-011322	106	96	100
400-214137-11 - RA	P58-ROX-011322	104	95	103
400-214137-12	P58-ROX-011322-DUP	109	97	100
400-214137-13	P93B-ROX-011322	105	95	99
LCS 400-563489/1002	Lab Control Sample	95	105	97
LCS 400-563628/1002	Lab Control Sample	96	106	96
LCS 400-563776/1002	Lab Control Sample	91	104	96
MB 400-563489/5	Method Blank	106	101	98
MB 400-563628/4	Method Blank	105	101	97
MB 400-563776/5	Method Blank	105	98	101

Surrogate Legend

BFB = 4-Bromofluorobenzene
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(46-124)	(13-113)	(36-126)	(17-127)	(44-149)	(26-150)
400-214137-3	MW14-ROX-011322-EB	63	19	70	56	103	62
400-214137-4	MW14-ROX-011322	61	17	67	51	105	60
400-214137-4 MS	MW14-ROX-011322-MS	68	33	63	59	94	95
400-214137-4 MSD	MW14-ROX-011322-MSD	65	25	63	59	109	90
400-214137-5	P66-ROX-011322	63	67	70	67	82	98
400-214137-8	P74-ROX-011322	65	68	71	68	100	74
400-214137-9	P74-ROX-011322-DUP	62	66	70	66	110	75
400-214137-10	P59-ROX-011322	55	56	63	64	52	98
400-214137-11	P58-ROX-011322	56	65	66	75	66	95
400-214137-12	P58-ROX-011322-DUP	51	59	58	69	56	91
400-214137-13	P93B-ROX-011322	61	73	70	70	104	92
LCS 400-563773/2-A	Lab Control Sample	63	36	62	60	93	90
LCS 400-563773/3-A	Lab Control Sample	61	34	66	57	109	50
LCSD 400-563773/4-A	Lab Control Sample Dup	66	28	73	54	118	59
MB 400-563773/1-A	Method Blank	61	18	66	54	94	63

Surrogate Legend

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHL = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHL
Lab Sample ID	Client Sample ID	(15-122)	(19-130)	(33-138)
400-214137-3	MW14-ROX-011322-EB	113	113	132
400-214137-4	MW14-ROX-011322	116	107	121
400-214137-4 MS	MW14-ROX-011322-MS	106	133 S1+	122
400-214137-4 MSD	MW14-ROX-011322-MSD	100	128	110
400-214137-5	P66-ROX-011322	111	112	99
400-214137-8	P74-ROX-011322	125 S1+	123	135
400-214137-9	P74-ROX-011322-DUP	106	110	137
400-214137-10	P59-ROX-011322	107	107	89
400-214137-11	P58-ROX-011322	103	108	88
400-214137-12	P58-ROX-011322-DUP	97	101	78
400-214137-13	P93B-ROX-011322	104	110	116
LCS 400-563773/2-A	Lab Control Sample	100	128	109
MB 400-563773/1-A	Method Blank	117	110	130

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)
400-214137-2	TB-ROX-011322-8011-A	87
400-214137-3	MW14-ROX-011322-EB	77
400-214137-4	MW14-ROX-011322	79
400-214137-4 MS	MW14-ROX-011322-MS	94
400-214137-4 MSD	MW14-ROX-011322-MSD	91
400-214137-5	P66-ROX-011322	85
400-214137-6	TB-ROX-011322-8011-B	77
400-214137-8	P74-ROX-011322	68
400-214137-9	P74-ROX-011322-DUP	69
400-214137-10	P59-ROX-011322	72
400-214137-11	P58-ROX-011322	74 p
400-214137-12	P58-ROX-011322-DUP	78
400-214137-13	P93B-ROX-011322	82
LCS 400-563945/2-A	Lab Control Sample	93
MB 400-563945/1-A	Method Blank	94

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL PEN
8270D LL	Semivolatile Organic Compounds by GC/MS - Low Level	SW846	TAL PEN
8011	EDB and DBCP in Water by Microextraction	EPA	TAL PEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL PEN
5030B	Purge and Trap	SW846	TAL PEN
8011	Microextraction	SW846	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: TB-ROX-01322-8260-A

Lab Sample ID: 400-214137-1

Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 11:39	BEP	TAL PEN

Client Sample ID: TB-ROX-011322-8011-A

Lab Sample ID: 400-214137-2

Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.5 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 16:02	DS	TAL PEN

Client Sample ID: MW14-ROX-011322-EB

Lab Sample ID: 400-214137-3

Date Collected: 01/13/22 08:20
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 12:05	BEP	TAL PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 16:42	VC1	TAL PEN
Total/NA	Prep	3520C			264.4 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 16:45	PP1	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 16:42	DS	TAL PEN

Client Sample ID: MW14-ROX-011322

Lab Sample ID: 400-214137-4

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 09:55	BEP	TAL PEN
Total/NA	Prep	3520C			260.8 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 15:20	VC1	TAL PEN
Total/NA	Prep	3520C			260.8 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 16:28	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 14:21	DS	TAL PEN

Client Sample ID: P66-ROX-011322

Lab Sample ID: 400-214137-5

Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	563489	01/18/22 18:36	BEP	TAL PEN
Total/NA	Analysis	8260B	RA	5	5 mL	5 mL	563628	01/19/22 19:45	BEP	TAL PEN
Total/NA	Prep	3520C			260.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL/g	1.0 mL	563937	01/21/22 17:03	VC1	TAL PEN

Client Sample ID: P66-ROX-011322

Lab Sample ID: 400-214137-5

Date Collected: 01/13/22 11:25
Date Received: 01/15/22 09:03
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			260.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 17:02	PP1	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 17:02	DS	TAL PEN

Client Sample ID: TB-ROX-011322-8011-B

Lab Sample ID: 400-214137-6

Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.4 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 17:22	DS	TAL PEN

Client Sample ID: TB-ROX-011322-8260-B

Lab Sample ID: 400-214137-7

Date Collected: 01/13/22 00:00
Date Received: 01/15/22 09:03
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 12:32	BEP	TAL PEN

Client Sample ID: P74-ROX-011322

Lab Sample ID: 400-214137-8

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 17:18	BEP	TAL PEN
Total/NA	Prep	3520C			262 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 17:23	VC1	TAL PEN
Total/NA	Prep	3520C			262 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 17:19	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 17:42	DS	TAL PEN

Client Sample ID: P74-ROX-011322-DUP

Lab Sample ID: 400-214137-9

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 17:44	BEP	TAL PEN
Total/NA	Prep	3520C			243 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 17:44	VC1	TAL PEN
Total/NA	Prep	3520C			243 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 17:36	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 18:02	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: P59-ROX-011322

Lab Sample ID: 400-214137-10

Date Collected: 01/13/22 11:05
Matrix: Water
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 18:10	BEP	TAL PEN
Total/NA	Analysis	8260B	DL	20	5 mL	5 mL	563776	01/20/22 19:53	BPO	TAL PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 18:04	VC1	TAL PEN
Total/NA	Prep	3520C			247.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 17:53	PP1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 18:22	DS	TAL PEN

Client Sample ID: P58-ROX-011322

Lab Sample ID: 400-214137-11

Date Collected: 01/13/22 11:50
Matrix: Water
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	563489	01/18/22 19:02	BEP	TAL PEN
Total/NA	Analysis	8260B	RA	1000	5 mL	5 mL	563776	01/20/22 20:18	BPO	TAL PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 18:25	VC1	TAL PEN
Total/NA	Prep	3520C	DL		263.2 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D	DL	5			564140	01/24/22 23:18	S1B	TAL PEN
Total/NA	Prep	3520C			263.2 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 18:10	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 18:42	DS	TAL PEN

Client Sample ID: P58-ROX-011322-DUP

Lab Sample ID: 400-214137-12

Date Collected: 01/13/22 11:50
Matrix: Water
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1000	5 mL	5 mL	563489	01/18/22 19:28	BEP	TAL PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 18:45	VC1	TAL PEN
Total/NA	Prep	3520C	DL		255.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D	DL	5			564140	01/24/22 23:39	S1B	TAL PEN
Total/NA	Prep	3520C			255.6 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 18:27	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 19:03	DS	TAL PEN

Client Sample ID: P93B-ROX-011322

Lab Sample ID: 400-214137-13

Date Collected: 01/13/22 12:40
Matrix: Water
Date Received: 01/15/22 09:03

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5000	5 mL	5 mL	563489	01/18/22 19:55	BEP	TAL PEN
Total/NA	Prep	3520C			255.8 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 19:06	VC1	TAL PEN
Total/NA	Prep	3520C			255.8 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 18:44	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 19:23	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563489/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 09:29	BEP	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563628/4

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563628	01/19/22 10:32	BEP	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563773/1-A

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 13:58	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		1			563966	01/21/22 15:19	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563776/5

Date Collected: N/A
Matrix: Water
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563776	01/20/22 11:25	BPO	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-563945/1-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	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 13:00	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563489/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563489	01/18/22 08:30	BEP	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563628/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563628	01/19/22 08:54	BEP	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563773/2-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 14:18	VC1	TAL PEN
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563966	01/21/22 15:36	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563773/3-A**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 16:01	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563776/1002**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	563776	01/20/22 09:26	BPO	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-563945/2-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	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 13:20	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-563773/4-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 16:22	VC1	TAL PEN

Client Sample ID: MW14-ROX-011322-MS

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-4 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	8260B		1	5 mL	5 mL	563489	01/18/22 10:21	BEP	TAL PEN
Total/NA	Prep	3520C			259.2 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 14:39	VC1	TAL PEN
Total/NA	Prep	3520C			259.2 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563966	01/21/22 15:53	PP1	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 13:40	DS	TAL PEN

Client Sample ID: MW14-ROX-011322-MSD

Date Collected: 01/13/22 10:10
Date Received: 01/15/22 09:03

Lab Sample ID: 400-214137-4 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	8260B		1	5 mL	5 mL	563489	01/18/22 10:47	BEP	TAL PEN
Total/NA	Prep	3520C			260.4 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D		1			563937	01/21/22 15:00	VC1	TAL PEN
Total/NA	Prep	3520C			260.4 mL	1 mL	563773	01/20/22 08:27	KWS	TAL PEN
Total/NA	Analysis	8270D LL		5			563966	01/21/22 16:10	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	563945	01/21/22 12:37	KIS	TAL PEN
Total/NA	Analysis	8011		1			564103	01/24/22 14:01	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

GC/MS VOA

Analysis Batch: 563489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-1	TB-ROX-01322-8260-A	Total/NA	Water	8260B	
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	8260B	
400-214137-4	MW14-ROX-011322	Total/NA	Water	8260B	
400-214137-5	P66-ROX-011322	Total/NA	Water	8260B	
400-214137-7	TB-ROX-011322-8260-B	Total/NA	Water	8260B	
400-214137-8	P74-ROX-011322	Total/NA	Water	8260B	
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	8260B	
400-214137-10	P59-ROX-011322	Total/NA	Water	8260B	
400-214137-11	P58-ROX-011322	Total/NA	Water	8260B	
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	8260B	
400-214137-13	P93B-ROX-011322	Total/NA	Water	8260B	
MB 400-563489/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563489/1002	Lab Control Sample	Total/NA	Water	8260B	
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	8260B	
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	8260B	

Analysis Batch: 563628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-5 - RA	P66-ROX-011322	Total/NA	Water	8260B	
MB 400-563628/4	Method Blank	Total/NA	Water	8260B	
LCS 400-563628/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 563776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-10 - DL	P59-ROX-011322	Total/NA	Water	8260B	
400-214137-11 - RA	P58-ROX-011322	Total/NA	Water	8260B	
MB 400-563776/5	Method Blank	Total/NA	Water	8260B	
LCS 400-563776/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 563773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	3520C	
400-214137-4	MW14-ROX-011322	Total/NA	Water	3520C	
400-214137-5	P66-ROX-011322	Total/NA	Water	3520C	
400-214137-8	P74-ROX-011322	Total/NA	Water	3520C	
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	3520C	
400-214137-10	P59-ROX-011322	Total/NA	Water	3520C	
400-214137-11	P58-ROX-011322	Total/NA	Water	3520C	
400-214137-11 - DL	P58-ROX-011322	Total/NA	Water	3520C	
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	3520C	
400-214137-12 - DL	P58-ROX-011322-DUP	Total/NA	Water	3520C	
400-214137-13	P93B-ROX-011322	Total/NA	Water	3520C	
MB 400-563773/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-563773/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-563773/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-563773/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	3520C	
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	3520C	

GC/MS Semi VOA

Analysis Batch: 563937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	8270D	563773
400-214137-4	MW14-ROX-011322	Total/NA	Water	8270D	563773
400-214137-5	P66-ROX-011322	Total/NA	Water	8270D	563773
400-214137-8	P74-ROX-011322	Total/NA	Water	8270D	563773
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	8270D	563773
400-214137-10	P59-ROX-011322	Total/NA	Water	8270D	563773
400-214137-11	P58-ROX-011322	Total/NA	Water	8270D	563773
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	8270D	563773
400-214137-13	P93B-ROX-011322	Total/NA	Water	8270D	563773
MB 400-563773/1-A	Method Blank	Total/NA	Water	8270D	563773
LCS 400-563773/2-A	Lab Control Sample	Total/NA	Water	8270D	563773
LCS 400-563773/3-A	Lab Control Sample	Total/NA	Water	8270D	563773
LCSD 400-563773/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	563773
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	8270D	563773
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	8270D	563773

Analysis Batch: 563966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	8270D LL	563773
400-214137-4	MW14-ROX-011322	Total/NA	Water	8270D LL	563773
400-214137-5	P66-ROX-011322	Total/NA	Water	8270D LL	563773
400-214137-8	P74-ROX-011322	Total/NA	Water	8270D LL	563773
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	8270D LL	563773
400-214137-10	P59-ROX-011322	Total/NA	Water	8270D LL	563773
400-214137-11	P58-ROX-011322	Total/NA	Water	8270D LL	563773
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	8270D LL	563773
400-214137-13	P93B-ROX-011322	Total/NA	Water	8270D LL	563773
MB 400-563773/1-A	Method Blank	Total/NA	Water	8270D LL	563773
LCS 400-563773/2-A	Lab Control Sample	Total/NA	Water	8270D LL	563773
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	8270D LL	563773
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	8270D LL	563773

Analysis Batch: 564140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-11 - DL	P58-ROX-011322	Total/NA	Water	8270D	563773
400-214137-12 - DL	P58-ROX-011322-DUP	Total/NA	Water	8270D	563773

GC Semi VOA

Prep Batch: 563945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-2	TB-ROX-011322-8011-A	Total/NA	Water	8011	
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	8011	
400-214137-4	MW14-ROX-011322	Total/NA	Water	8011	
400-214137-5	P66-ROX-011322	Total/NA	Water	8011	
400-214137-6	TB-ROX-011322-8011-B	Total/NA	Water	8011	
400-214137-8	P74-ROX-011322	Total/NA	Water	8011	
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	8011	
400-214137-10	P59-ROX-011322	Total/NA	Water	8011	
400-214137-11	P58-ROX-011322	Total/NA	Water	8011	
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	8011	

QC Association Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-214137-1

GC Semi VOA (Continued)

Prep Batch: 563945 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-13	P93B-ROX-011322	Total/NA	Water	8011	
MB 400-563945/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-563945/2-A	Lab Control Sample	Total/NA	Water	8011	
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	8011	
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	8011	

Analysis Batch: 564103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-214137-2	TB-ROX-011322-8011-A	Total/NA	Water	8011	563945
400-214137-3	MW14-ROX-011322-EB	Total/NA	Water	8011	563945
400-214137-4	MW14-ROX-011322	Total/NA	Water	8011	563945
400-214137-5	P66-ROX-011322	Total/NA	Water	8011	563945
400-214137-6	TB-ROX-011322-8011-B	Total/NA	Water	8011	563945
400-214137-8	P74-ROX-011322	Total/NA	Water	8011	563945
400-214137-9	P74-ROX-011322-DUP	Total/NA	Water	8011	563945
400-214137-10	P59-ROX-011322	Total/NA	Water	8011	563945
400-214137-11	P58-ROX-011322	Total/NA	Water	8011	563945
400-214137-12	P58-ROX-011322-DUP	Total/NA	Water	8011	563945
400-214137-13	P93B-ROX-011322	Total/NA	Water	8011	563945
MB 400-563945/1-A	Method Blank	Total/NA	Water	8011	563945
LCS 400-563945/2-A	Lab Control Sample	Total/NA	Water	8011	563945
400-214137-4 MS	MW14-ROX-011322-MS	Total/NA	Water	8011	563945
400-214137-4 MSD	MW14-ROX-011322-MSD	Total/NA	Water	8011	563945

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563489/5
Matrix: Water
Analysis Batch: 563489

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	10	ug/L			01/18/22 09:29	1
Acrolein	ND		20	3.3	ug/L			01/18/22 09:29	1
Acrylonitrile	ND		10	2.8	ug/L			01/18/22 09:29	1
Benzene	ND		1.0	0.13	ug/L			01/18/22 09:29	1
Bromobenzene	ND		1.0	0.54	ug/L			01/18/22 09:29	1
Bromochloromethane	ND		1.0	0.21	ug/L			01/18/22 09:29	1
Bromodichloromethane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Bromoform	ND		5.0	0.25	ug/L			01/18/22 09:29	1
Bromomethane	ND		1.0	0.98	ug/L			01/18/22 09:29	1
2-Butanone (MEK)	ND		25	2.6	ug/L			01/18/22 09:29	1
Carbon disulfide	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Carbon tetrachloride	ND		1.0	0.19	ug/L			01/18/22 09:29	1
Chlorobenzene	ND		1.0	0.15	ug/L			01/18/22 09:29	1
Dibromochloromethane	ND		1.0	0.24	ug/L			01/18/22 09:29	1
Chloroethane	ND		1.0	0.76	ug/L			01/18/22 09:29	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			01/18/22 09:29	1
Chloroform	ND		1.0	0.60	ug/L			01/18/22 09:29	1
1-Chlorohexane	ND		1.0	0.32	ug/L			01/18/22 09:29	1
Chloromethane	ND		1.0	0.32	ug/L			01/18/22 09:29	1
cis-1,2-Dichloroethene	ND		1.0	0.20	ug/L			01/18/22 09:29	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			01/18/22 09:29	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			01/18/22 09:29	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			01/18/22 09:29	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			01/18/22 09:29	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			01/18/22 09:29	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
1,2-Dichloroethane	ND		1.0	0.19	ug/L			01/18/22 09:29	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 09:29	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Ethylbenzene	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			01/18/22 09:29	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			01/18/22 09:29	1
2-Hexanone	ND		25	1.4	ug/L			01/18/22 09:29	1
Isopropylbenzene	ND		1.0	0.53	ug/L			01/18/22 09:29	1
Methylene bromide	ND		5.0	0.22	ug/L			01/18/22 09:29	1
Methylene Chloride	ND		5.0	3.0	ug/L			01/18/22 09:29	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			01/18/22 09:29	1
Methyl tert-butyl ether	ND		1.0	0.22	ug/L			01/18/22 09:29	1
m-Xylene & p-Xylene	ND		5.0	0.63	ug/L			01/18/22 09:29	1
Naphthalene	ND		1.0	1.0	ug/L			01/18/22 09:29	1
n-Butylbenzene	ND		1.0	0.76	ug/L			01/18/22 09:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/18/22 09:29	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			01/18/22 09:29	1
o-Xylene	ND		5.0	0.60	ug/L			01/18/22 09:29	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			01/18/22 09:29	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-563489/5
Matrix: Water
Analysis Batch: 563489

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	ND		1.0	0.71	ug/L			01/18/22 09:29	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			01/18/22 09:29	1
Styrene	ND		1.0	1.0	ug/L			01/18/22 09:29	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			01/18/22 09:29	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.16	ug/L			01/18/22 09:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Tetrachloroethene	ND		1.0	0.12	ug/L			01/18/22 09:29	1
Toluene	ND		1.0	0.41	ug/L			01/18/22 09:29	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			01/18/22 09:29	1
trans-1,3-Dichloropropene	ND		5.0	0.20	ug/L			01/18/22 09:29	1
1,2,3-Trichlorobenzene	ND		1.0	0.19	ug/L			01/18/22 09:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			01/18/22 09:29	1
1,1,1-Trichloroethane	ND		1.0	0.18	ug/L			01/18/22 09:29	1
1,1,2-Trichloroethane	ND		5.0	0.21	ug/L			01/18/22 09:29	1
Trichloroethene	ND		1.0	0.15	ug/L			01/18/22 09:29	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			01/18/22 09:29	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			01/18/22 09:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			01/18/22 09:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			01/18/22 09:29	1
Vinyl acetate	ND		25	0.93	ug/L			01/18/22 09:29	1
Vinyl chloride	ND		1.0	0.50	ug/L			01/18/22 09:29	1
Xylenes, Total	ND		10	1.6	ug/L			01/18/22 09:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*72 - 119*		*01/18/22 09:29*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/18/22 09:29*	*1*
Toluene-d8 (Surr)	*98*		*64 - 132*		*01/18/22 09:29*	*1*

Lab Sample ID: LCS 400-563489/1002
Matrix: Water
Analysis Batch: 563489

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	173		ug/L		87	43 - 160
Acrolein	500	373		ug/L		75	38 - 160
Acrylonitrile	500	438		ug/L		88	64 - 142
Benzene	50.0	46.1		ug/L		92	70 - 130
Bromobenzene	50.0	43.1		ug/L		86	70 - 132
Bromochloromethane	50.0	47.5		ug/L		95	70 - 130
Bromodichloromethane	50.0	47.2		ug/L		94	67 - 133
Bromoform	50.0	38.6		ug/L		77	57 - 140
Bromomethane	50.0	36.3		ug/L		73	10 - 160
2-Butanone (MEK)	200	169		ug/L		85	61 - 145
Carbon disulfide	50.0	41.4		ug/L		83	61 - 137
Carbon tetrachloride	50.0	46.3		ug/L		93	61 - 137
Chlorobenzene	50.0	47.3		ug/L		95	70 - 130
Dibromochloromethane	50.0	44.6		ug/L		89	67 - 135
Chloroethane	50.0	37.5		ug/L		75	55 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563489/1002
Matrix: Water
Analysis Batch: 563489

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	48.9		ug/L		98	10 - 160
Chloroform	50.0	46.4		ug/L		93	69 - 130
1-Chlorohexane	50.0	45.1		ug/L		90	69 - 130
Chloromethane	50.0	40.0		ug/L		80	58 - 137
cis-1,2-Dichloroethene	50.0	43.0		ug/L		86	68 - 130
cis-1,3-Dichloropropene	50.0	45.9		ug/L		92	69 - 132
1,2-Dichlorobenzene	50.0	46.4		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	45.0		ug/L		90	70 - 130
1,4-Dichlorobenzene	50.0	46.0		ug/L		92	70 - 130
Dichlorodifluoromethane	50.0	42.4		ug/L		85	41 - 146
1,1-Dichloroethane	50.0	43.1		ug/L		86	70 - 130
1,2-Dichloroethane	50.0	44.6		ug/L		89	69 - 130
1,1-Dichloroethene	50.0	40.0		ug/L		80	63 - 134
1,2-Dichloropropane	50.0	43.3		ug/L		87	70 - 130
1,3-Dichloropropane	50.0	43.8		ug/L		88	70 - 130
2,2-Dichloropropane	50.0	37.7		ug/L		75	52 - 135
1,1-Dichloropropene	50.0	46.2		ug/L		92	70 - 130
Ethylbenzene	50.0	46.7		ug/L		93	70 - 130
Ethyl methacrylate	50.0	44.1		ug/L		88	68 - 130
Hexachlorobutadiene	50.0	50.8		ug/L		102	53 - 140
2-Hexanone	200	164		ug/L		82	65 - 137
Isopropylbenzene	50.0	49.1		ug/L		98	70 - 130
Methylene bromide	50.0	47.3		ug/L		95	70 - 130
Methylene Chloride	50.0	44.1		ug/L		88	66 - 135
4-Methyl-2-pentanone (MIBK)	200	168		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	42.0		ug/L		84	66 - 130
m-Xylene & p-Xylene	50.0	47.7		ug/L		95	70 - 130
Naphthalene	50.0	43.4		ug/L		87	47 - 149
n-Butylbenzene	50.0	46.7		ug/L		93	67 - 130
N-Propylbenzene	50.0	43.6		ug/L		87	70 - 130
o-Chlorotoluene	50.0	44.4		ug/L		89	70 - 130
o-Xylene	50.0	46.5		ug/L		93	70 - 130
p-Chlorotoluene	50.0	45.0		ug/L		90	70 - 130
p-Isopropyltoluene	50.0	45.0		ug/L		90	65 - 130
sec-Butylbenzene	50.0	45.6		ug/L		91	66 - 130
Styrene	50.0	47.3		ug/L		95	70 - 130
tert-Butylbenzene	50.0	43.5		ug/L		87	64 - 139
1,1,1,2-Tetrachloroethane	50.0	44.9		ug/L		90	67 - 131
1,1,2,2-Tetrachloroethane	50.0	39.2		ug/L		78	70 - 131
Tetrachloroethene	50.0	46.0		ug/L		92	65 - 130
Toluene	50.0	45.0		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	44.4		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	42.1		ug/L		84	63 - 130
1,2,3-Trichlorobenzene	50.0	46.3		ug/L		93	60 - 138
1,2,4-Trichlorobenzene	50.0	46.8		ug/L		94	60 - 140
1,1,1-Trichloroethane	50.0	46.1		ug/L		92	68 - 130
1,1,2-Trichloroethane	50.0	44.0		ug/L		88	70 - 130
Trichloroethene	50.0	48.3		ug/L		97	70 - 130
Trichlorofluoromethane	50.0	41.4		ug/L		83	65 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563489/1002
Matrix: Water
Analysis Batch: 563489

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	42.1		ug/L		84	70 - 130
1,2,4-Trimethylbenzene	50.0	44.9		ug/L		90	70 - 130
1,3,5-Trimethylbenzene	50.0	44.3		ug/L		89	69 - 130
Vinyl acetate	100	90.0		ug/L		90	26 - 160
Vinyl chloride	50.0	39.8		ug/L		80	59 - 136
Xylenes, Total	100	94.2		ug/L		94	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*72 - 119*
Dibromofluoromethane	*105*		*75 - 126*
Toluene-d8 (Surr)	*97*		*64 - 132*

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 563489

Client Sample ID: MW14-ROX-011322-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	187		ug/L		94	43 - 150
Acrolein	ND		500	380		ug/L		76	38 - 150
Acrylonitrile	ND		500	450		ug/L		90	62 - 149
Benzene	ND		50.0	46.7		ug/L		93	56 - 142
Bromobenzene	ND		50.0	43.9		ug/L		88	59 - 136
Bromochloromethane	ND		50.0	49.2		ug/L		98	64 - 140
Bromodichloromethane	ND		50.0	46.6		ug/L		93	59 - 143
Bromoform	ND		50.0	41.7		ug/L		83	50 - 140
Bromomethane	ND		50.0	40.0		ug/L		80	10 - 150
2-Butanone (MEK)	ND		200	173		ug/L		87	55 - 150
Carbon disulfide	ND		50.0	41.8		ug/L		84	48 - 150
Carbon tetrachloride	ND		50.0	46.0		ug/L		92	55 - 145
Chlorobenzene	ND		50.0	46.3		ug/L		93	64 - 130
Dibromochloromethane	ND		50.0	46.2		ug/L		92	56 - 143
Chloroethane	ND		50.0	39.1		ug/L		78	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	47.2		ug/L		94	60 - 141
1-Chlorohexane	ND		50.0	42.7		ug/L		85	56 - 136
Chloromethane	ND		50.0	42.2		ug/L		84	49 - 148
cis-1,2-Dichloroethene	ND		50.0	43.7		ug/L		87	59 - 143
cis-1,3-Dichloropropene	ND		50.0	45.1		ug/L		90	57 - 140
1,2-Dichlorobenzene	ND		50.0	45.8		ug/L		92	52 - 137
1,3-Dichlorobenzene	ND		50.0	43.3		ug/L		87	54 - 135
1,4-Dichlorobenzene	ND		50.0	44.8		ug/L		90	53 - 135
Dichlorodifluoromethane	ND		50.0	44.4		ug/L		89	16 - 150
1,1-Dichloroethane	ND		50.0	44.2		ug/L		88	61 - 144
1,2-Dichloroethane	ND		50.0	45.1		ug/L		90	60 - 141
1,1-Dichloroethene	ND		50.0	41.7		ug/L		83	54 - 147
1,2-Dichloropropane	ND		50.0	44.1		ug/L		88	66 - 137
1,3-Dichloropropane	ND		50.0	45.2		ug/L		90	66 - 133
2,2-Dichloropropane	ND		50.0	38.2		ug/L		76	42 - 144

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 563489

Client Sample ID: MW14-ROX-011322-MS
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	46.0		ug/L		92	65 - 136
Ethylbenzene	ND		50.0	44.9		ug/L		90	58 - 131
Ethyl methacrylate	ND		50.0	45.9		ug/L		92	64 - 130
Hexachlorobutadiene	ND		50.0	44.5		ug/L		89	31 - 149
2-Hexanone	ND		200	170		ug/L		85	65 - 140
Isopropylbenzene	ND		50.0	46.3		ug/L		93	56 - 133
Methylene bromide	ND		50.0	47.4		ug/L		95	63 - 138
Methylene Chloride	ND		50.0	46.7		ug/L		93	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	172		ug/L		86	63 - 146
Methyl tert-butyl ether	ND		50.0	43.9		ug/L		88	59 - 137
m-Xylene & p-Xylene	ND		50.0	45.2		ug/L		90	57 - 130
Naphthalene	ND		50.0	44.6		ug/L		89	25 - 150
n-Butylbenzene	ND		50.0	42.8		ug/L		86	41 - 142
N-Propylbenzene	ND		50.0	42.2		ug/L		84	51 - 138
o-Chlorotoluene	ND		50.0	44.1		ug/L		88	53 - 134
o-Xylene	ND		50.0	44.6		ug/L		89	61 - 130
p-Chlorotoluene	ND		50.0	43.7		ug/L		87	54 - 133
p-Isopropyltoluene	ND		50.0	42.2		ug/L		84	48 - 139
sec-Butylbenzene	ND		50.0	43.6		ug/L		87	50 - 138
Styrene	ND		50.0	46.0		ug/L		92	58 - 131
tert-Butylbenzene	ND		50.0	42.9		ug/L		86	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	45.2		ug/L		90	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	43.2		ug/L		86	66 - 135
Tetrachloroethene	ND		50.0	43.9		ug/L		88	52 - 133
Toluene	ND		50.0	45.3		ug/L		91	65 - 130
trans-1,2-Dichloroethene	ND		50.0	43.8		ug/L		88	61 - 143
trans-1,3-Dichloropropene	ND		50.0	43.1		ug/L		86	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	45.2		ug/L		90	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	45.0		ug/L		90	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.5		ug/L		93	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.7		ug/L		91	66 - 131
Trichloroethene	ND		50.0	47.5		ug/L		95	64 - 136
Trichlorofluoromethane	ND		50.0	43.1		ug/L		86	54 - 150
1,2,3-Trichloropropane	ND		50.0	45.2		ug/L		90	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	42.8		ug/L		86	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	43.3		ug/L		87	52 - 135
Vinyl acetate	ND		100	90.8		ug/L		91	26 - 150
Vinyl chloride	ND		50.0	41.2		ug/L		82	46 - 150
Xylenes, Total	ND		100	89.8		ug/L		90	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*102*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563489

Client Sample ID: MW14-ROX-011322-MSD
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	200		ug/L		100	43 - 150	7	30
Acrolein	ND		500	402		ug/L		80	38 - 150	6	31
Acrylonitrile	ND		500	496		ug/L		99	62 - 149	10	30
Benzene	ND		50.0	50.9		ug/L		102	56 - 142	9	30
Bromobenzene	ND		50.0	48.5		ug/L		97	59 - 136	10	30
Bromochloromethane	ND		50.0	53.8		ug/L		108	64 - 140	9	30
Bromodichloromethane	ND		50.0	51.4		ug/L		103	59 - 143	10	30
Bromoform	ND		50.0	46.6		ug/L		93	50 - 140	11	30
Bromomethane	ND		50.0	41.0		ug/L		82	10 - 150	3	50
2-Butanone (MEK)	ND		200	193		ug/L		97	55 - 150	11	30
Carbon disulfide	ND		50.0	46.4		ug/L		93	48 - 150	10	30
Carbon tetrachloride	ND		50.0	51.7		ug/L		103	55 - 145	12	30
Chlorobenzene	ND		50.0	50.3		ug/L		101	64 - 130	8	30
Dibromochloromethane	ND		50.0	51.0		ug/L		102	56 - 143	10	30
Chloroethane	ND		50.0	40.4		ug/L		81	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	51.8		ug/L		104	60 - 141	9	30
1-Chlorohexane	ND		50.0	46.9		ug/L		94	56 - 136	9	30
Chloromethane	ND		50.0	43.7		ug/L		87	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	47.5		ug/L		95	59 - 143	8	30
cis-1,3-Dichloropropene	ND		50.0	49.7		ug/L		99	57 - 140	10	30
1,2-Dichlorobenzene	ND		50.0	50.0		ug/L		100	52 - 137	9	30
1,3-Dichlorobenzene	ND		50.0	47.4		ug/L		95	54 - 135	9	30
1,4-Dichlorobenzene	ND		50.0	49.1		ug/L		98	53 - 135	9	30
Dichlorodifluoromethane	ND		50.0	47.2		ug/L		94	16 - 150	6	31
1,1-Dichloroethane	ND		50.0	47.8		ug/L		96	61 - 144	8	30
1,2-Dichloroethane	ND		50.0	48.9		ug/L		98	60 - 141	8	30
1,1-Dichloroethene	ND		50.0	44.4		ug/L		89	54 - 147	6	30
1,2-Dichloropropane	ND		50.0	48.1		ug/L		96	66 - 137	9	30
1,3-Dichloropropane	ND		50.0	49.3		ug/L		99	66 - 133	9	30
2,2-Dichloropropane	ND		50.0	42.8		ug/L		86	42 - 144	11	31
1,1-Dichloropropene	ND		50.0	49.9		ug/L		100	65 - 136	8	30
Ethylbenzene	ND		50.0	49.2		ug/L		98	58 - 131	9	30
Ethyl methacrylate	ND		50.0	49.3		ug/L		99	64 - 130	7	30
Hexachlorobutadiene	ND		50.0	49.5		ug/L		99	31 - 149	11	36
2-Hexanone	ND		200	184		ug/L		92	65 - 140	8	30
Isopropylbenzene	ND		50.0	51.3		ug/L		103	56 - 133	10	30
Methylene bromide	ND		50.0	53.0		ug/L		106	63 - 138	11	30
Methylene Chloride	ND		50.0	51.2		ug/L		102	60 - 146	9	32
4-Methyl-2-pentanone (MIBK)	ND		200	189		ug/L		94	63 - 146	9	30
Methyl tert-butyl ether	ND		50.0	48.2		ug/L		96	59 - 137	9	30
m-Xylene & p-Xylene	ND		50.0	49.6		ug/L		99	57 - 130	9	30
Naphthalene	ND		50.0	49.8		ug/L		100	25 - 150	11	30
n-Butylbenzene	ND		50.0	46.4		ug/L		93	41 - 142	8	31
N-Propylbenzene	ND		50.0	46.5		ug/L		93	51 - 138	10	30
o-Chlorotoluene	ND		50.0	47.7		ug/L		95	53 - 134	8	30
o-Xylene	ND		50.0	48.6		ug/L		97	61 - 130	9	30
p-Chlorotoluene	ND		50.0	47.8		ug/L		96	54 - 133	9	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563489

Client Sample ID: MW14-ROX-011322-MSD
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	10	30
sec-Butylbenzene	ND		50.0	48.3		ug/L		97	50 - 138	10	30
Styrene	ND		50.0	49.9		ug/L		100	58 - 131	8	30
tert-Butylbenzene	ND		50.0	47.2		ug/L		94	54 - 146	10	30
1,1,1,2-Tetrachloroethane	ND		50.0	49.8		ug/L		100	59 - 137	10	30
1,1,2,2-Tetrachloroethane	ND		50.0	47.3		ug/L		95	66 - 135	9	30
Tetrachloroethene	ND		50.0	49.3		ug/L		99	52 - 133	12	30
Toluene	ND		50.0	49.4		ug/L		99	65 - 130	9	30
trans-1,2-Dichloroethene	ND		50.0	49.2		ug/L		98	61 - 143	12	30
trans-1,3-Dichloropropene	ND		50.0	47.4		ug/L		95	53 - 133	10	30
1,2,3-Trichlorobenzene	ND		50.0	49.4		ug/L		99	43 - 145	9	30
1,2,4-Trichlorobenzene	ND		50.0	48.6		ug/L		97	39 - 148	8	30
1,1,1-Trichloroethane	ND		50.0	51.3		ug/L		103	57 - 142	10	30
1,1,2-Trichloroethane	ND		50.0	49.4		ug/L		99	66 - 131	8	30
Trichloroethene	ND		50.0	53.5		ug/L		107	64 - 136	12	30
Trichlorofluoromethane	ND		50.0	44.1		ug/L		88	54 - 150	2	30
1,2,3-Trichloropropane	ND		50.0	49.7		ug/L		99	65 - 133	10	30
1,2,4-Trimethylbenzene	ND		50.0	47.4		ug/L		95	50 - 139	10	30
1,3,5-Trimethylbenzene	ND		50.0	47.7		ug/L		95	52 - 135	10	30
Vinyl acetate	ND		100	101		ug/L		101	26 - 150	10	33
Vinyl chloride	ND		50.0	42.2		ug/L		84	46 - 150	2	30
Xylenes, Total	ND		100	98.2		ug/L		98	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*72 - 119*
Dibromofluoromethane	*103*		*75 - 126*
Toluene-d8 (Surr)	*98*		*64 - 132*

Lab Sample ID: MB 400-563628/4
Matrix: Water
Analysis Batch: 563628

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			01/19/22 10:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*72 - 119*		*01/19/22 10:32*	*1*
Dibromofluoromethane	*101*		*75 - 126*		*01/19/22 10:32*	*1*
Toluene-d8 (Surr)	*97*		*64 - 132*		*01/19/22 10:32*	*1*

Lab Sample ID: LCS 400-563628/1002
Matrix: Water
Analysis Batch: 563628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	50.0	40.2		ug/L		80	47 - 149

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563628/1002
Matrix: Water
Analysis Batch: 563628

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	96		72 - 119
Dibromofluoromethane	106		75 - 126
Toluene-d8 (Surr)	96		64 - 132

Lab Sample ID: MB 400-563776/5
Matrix: Water
Analysis Batch: 563776

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	0.13	ug/L			01/20/22 11:25	1
Naphthalene	ND		1.0	1.0	ug/L			01/20/22 11:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	105		72 - 119		01/20/22 11:25	1
Dibromofluoromethane	98		75 - 126		01/20/22 11:25	1
Toluene-d8 (Surr)	101		64 - 132		01/20/22 11:25	1

Lab Sample ID: LCS 400-563776/1002
Matrix: Water
Analysis Batch: 563776

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	52.6		ug/L		105	70 - 130
Naphthalene	50.0	43.3		ug/L		87	47 - 149

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	91		72 - 119
Dibromofluoromethane	104		75 - 126
Toluene-d8 (Surr)	96		64 - 132

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		01/20/22 08:27	01/21/22 13:58	1
Benzenethiol	ND		10	1.7	ug/L		01/20/22 08:27	01/21/22 13:58	1
Benzoic acid	ND		30	7.3	ug/L		01/20/22 08:27	01/21/22 13:58	1
Benzyl alcohol	ND		10	2.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Bis(2-chloroethoxy)methane	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 13:58	1
Bis(2-chloroethyl)ether	ND		10	2.7	ug/L		01/20/22 08:27	01/21/22 13:58	1
bis (2-chloroisopropyl) ether	ND		10	0.16	ug/L		01/20/22 08:27	01/21/22 13:58	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
4-Bromophenyl phenyl ether	ND		10	0.20	ug/L		01/20/22 08:27	01/21/22 13:58	1
Butyl benzyl phthalate	ND		10	0.19	ug/L		01/20/22 08:27	01/21/22 13:58	1
4-Chloroaniline	ND		10	3.4	ug/L		01/20/22 08:27	01/21/22 13:58	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		01/20/22 08:27	01/21/22 13:58	1
2-Chloronaphthalene	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 13:58	1
2-Chlorophenol	ND		10	2.2	ug/L		01/20/22 08:27	01/21/22 13:58	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Dibenz[a,h]acridine	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Dibenzofuran	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 13:58	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Diethyl phthalate	ND		10	0.24	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 13:58	1
Dimethyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 13:58	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		01/20/22 08:27	01/21/22 13:58	1
4,6-Dinitro-ortho-cresol	ND		10	1.6	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		01/20/22 08:27	01/21/22 13:58	1
Di-n-octyl phthalate	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 13:58	1
1,4-Dioxane	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Hexachlorobenzene	ND		10	0.17	ug/L		01/20/22 08:27	01/21/22 13:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		01/20/22 08:27	01/21/22 13:58	1
Hexachloroethane	ND		10	4.2	ug/L		01/20/22 08:27	01/21/22 13:58	1
Indene	ND		10	1.0	ug/L		01/20/22 08:27	01/21/22 13:58	1
Isophorone	ND		10	0.14	ug/L		01/20/22 08:27	01/21/22 13:58	1
2-Methylphenol	ND		10	1.8	ug/L		01/20/22 08:27	01/21/22 13:58	1
3 & 4 Methylphenol	ND		20	0.39	ug/L		01/20/22 08:27	01/21/22 13:58	1
2-Nitroaniline	ND		10	2.2	ug/L		01/20/22 08:27	01/21/22 13:58	1
3-Nitroaniline	ND		10	1.8	ug/L		01/20/22 08:27	01/21/22 13:58	1
4-Nitroaniline	ND		10	1.5	ug/L		01/20/22 08:27	01/21/22 13:58	1
Nitrobenzene	ND		10	0.13	ug/L		01/20/22 08:27	01/21/22 13:58	1
2-Nitrophenol	ND		10	5.2	ug/L		01/20/22 08:27	01/21/22 13:58	1
4-Nitrophenol	ND		10	2.1	ug/L		01/20/22 08:27	01/21/22 13:58	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 13:58	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		01/20/22 08:27	01/21/22 13:58	1
N-Nitrosodiphenylamine	ND		10	0.18	ug/L		01/20/22 08:27	01/21/22 13:58	1
Pentachlorophenol	ND		20	1.4	ug/L		01/20/22 08:27	01/21/22 13:58	1
Phenol	ND		10	2.6	ug/L		01/20/22 08:27	01/21/22 13:58	1
Pyridine	ND		10	3.2	ug/L		01/20/22 08:27	01/21/22 13:58	1
Quinoline	ND		10	4.5	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		01/20/22 08:27	01/21/22 13:58	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		01/20/22 08:27	01/21/22 13:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*61*		*46 - 124*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
2-Fluorophenol	*18*		*13 - 113*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
Nitrobenzene-d5	*66*		*36 - 126*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
Phenol-d5	*54*		*17 - 127*	*01/20/22 08:27*	*01/21/22 13:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*94*		*44 - 149*	*01/20/22 08:27*	*01/21/22 13:58*	*1*
2,4,6-Tribromophenol	*63*		*26 - 150*	*01/20/22 08:27*	*01/21/22 13:58*	*1*

Lab Sample ID: LCS 400-563773/2-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	120	61.0		ug/L		51	21 - 120
Benzoic acid	498	205		ug/L		41	10 - 144
Benzyl alcohol	120	86.4		ug/L		72	28 - 120
Bis(2-chloroethoxy)methane	120	60.9		ug/L		51	47 - 120
Bis(2-chloroethyl)ether	120	66.7		ug/L		55	44 - 120
bis (2-chloroisopropyl) ether	120	85.0		ug/L		71	33 - 121
Bis(2-ethylhexyl) phthalate	120	96.1		ug/L		80	52 - 147
4-Bromophenyl phenyl ether	120	88.5		ug/L		74	54 - 122
Butyl benzyl phthalate	120	90.4		ug/L		75	54 - 133
4-Chloroaniline	120	56.3		ug/L		47	26 - 120
4-Chloro-3-methylphenol	120	76.6		ug/L		64	48 - 131
2-Chloronaphthalene	120	73.4		ug/L		61	52 - 121
2-Chlorophenol	120	68.6		ug/L		57	40 - 120
4-Chlorophenyl phenyl ether	120	80.2		ug/L		67	56 - 125
Dibenz[a,h]acridine	120	126		ug/L		105	31 - 150
Dibenzofuran	120	76.3		ug/L		63	56 - 122
3,3'-Dichlorobenzidine	180	135		ug/L		75	36 - 132
2,4-Dichlorophenol	120	72.8		ug/L		61	49 - 120
Diethyl phthalate	120	102		ug/L		84	50 - 137
2,4-Dimethylphenol	120	81.4		ug/L		68	48 - 120
Dimethyl phthalate	120	82.0		ug/L		68	57 - 124
Di-n-butyl phthalate	120	97.2		ug/L		81	58 - 126
4,6-Dinitro-ortho-cresol	241	251		ug/L		104	23 - 148
2,4-Dinitrophenol	241	268		ug/L		111	10 - 150
2,4-Dinitrotoluene	120	75.9		ug/L		63	54 - 142
2,6-Dinitrotoluene	120	67.0		ug/L		56	55 - 130
Di-n-octyl phthalate	120	94.6		ug/L		79	57 - 138
1,4-Dioxane	120	56.8		ug/L		47	31 - 120
1,2-Diphenylhydrazine (as Azobenzene)	120	82.8		ug/L		69	45 - 124
Hexachlorobenzene	120	114		ug/L		95	52 - 129
Hexachlorocyclopentadiene	120	68.7		ug/L		57	10 - 134
Hexachloroethane	120	83.0		ug/L		69	20 - 120
Indene	120	81.6		ug/L		68	49 - 120
Isophorone	120	69.0		ug/L		57	48 - 120
2-Methylphenol	120	83.7		ug/L		70	46 - 124
3 & 4 Methylphenol	120	89.7		ug/L		75	45 - 120
2-Nitroaniline	120	85.9		ug/L		71	51 - 145
3-Nitroaniline	120	74.9		ug/L		62	37 - 127
4-Nitroaniline	120	78.2		ug/L		65	36 - 137
Nitrobenzene	120	68.1		ug/L		57	45 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-563773/2-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitrophenol	120	64.1		ug/L		53	40 - 124
4-Nitrophenol	241	267		ug/L		111	23 - 146
N-Nitrosodimethylamine	120	113		ug/L		94	29 - 137
N-Nitrosodi-n-propylamine	120	95.7		ug/L		80	45 - 120
N-Nitrosodiphenylamine	119	72.9		ug/L		61	54 - 120
Pentachlorophenol	241	187		ug/L		78	31 - 130
Phenol	120	63.2		ug/L		52	11 - 120
Pyridine	241	98.1		ug/L		41	16 - 120
Quinoline	120	70.4		ug/L		59	49 - 130
2,4,5-Trichlorophenol	120	84.2		ug/L		70	51 - 136
2,4,6-Trichlorophenol	120	77.3		ug/L		64	50 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*46 - 124*
2-Fluorophenol	*36*		*13 - 113*
Nitrobenzene-d5	*62*		*36 - 126*
Phenol-d5	*60*		*17 - 127*
Terphenyl-d14	*93*		*44 - 149*
2,4,6-Tribromophenol	*90*		*26 - 150*

Lab Sample ID: LCS 400-563773/3-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	120	4.77	J *-	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*46 - 124*
2-Fluorophenol	*34*		*13 - 113*
Nitrobenzene-d5	*66*		*36 - 126*
Phenol-d5	*57*		*17 - 127*
Terphenyl-d14	*109*		*44 - 149*
2,4,6-Tribromophenol	*50*		*26 - 150*

Lab Sample ID: LCSD 400-563773/4-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	120	36.2	*1	ug/L		30	10 - 120	153	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*46 - 124*
2-Fluorophenol	*28*		*13 - 113*
Nitrobenzene-d5	*73*		*36 - 126*
Phenol-d5	*54*		*17 - 127*
Terphenyl-d14	*118*		*44 - 149*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-563773/4-A
Matrix: Water
Analysis Batch: 563937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 563773

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*59*		*26 - 150*

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 563937

Client Sample ID: MW14-ROX-011322-MS
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		116	59.0		ug/L		51	10 - 120
Benzoic acid	ND		480	208		ug/L		43	10 - 149
Benzyl alcohol	ND		116	84.4		ug/L		73	33 - 120
Bis(2-chloroethoxy)methane	ND		116	61.4		ug/L		53	26 - 120
Bis(2-chloroethyl)ether	ND		116	72.0		ug/L		62	42 - 120
bis (2-chloroisopropyl) ether	ND		116	87.8		ug/L		76	28 - 120
Bis(2-ethylhexyl) phthalate	ND		116	100		ug/L		86	39 - 120
4-Bromophenyl phenyl ether	ND		116	97.2		ug/L		84	40 - 120
Butyl benzyl phthalate	ND		116	92.6		ug/L		80	45 - 120
4-Chloroaniline	ND		116	38.4		ug/L		33	10 - 120
4-Chloro-3-methylphenol	ND		116	78.9		ug/L		68	34 - 120
2-Chloronaphthalene	ND		116	76.9		ug/L		66	39 - 120
2-Chlorophenol	ND		116	66.5		ug/L		57	25 - 120
4-Chlorophenyl phenyl ether	ND		116	84.0		ug/L		72	44 - 120
Dibenz[a,h]acridine	ND		115	139		ug/L		121	50 - 150
Dibenzofuran	ND		116	79.6		ug/L		69	25 - 130
3,3'-Dichlorobenzidine	ND		174	139		ug/L		80	10 - 120
2,4-Dichlorophenol	ND		116	72.8		ug/L		63	31 - 120
Diethyl phthalate	ND		116	108		ug/L		93	46 - 120
2,4-Dimethylphenol	ND		116	82.7		ug/L		71	21 - 120
Dimethyl phthalate	ND		116	85.7		ug/L		74	38 - 120
Di-n-butyl phthalate	ND		116	101		ug/L		87	49 - 120
4,6-Dinitro-ortho-cresol	ND		232	265		ug/L		114	25 - 120
2,4-Dinitrophenol	ND		232	271		ug/L		117	15 - 140
2,4-Dinitrotoluene	ND		116	78.5		ug/L		68	53 - 120
2,6-Dinitrotoluene	ND		116	70.0		ug/L		60	43 - 120
Di-n-octyl phthalate	ND		116	121		ug/L		104	35 - 121
1,4-Dioxane	ND		116	59.3		ug/L		51	50 - 150
1,2-Diphenylhydrazine (as Azobenzene)	ND		116	84.3		ug/L		73	50 - 150
Hexachlorobenzene	ND		116	123		ug/L		106	38 - 122
Hexachlorocyclopentadiene	ND		116	67.4		ug/L		58	10 - 120
Hexachloroethane	ND		116	79.1		ug/L		68	10 - 150
Indene	ND		116	84.3		ug/L		73	50 - 150
Isophorone	ND		116	69.1		ug/L		60	42 - 120
2-Methylphenol	ND		116	87.1		ug/L		75	28 - 120
3 & 4 Methylphenol	ND		116	90.3		ug/L		78	31 - 120
2-Nitroaniline	ND		116	87.5		ug/L		75	45 - 120
3-Nitroaniline	ND		116	79.3		ug/L		68	10 - 130
4-Nitroaniline	ND		116	82.3		ug/L		71	10 - 132
Nitrobenzene	ND		116	69.0		ug/L		59	39 - 120
2-Nitrophenol	ND		116	62.5		ug/L		54	33 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 563937

Client Sample ID: MW14-ROX-011322-MS
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrophenol	ND		232	273		ug/L		118	10 - 120
N-Nitrosodimethylamine	ND		116	110		ug/L		94	10 - 139
N-Nitrosodi-n-propylamine	ND		116	95.2		ug/L		82	37 - 124
N-Nitrosodiphenylamine	ND		115	76.0		ug/L		66	10 - 150
Pentachlorophenol	ND		232	210		ug/L		91	29 - 130
Phenol	ND		116	61.4		ug/L		53	10 - 150
Pyridine	ND		232	107		ug/L		46	10 - 120
Quinoline	ND		115	74.9		ug/L		65	51 - 120
2,4,5-Trichlorophenol	ND		116	88.4		ug/L		76	34 - 120
2,4,6-Trichlorophenol	ND		116	81.9		ug/L		71	33 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*46 - 124*
2-Fluorophenol	*33*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*94*		*44 - 149*
2,4,6-Tribromophenol	*95*		*26 - 150*

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563937

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		115	59.2		ug/L		51	10 - 120	0	63
Benzoic acid	ND		478	205		ug/L		43	10 - 149	2	49
Benzyl alcohol	ND		115	85.0		ug/L		74	33 - 120	1	37
Bis(2-chloroethoxy)methane	ND		115	59.7		ug/L		52	26 - 120	3	70
Bis(2-chloroethyl)ether	ND		115	69.5		ug/L		60	42 - 120	3	42
bis (2-chloroisopropyl) ether	ND		115	84.4		ug/L		73	28 - 120	4	41
Bis(2-ethylhexyl) phthalate	ND		115	96.5		ug/L		84	39 - 120	4	35
4-Bromophenyl phenyl ether	ND		115	90.2		ug/L		78	40 - 120	7	30
Butyl benzyl phthalate	ND		115	92.8		ug/L		80	45 - 120	0	32
4-Chloroaniline	ND		115	37.4		ug/L		32	10 - 120	3	94
4-Chloro-3-methylphenol	ND		115	77.0		ug/L		67	34 - 120	2	40
2-Chloronaphthalene	ND		115	75.5		ug/L		65	39 - 120	2	29
2-Chlorophenol	ND		115	62.0		ug/L		54	25 - 120	7	42
4-Chlorophenyl phenyl ether	ND		115	80.4		ug/L		70	44 - 120	4	27
Dibenz[a,h]acridine	ND		115	119		ug/L		103	50 - 150	16	40
Dibenzofuran	ND		115	77.4		ug/L		67	25 - 130	3	29
3,3'-Dichlorobenzidine	ND		173	144		ug/L		83	10 - 120	4	58
2,4-Dichlorophenol	ND		115	72.1		ug/L		62	31 - 120	1	43
Diethyl phthalate	ND		115	103		ug/L		89	46 - 120	4	40
2,4-Dimethylphenol	ND		115	82.2		ug/L		71	21 - 120	1	47
Dimethyl phthalate	ND		115	82.7		ug/L		72	38 - 120	4	36
Di-n-butyl phthalate	ND		115	96.4		ug/L		83	49 - 120	4	32
4,6-Dinitro-ortho-cresol	ND		231	249		ug/L		108	25 - 120	6	42
2,4-Dinitrophenol	ND		231	266		ug/L		115	15 - 140	2	36

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563937

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4-Dinitrotoluene	ND		115	76.0		ug/L		66	53 - 120	3	28
2,6-Dinitrotoluene	ND		115	67.0		ug/L		58	43 - 120	4	28
Di-n-octyl phthalate	ND		115	93.2		ug/L		81	35 - 121	26	35
1,4-Dioxane	ND		115	58.0		ug/L		50	50 - 150	2	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		115	82.2		ug/L		71	50 - 150	3	40
Hexachlorobenzene	ND		115	118		ug/L		102	38 - 122	4	33
Hexachlorocyclopentadiene	ND		115	72.5		ug/L		63	10 - 120	7	50
Hexachloroethane	ND		115	83.0		ug/L		72	10 - 150	5	41
Indene	ND		115	82.6		ug/L		72	50 - 150	2	40
Isophorone	ND		115	66.6		ug/L		58	42 - 120	4	33
2-Methylphenol	ND		115	86.7		ug/L		75	28 - 120	0	47
3 & 4 Methylphenol	ND		115	91.2		ug/L		79	31 - 120	1	47
2-Nitroaniline	ND		115	83.1		ug/L		72	45 - 120	5	33
3-Nitroaniline	ND		115	74.5		ug/L		64	10 - 130	6	39
4-Nitroaniline	ND		115	80.1		ug/L		69	10 - 132	3	50
Nitrobenzene	ND		115	67.7		ug/L		59	39 - 120	2	35
2-Nitrophenol	ND		115	61.8		ug/L		54	33 - 120	1	43
4-Nitrophenol	ND		231	273		ug/L		118	10 - 120	0	82
N-Nitrosodimethylamine	ND		115	113		ug/L		97	10 - 139	3	62
N-Nitrosodi-n-propylamine	ND		115	94.3		ug/L		82	37 - 124	1	36
N-Nitrosodiphenylamine	ND		115	73.6		ug/L		64	10 - 150	3	34
Pentachlorophenol	ND		231	206		ug/L		89	29 - 130	2	42
Phenol	ND		115	70.1		ug/L		61	10 - 150	13	52
Pyridine	ND		231	98.9		ug/L		43	10 - 120	8	55
Quinoline	ND		115	73.4		ug/L		64	51 - 120	2	40
2,4,5-Trichlorophenol	ND		115	86.4		ug/L		75	34 - 120	2	42
2,4,6-Trichlorophenol	ND		115	80.3		ug/L		70	33 - 120	2	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*46 - 124*
2-Fluorophenol	*25*		*13 - 113*
Nitrobenzene-d5	*63*		*36 - 126*
Phenol-d5	*59*		*17 - 127*
Terphenyl-d14	*109*		*44 - 149*
2,4,6-Tribromophenol	*90*		*26 - 150*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		01/20/22 08:27	01/21/22 15:19	1
Acenaphthylene	ND		0.20	0.045	ug/L		01/20/22 08:27	01/21/22 15:19	1
Anthracene	ND		0.20	0.032	ug/L		01/20/22 08:27	01/21/22 15:19	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		01/20/22 08:27	01/21/22 15:19	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		01/20/22 08:27	01/21/22 15:19	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: MB 400-563773/1-A
Matrix: Water
Analysis Batch: 563966

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563773

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		0.20	0.034	ug/L		01/20/22 08:27	01/21/22 15:19	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		01/20/22 08:27	01/21/22 15:19	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		01/20/22 08:27	01/21/22 15:19	1
Chrysene	0.0947	J	0.20	0.074	ug/L		01/20/22 08:27	01/21/22 15:19	1
Dibenz(a,h)anthracene	ND		0.20	0.050	ug/L		01/20/22 08:27	01/21/22 15:19	1
Fluoranthene	ND		0.20	0.068	ug/L		01/20/22 08:27	01/21/22 15:19	1
Fluorene	ND		0.20	0.11	ug/L		01/20/22 08:27	01/21/22 15:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.043	ug/L		01/20/22 08:27	01/21/22 15:19	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		01/20/22 08:27	01/21/22 15:19	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		01/20/22 08:27	01/21/22 15:19	1
Phenanthrene	ND		0.20	0.036	ug/L		01/20/22 08:27	01/21/22 15:19	1
Pyrene	ND		0.20	0.040	ug/L		01/20/22 08:27	01/21/22 15:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*117*		*15 - 122*	*01/20/22 08:27*	*01/21/22 15:19*	*1*
Nitrobenzene-d5	*110*		*19 - 130*	*01/20/22 08:27*	*01/21/22 15:19*	*1*
Terphenyl-d14	*130*		*33 - 138*	*01/20/22 08:27*	*01/21/22 15:19*	*1*

Lab Sample ID: LCS 400-563773/2-A
Matrix: Water
Analysis Batch: 563966

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	118		ug/L		98	41 - 120
Acenaphthylene	120	97.1		ug/L		81	44 - 120
Anthracene	120	111		ug/L		93	49 - 120
Benzo[a]anthracene	120	109		ug/L		90	61 - 135
Benzo[a]pyrene	120	103		ug/L		86	52 - 120
Benzo[b]fluoranthene	120	115		ug/L		96	53 - 134
Benzo[g,h,i]perylene	120	107		ug/L		89	47 - 133
Benzo[k]fluoranthene	120	117		ug/L		98	57 - 134
Chrysene	120	107		ug/L		89	55 - 122
Dibenz(a,h)anthracene	120	121		ug/L		100	48 - 146
Fluoranthene	120	120		ug/L		100	54 - 128
Fluorene	120	119		ug/L		99	45 - 125
Indeno[1,2,3-cd]pyrene	120	111		ug/L		92	43 - 142
1-Methylnaphthalene	120	109		ug/L		91	41 - 120
2-Methylnaphthalene	120	108		ug/L		90	32 - 124
Phenanthrene	120	113		ug/L		94	48 - 120
Pyrene	120	103		ug/L		86	48 - 132

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*15 - 122*
Nitrobenzene-d5	*128*		*19 - 130*
Terphenyl-d14	*109*		*33 - 138*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 563966

Client Sample ID: MW14-ROX-011322-MS
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		116	124		ug/L		107	35 - 113
Acenaphthylene	ND		116	111		ug/L		95	41 - 118
Anthracene	ND		116	115		ug/L		99	45 - 122
Benzo[a]anthracene	ND		116	136		ug/L		117	55 - 133
Benzo[a]pyrene	ND		116	107		ug/L		92	50 - 108
Benzo[b]fluoranthene	ND		116	118		ug/L		102	50 - 128
Benzo[g,h,i]perylene	ND		116	115		ug/L		99	46 - 133
Benzo[k]fluoranthene	ND		116	119		ug/L		103	52 - 128
Chrysene	ND		116	123		ug/L		106	52 - 116
Dibenz(a,h)anthracene	ND		116	121		ug/L		104	52 - 143
Fluoranthene	ND		116	133		ug/L		115	32 - 150
Fluorene	ND		116	130		ug/L		112	15 - 150
Indeno[1,2,3-cd]pyrene	ND		116	118		ug/L		102	41 - 141
1-Methylnaphthalene	ND		116	119		ug/L		103	10 - 150
2-Methylnaphthalene	ND		116	113		ug/L		97	10 - 150
Phenanthrene	ND		116	122		ug/L		105	36 - 125
Pyrene	ND		116	119		ug/L		103	41 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*106*		*15 - 122*
Nitrobenzene-d5	*133*	*S1+*	*19 - 130*
Terphenyl-d14	*122*		*33 - 138*

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563966

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563773

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		115	120		ug/L		104	35 - 113	3	49
Acenaphthylene	ND		115	105		ug/L		91	41 - 118	5	48
Anthracene	ND		115	112		ug/L		97	45 - 122	3	56
Benzo[a]anthracene	ND		115	112		ug/L		97	55 - 133	20	57
Benzo[a]pyrene	ND		115	99.0		ug/L		86	50 - 108	8	59
Benzo[b]fluoranthene	ND		115	118		ug/L		102	50 - 128	0	62
Benzo[g,h,i]perylene	ND		115	111		ug/L		96	46 - 133	3	58
Benzo[k]fluoranthene	ND		115	113		ug/L		98	52 - 128	5	58
Chrysene	ND		115	105		ug/L		91	52 - 116	16	59
Dibenz(a,h)anthracene	ND		115	124		ug/L		107	52 - 143	2	60
Fluoranthene	ND		115	120		ug/L		104	32 - 150	10	59
Fluorene	ND		115	130		ug/L		113	15 - 150	0	49
Indeno[1,2,3-cd]pyrene	ND		115	104		ug/L		90	41 - 141	13	58
1-Methylnaphthalene	ND		115	106		ug/L		91	10 - 150	12	66
2-Methylnaphthalene	ND		115	108		ug/L		93	10 - 150	5	66
Phenanthrene	ND		115	115		ug/L		99	36 - 125	6	69
Pyrene	ND		115	106		ug/L		92	41 - 127	12	58

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*100*		*15 - 122*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 563966

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563773

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*128*		*19 - 130*
Terphenyl-d14	*110*		*33 - 138*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-563945/1-A
Matrix: Water
Analysis Batch: 564103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 563945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.017	ug/L		01/21/22 12:37	01/24/22 13:00	1
1,2-Dibromoethane	ND		0.020	0.015	ug/L		01/21/22 12:37	01/24/22 13:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*01/21/22 12:37*	*01/24/22 13:00*	*1*

Lab Sample ID: LCS 400-563945/2-A
Matrix: Water
Analysis Batch: 564103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 563945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.102		ug/L		101	60 - 140
1,2-Dibromoethane	0.101	0.112		ug/L		111	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Lab Sample ID: 400-214137-4 MS
Matrix: Water
Analysis Batch: 564103

Client Sample ID: MW14-ROX-011322-MS
Prep Type: Total/NA
Prep Batch: 563945

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.101	0.108		ug/L		107	10 - 150
1,2-Dibromoethane	ND		0.101	0.110		ug/L		109	39 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 564103

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563945

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		0.0985	0.0997		ug/L		101	10 - 150	8	20
1,2-Dibromoethane	ND		0.0988	0.105		ug/L		107	39 - 150	4	20

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: 400-214137-4 MSD
Matrix: Water
Analysis Batch: 564103

Client Sample ID: MW14-ROX-011322-MSD
Prep Type: Total/NA
Prep Batch: 563945

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	91		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	Melissa Remiger
PlaNet Site or Project ID	25278
PO #	60674381 – 3.1.2
GSAP Project ID	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/13/2022

PAGE: 1 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

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 60674381 – 3.1.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID

SAMPLER NAME(S) (Print): J. Mayer, T. Jones

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☐ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 | Cooler #2 | Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@secamshell.com; andrei.itamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011322-8260-A	1/13/2022	0000	Water	X					2	X			
	TB-ROX-011322-8011-A	1/13/2022	0000	Water	X					2		X		
	MW14-ROX-011322-EB	1/13/2022	0820	Water	X			X		8	X	X	X	X
	MW14-ROX-011322	1/13/2022	1010	Water	X			X		8	X	X	X	X
	MW14-ROX-011322-MS	1/13/2022	1010	Water	X			X		8	X	X	X	X
	MW14-ROX-011322-MSD	1/13/2022	1010	Water	X			X		8	X	X	X	X
	P66-ROX-011322	1/13/2022	1125	Water	X			X		8	X	X	X	X

400-214137 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

0.7 °C IR#

0.0°C 26°C

Container PID Readings or Laboratory Notes

Relinquished by: (Signature) Joe Mayer	Received by: (Signature) FEDEX: 9509 0059 2064, 9509 0059 2075, 1875 9061 9160	Date: 1/13/2022	Time: 16:00
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 1.15.22	Time: 09:03

CUSTODY SEALS: 1699419, 1699418, 1699420, 1699421, 1854695, 1854694

Version: 2Apr21

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (_____)

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	Melissa Remiger
PlaNet Site or Project ID	25278
PO #	60674381 – 3.1.2
GSAP Project ID	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 1/13/2022

PAGE: 2 of 2

SAMPLING COMPANY: AECOM

LOG CODE:

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

PROJECT CONTACT (Hardcopy or PDF Report to): Melissa Remiger

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: Rexana Quarterly GW 60674381 – 3.1.2

EDF DELIVERABLE TO (Name, Company, Office Location): Melissa Remiger, Bob Billman - please see special instructions

PHONE NO.: 314-802-1207; 314-802-1122

E-MAIL: melissa.remiger@aecom.com; bob.billman@aecom.com

AECOM Other ID

SAMPLER NAME(S) (Print): MD'Angelo LBadmus JMayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS):

☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ LA - RWQCB REPORT FORMAT

DELIVERABLES: ☑ LEVEL 2 ☐ LEVEL 3 ☑ LEVEL 4 ☑ OTHER (SPECIFY) __EDD_____

TEMPERATURE ON RECEIPT C° Cooler #1 Cooler #2 Cooler #3

SPECIAL INSTRUCTIONS OR NOTES :

Please include "J" values on Reports.

Please provide sample receipt upon login.

Please send EQuIS EDDs to EDDSubmissions@aecomshell.com; andrei.zamfir@aecom.com

☑ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☑ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

60674381 – 3.1.2

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	8011 EDB + DBCP	SVOC 8270	PAH 8270LL
	TB-ROX-011322-8011-B	1/13/2022	0000	Water	2					2		X		
	TB-ROX-011322-8260-B	1/13/2022	0000	Water	2					2	X			
	P74-ROX-011322	1/13/2022	1010	Water	6			2		8	X	X	X	X
	P74-ROX-011322-DUP	1/13/2022	1010	Water	6			2		8	X	X	X	X
	P58-ROX-011322	1/13/2022	1105	Water	6			2		8	X	X	X	X
	P58-ROX-011322	1/13/2022	1150	Water	6			2		8	X	X	X	X
	P58-ROX-011322-DUP	1/13/2022	1150	Water	6			2		8	X	X	X	X
	P93B-ROX-011322	1/13/2022	1240	Water	6			2		8	X	X	X	X

JAA 3.22

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by: (Signature) MARY D'ANGELO	Received by: (Signature) FEDEX: See page 1	Date: 1/13/2022	Time: 1600
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 1.15.22	Time: 09:03

CUSTODY SEALS: See pge 1

Version: 2Apr21

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-214137-1

Login Number: 214137
List Number: 1
Creator: Roberts, Alexis J

List Source: Eurofins Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.7°C, 2.0°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-214137-1
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	06-30-22
ANAB	ISO/IEC 17025	L2471	02-23-23
Arkansas DEQ	State	88-0689	09-01-22
California	State	2510	06-30-22
Florida	NELAP	E81010	06-30-22
Georgia	State	E81010(FL)	06-30-22
Illinois	NELAP	200041	10-09-22
Kansas	NELAP	E-10253	10-31-22
Kentucky (UST)	State	53	06-30-22
Kentucky (WW)	State	KY98030	12-31-22
Louisiana	NELAP	30976	06-30-22
Louisiana (DW)	State	LA017	12-31-22
Maryland	State	233	09-30-22
Massachusetts	State	M-FL094	06-30-22
Michigan	State	9912	06-30-22
North Carolina (WW/SW)	State	314	12-31-22
Oklahoma	State	9810	08-31-22
Pennsylvania	NELAP	68-00467	01-31-22
South Carolina	State	96026	06-30-22
Tennessee	State	TN02907	06-30-22
Texas	NELAP	T104704286	09-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-22
USDA	US Federal Programs	P330-21-00056	05-17-24
Virginia	NELAP	460166	06-14-22
West Virginia DEP	State	136	02-28-22

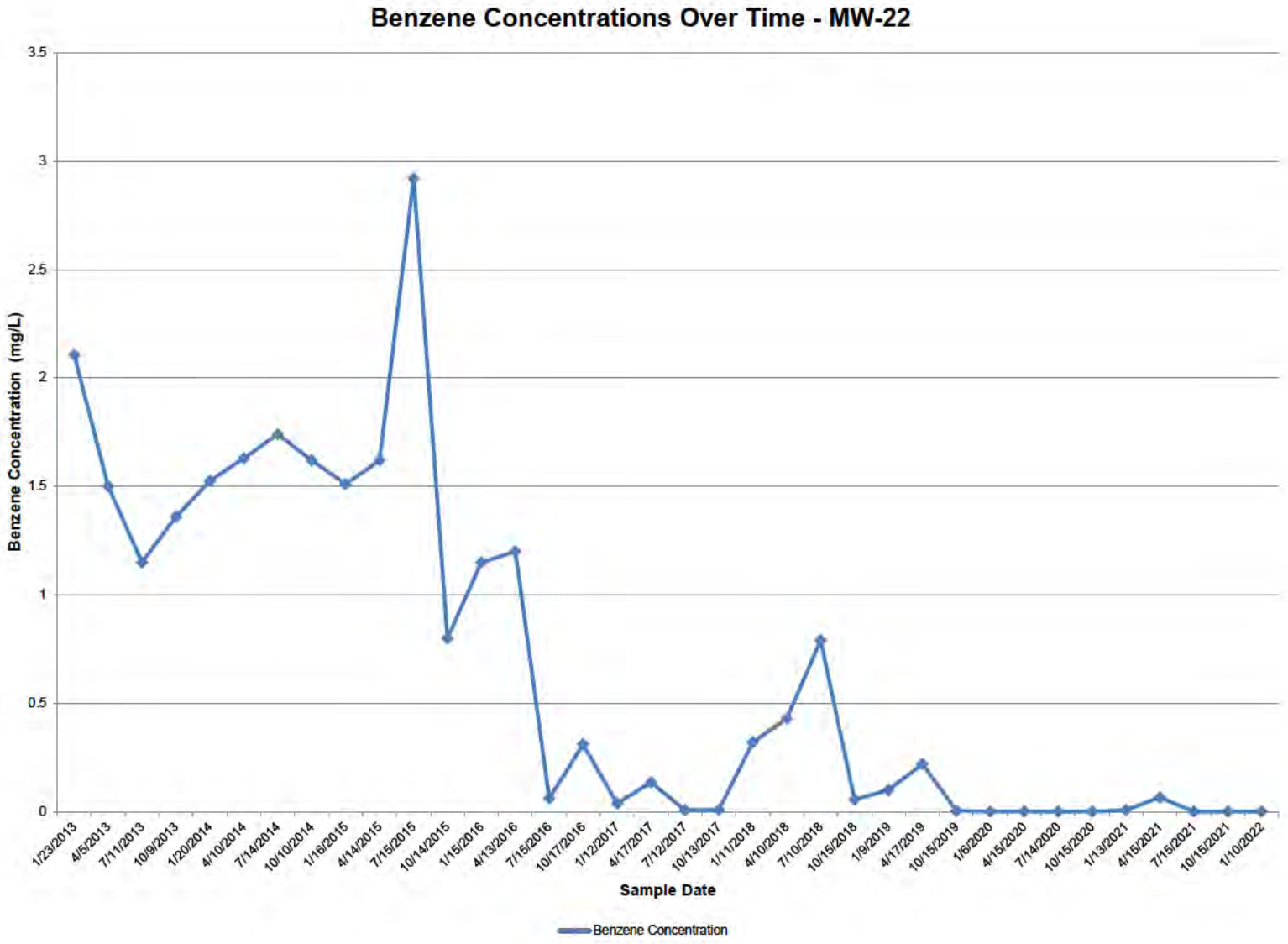
Appendix D

Appendix D – 1 Charts – Benzene Concentrations Over Time

Appendix D – 2 GWSDAT Charts

- 4th Street area – MW-22, ROST-4 PZ(C), P-59, and T-12
- Public Works Yard area – MW-7, MW-8, MW-25, and P-57

4th Street Area



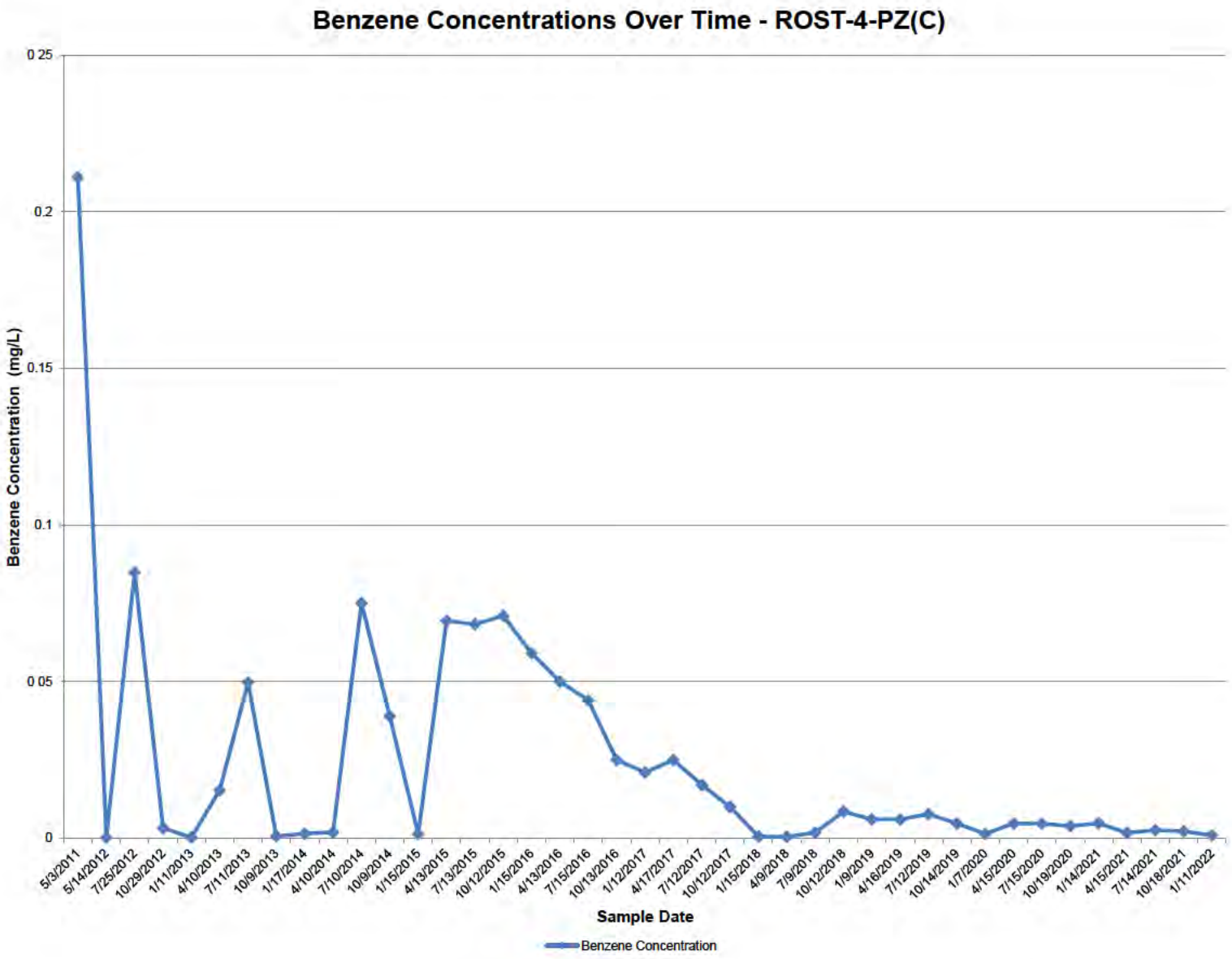
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.

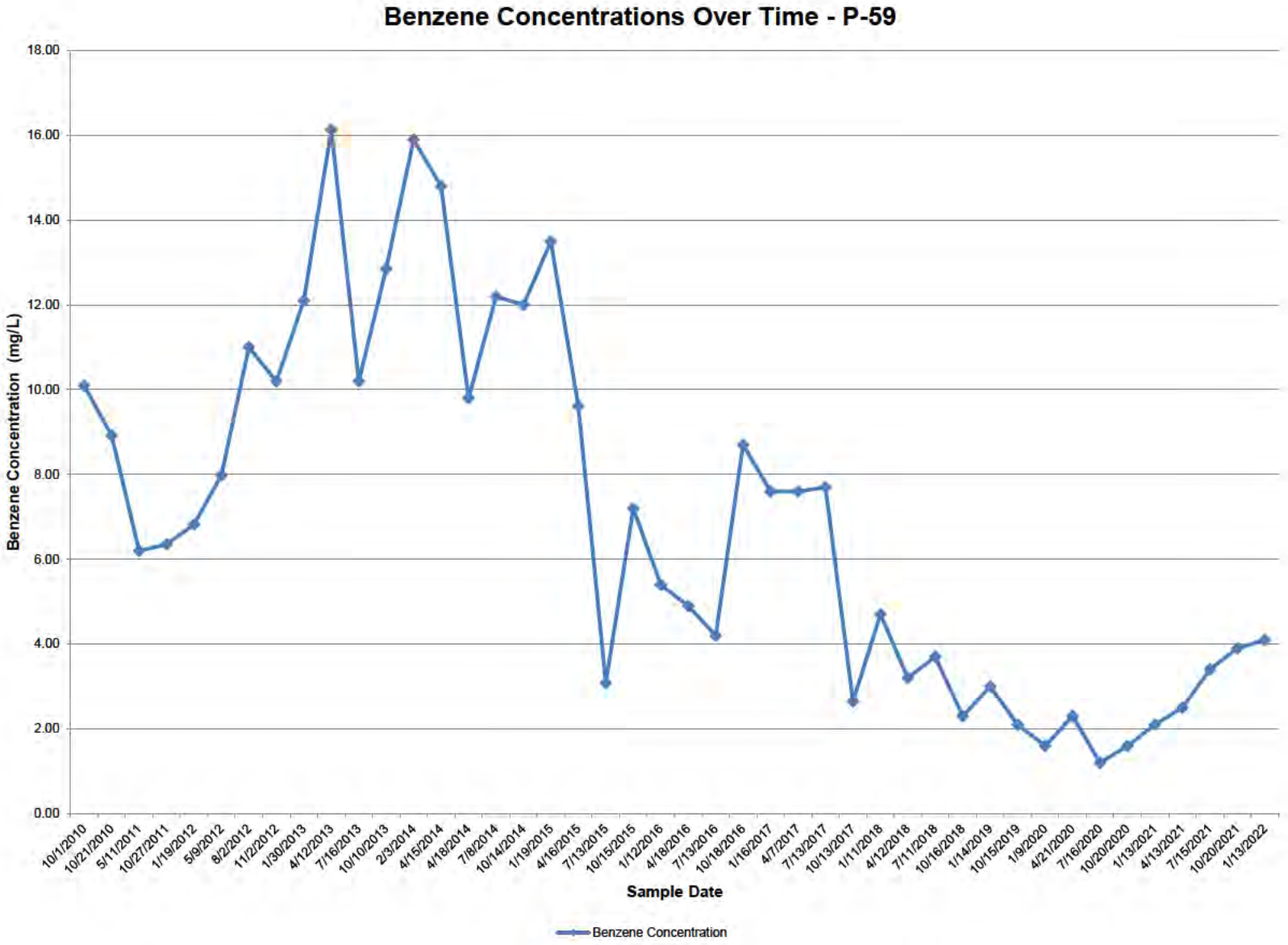


Notes:

mg/L = milligrams per liter

Timeframe specific to available data.

Non-detect values are shown at half the reporting limit.



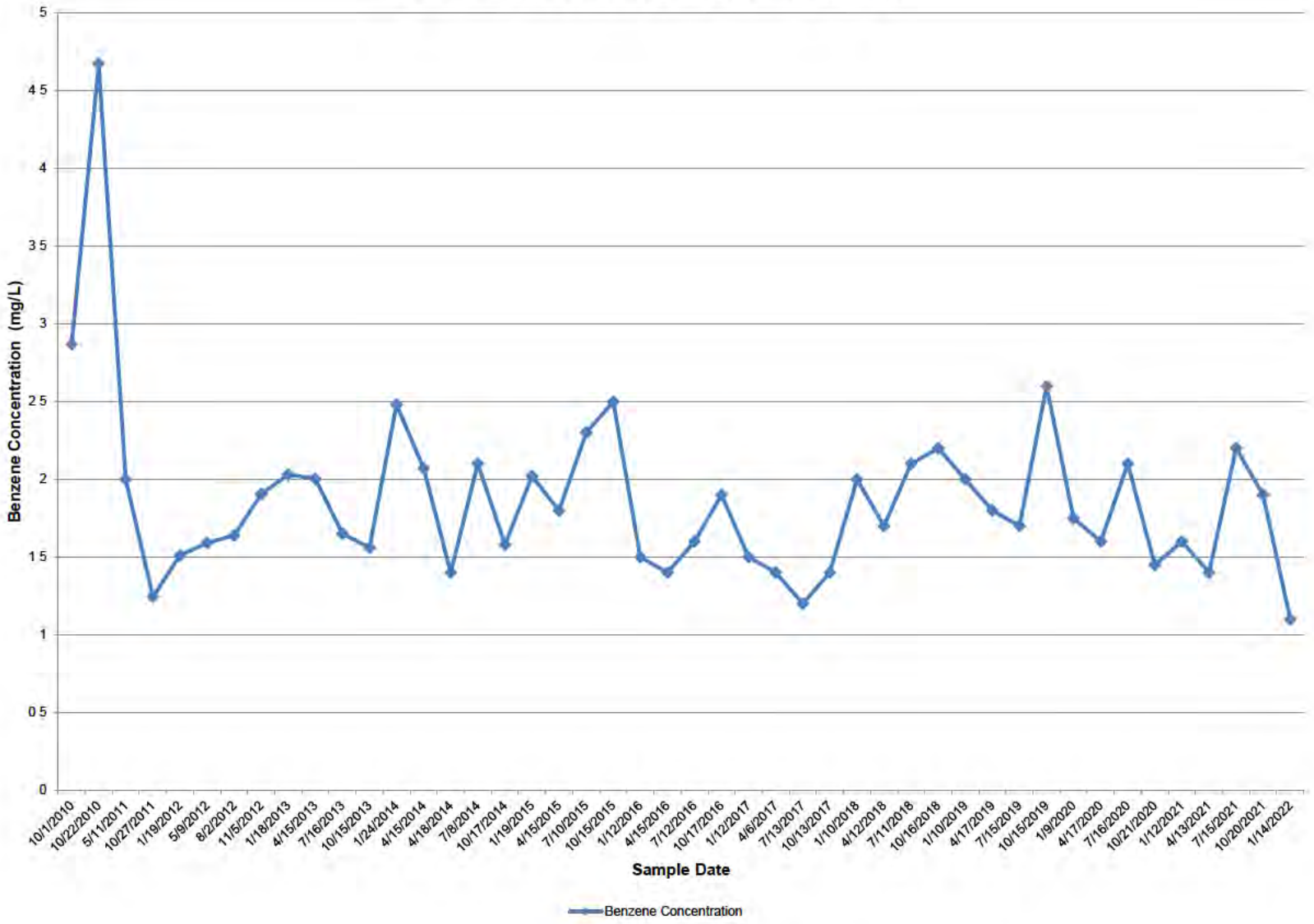
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Benzene Concentrations Over Time - T-12



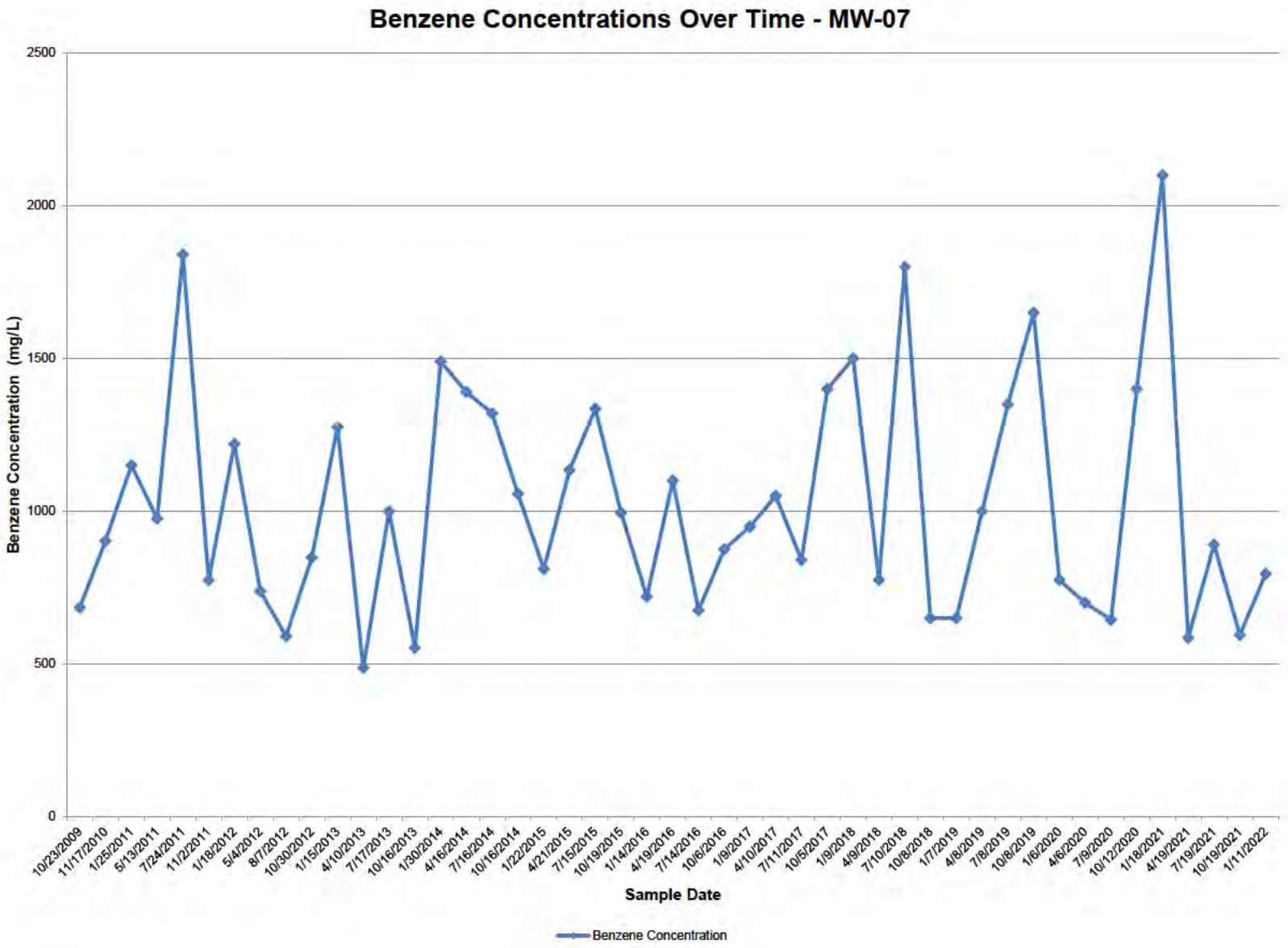
Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

Public Works Yard Area

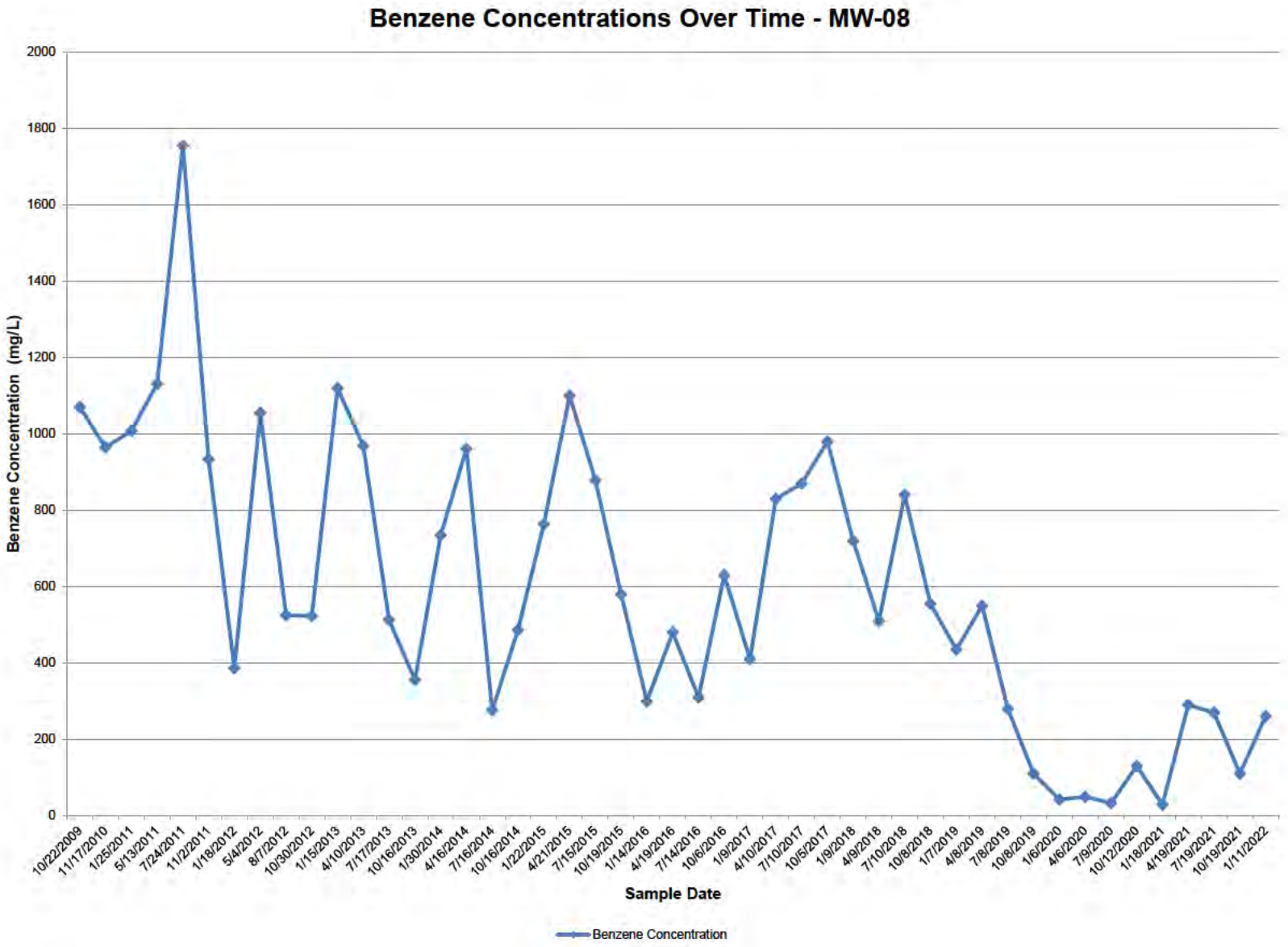


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

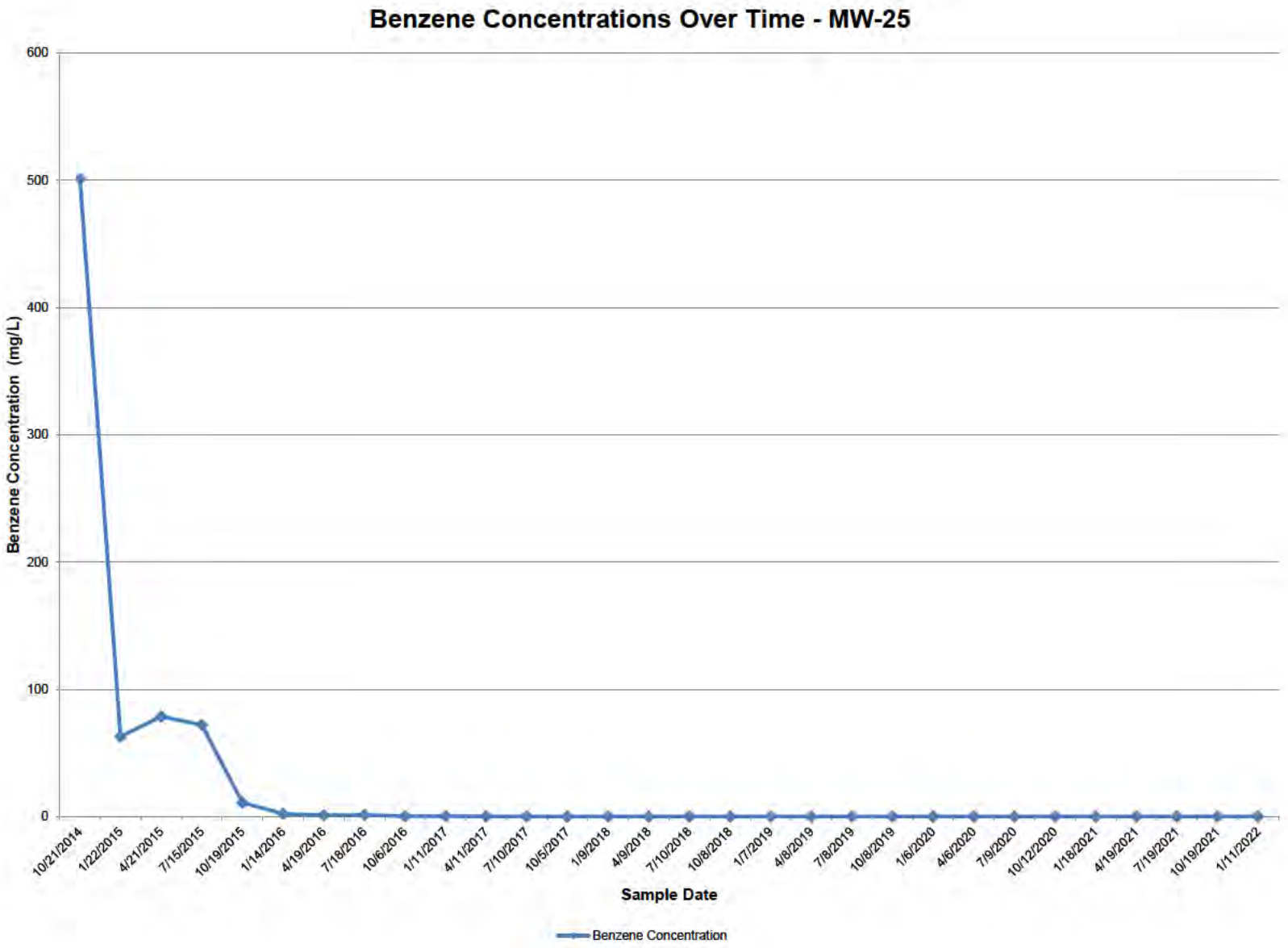


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.

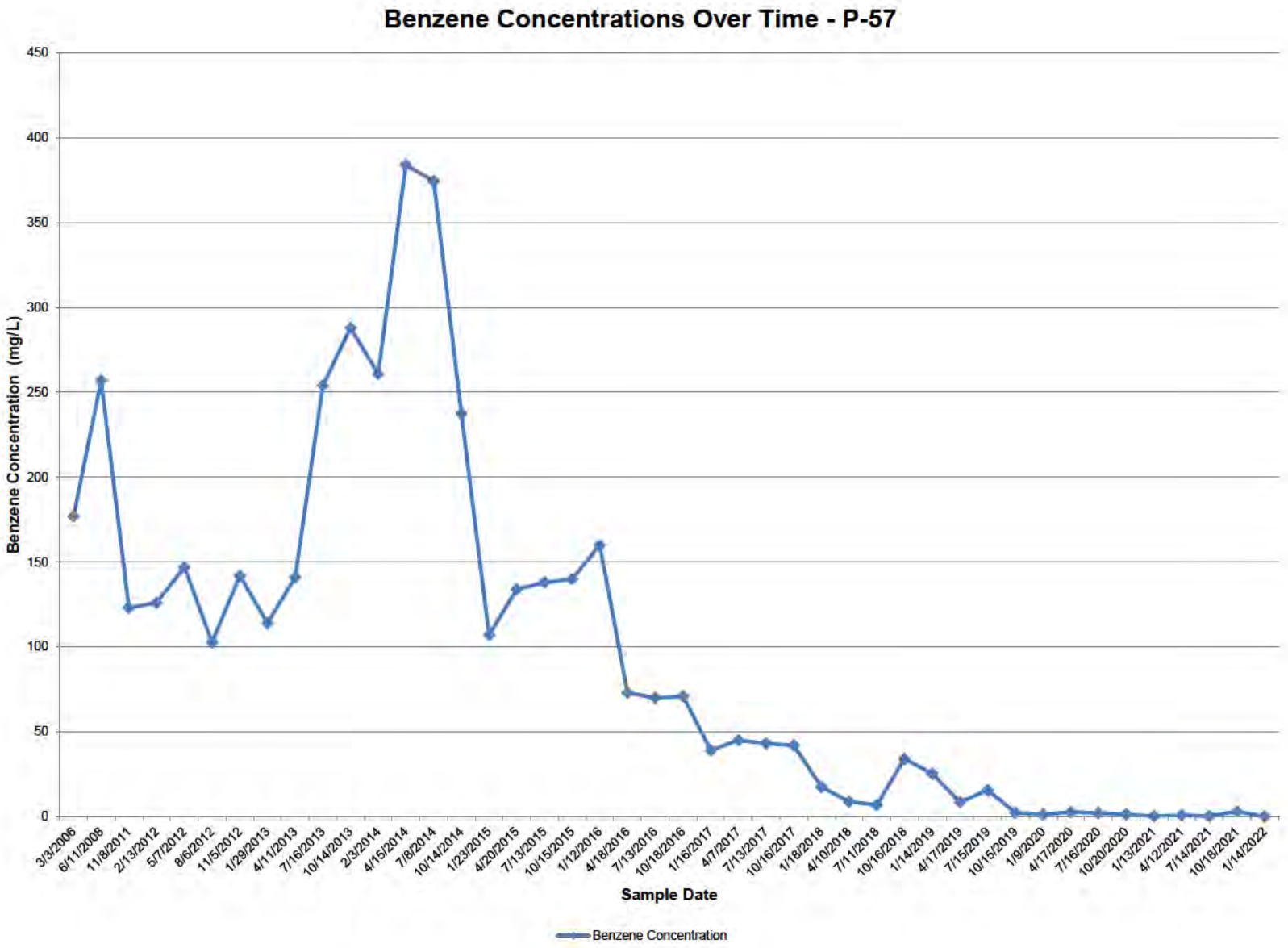


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

Timeframe specific to available data.



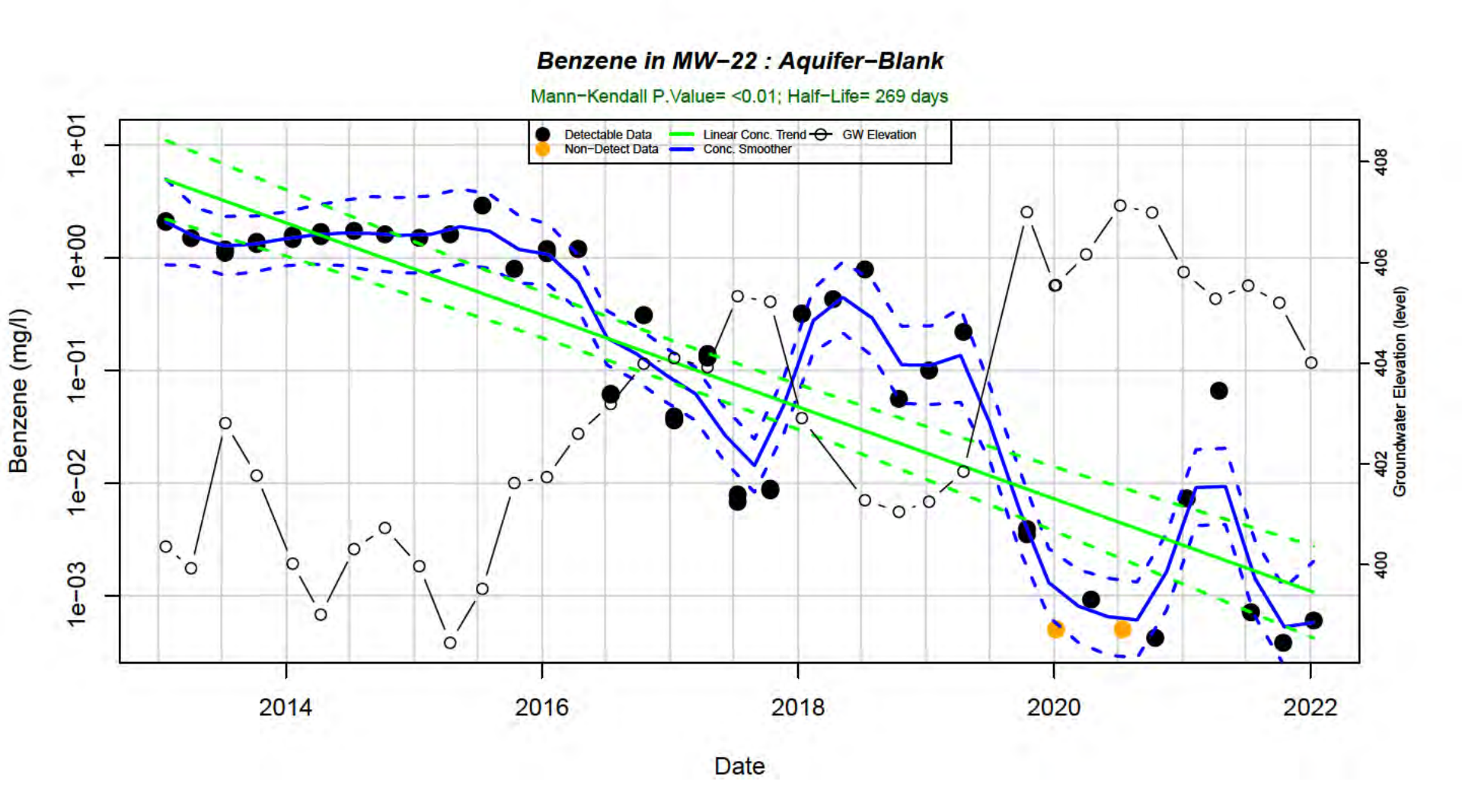
Notes:

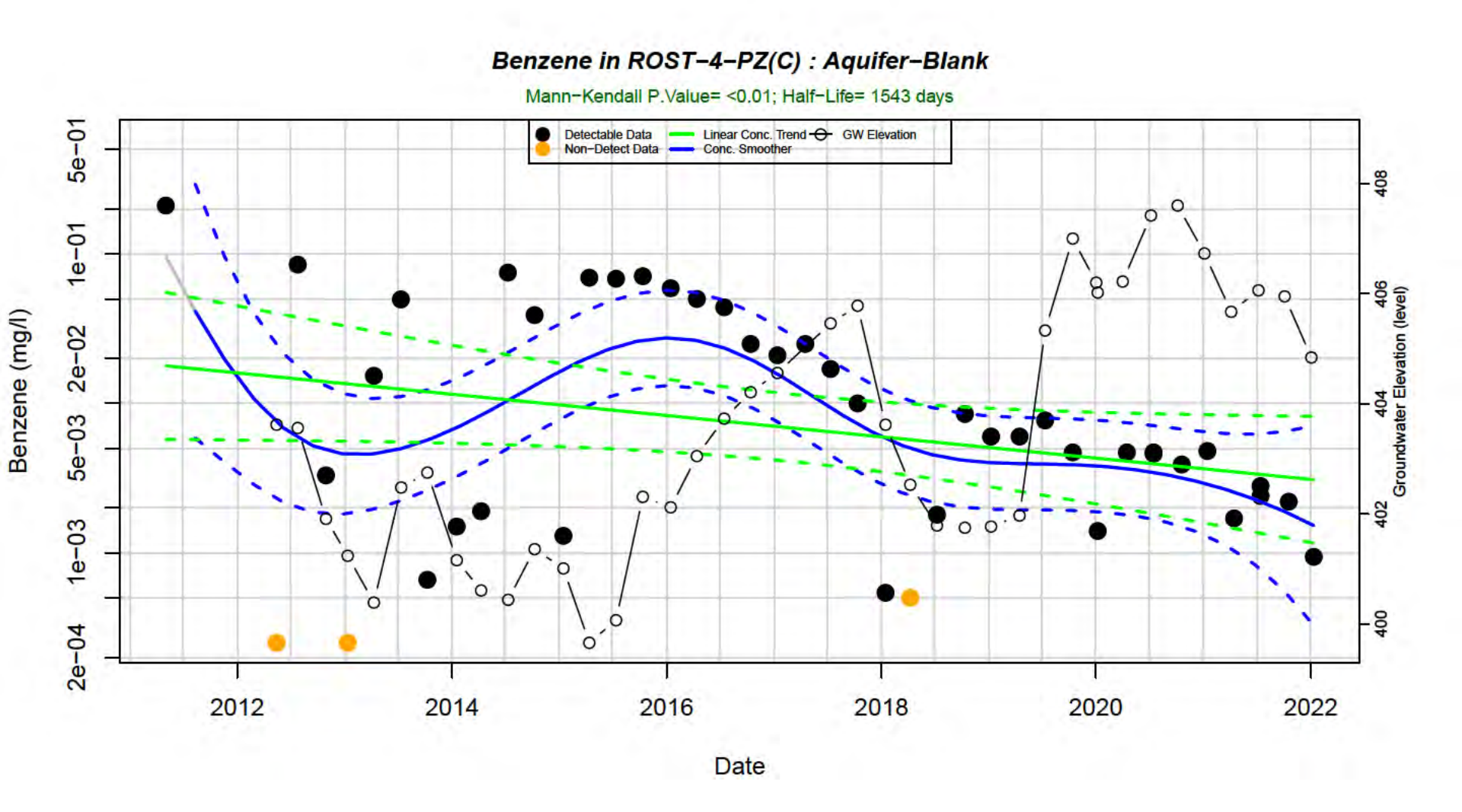
mg/L = milligrams per liter

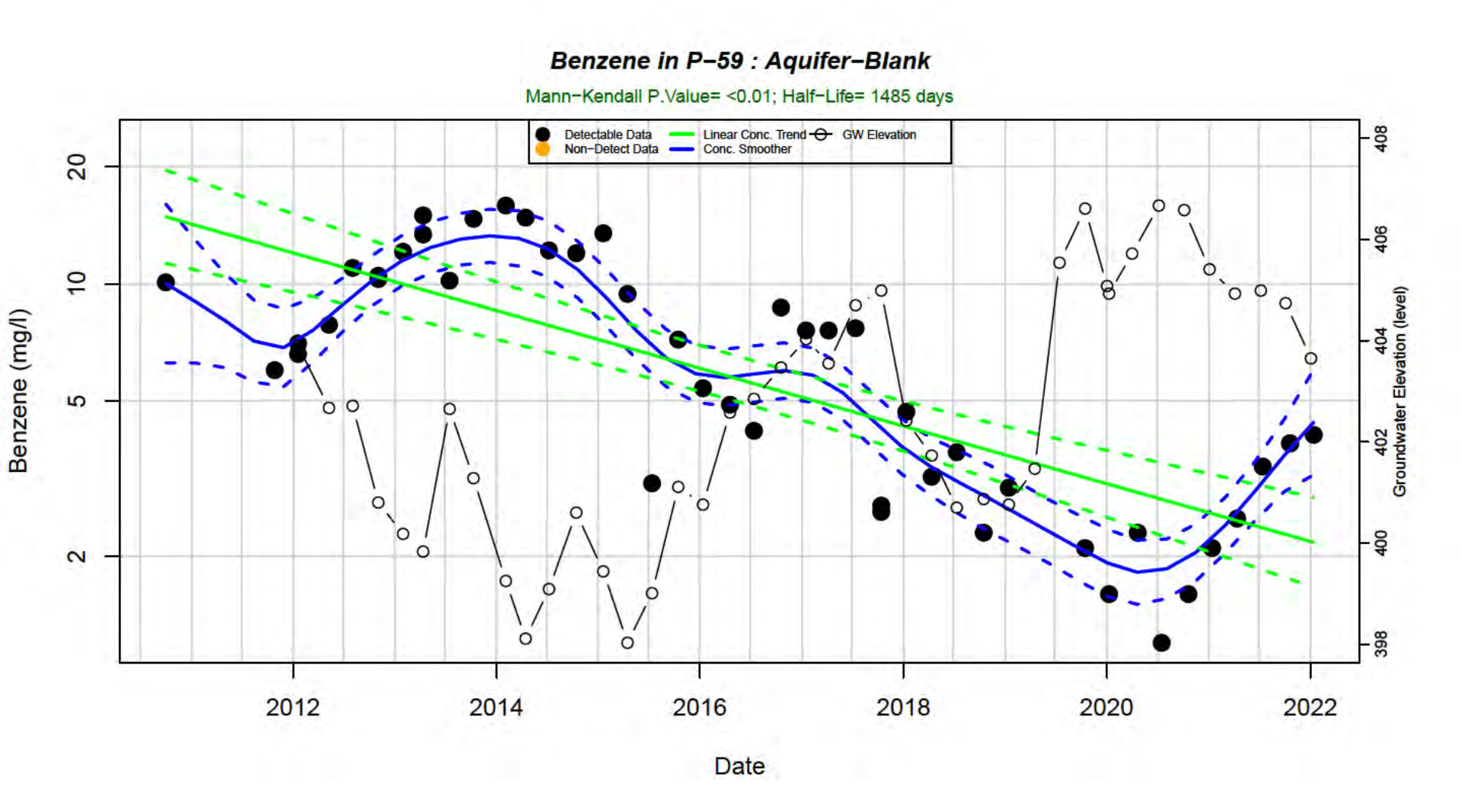
Duplicate values were averaged.

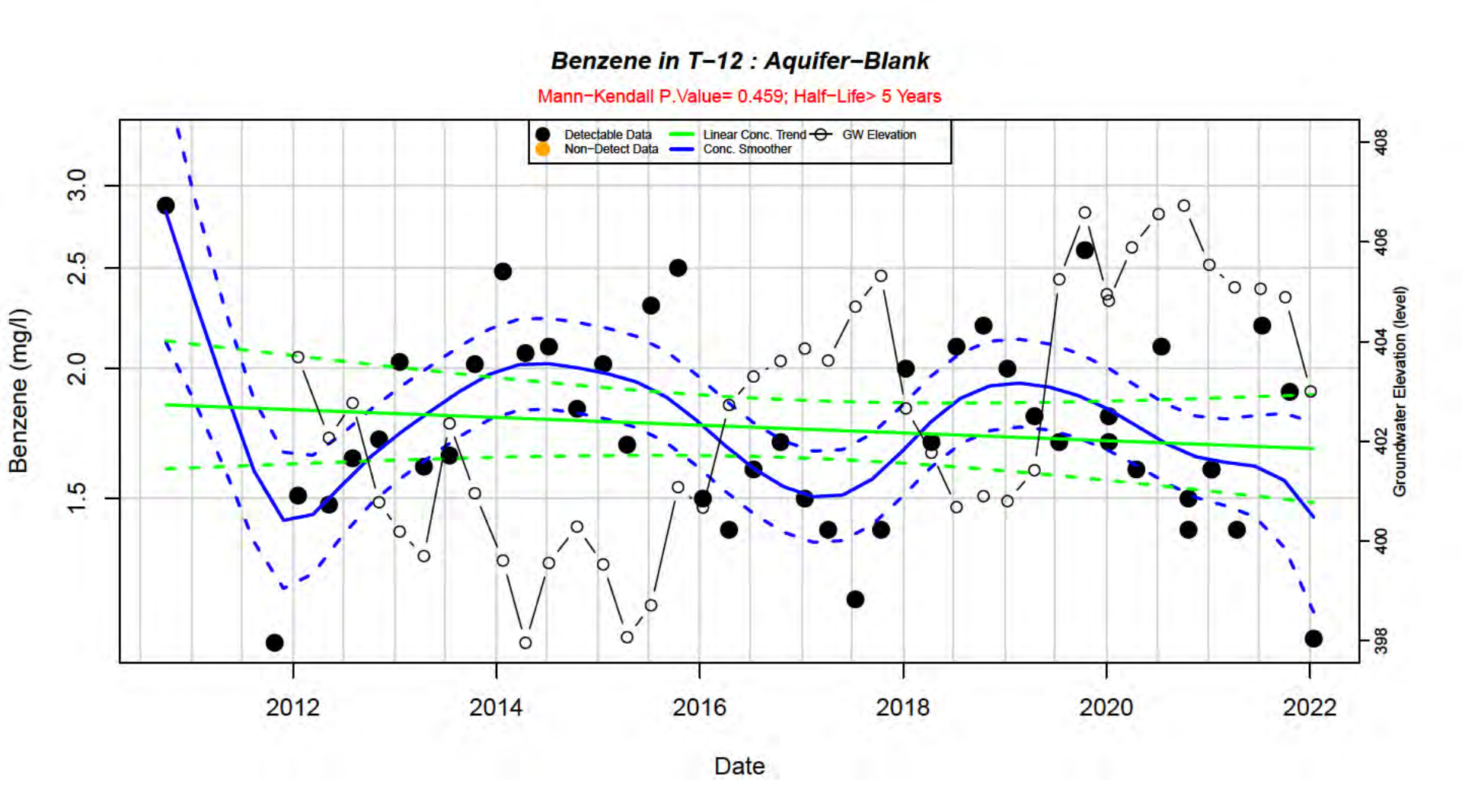
Timeframe specific to available data.

4th Street Area

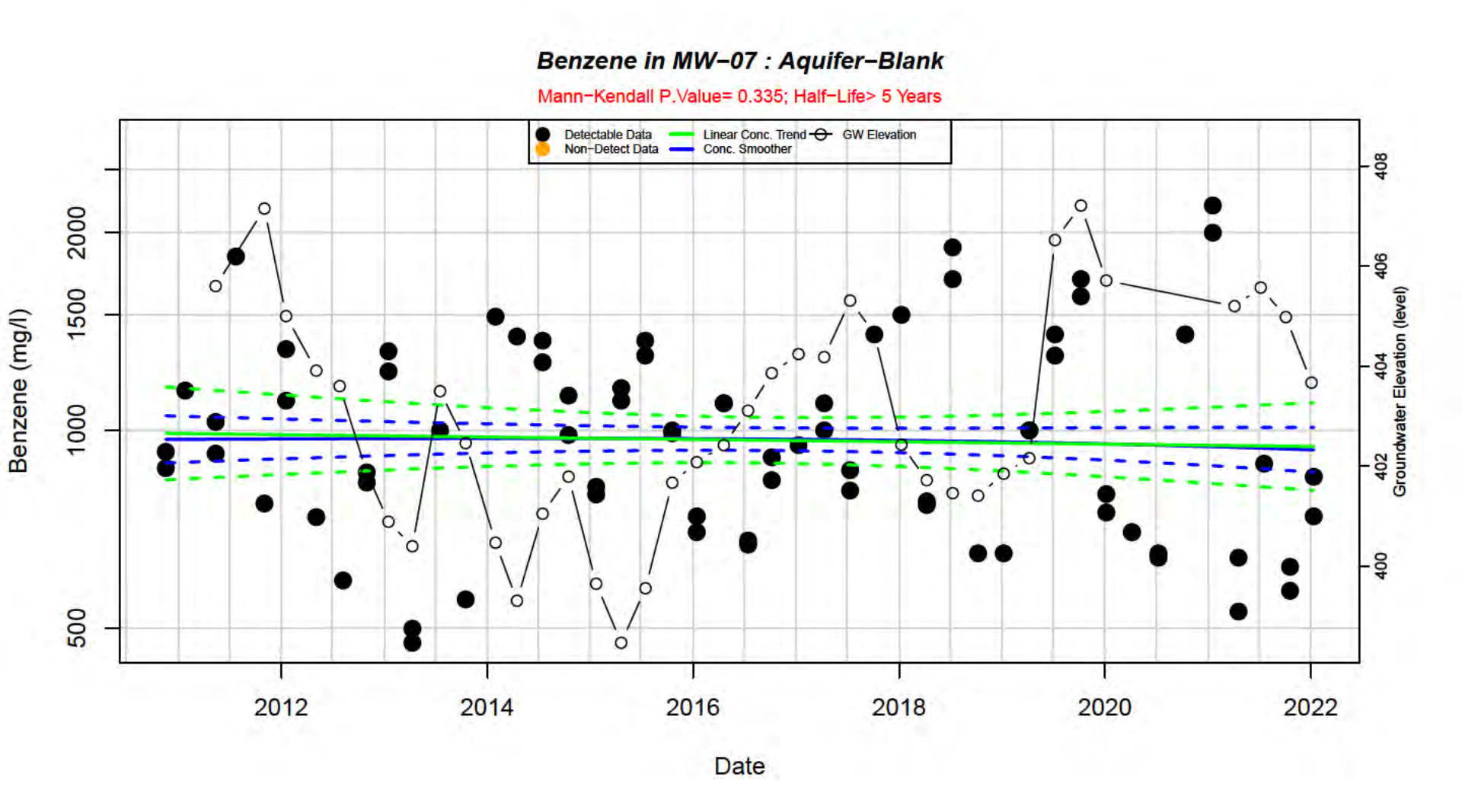

Benzene in MW−22 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 269 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1e−03
1e−02
1e−01
1e+00
1e+01
Groundwater Elevation (level)
400
402
404
406
408
2014
2016
2018
2020
2022
Date

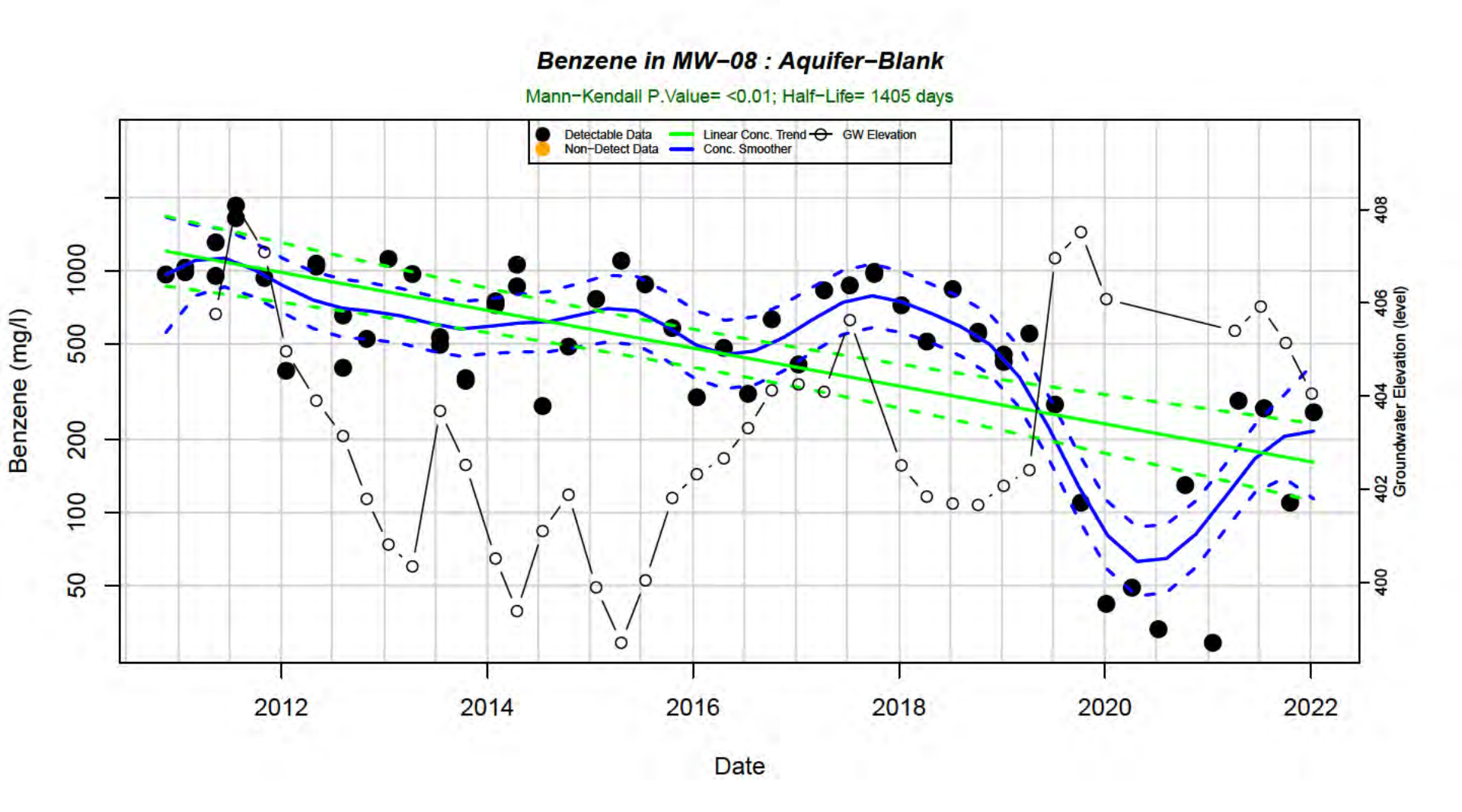

Benzene in ROST−4−PZ(C) : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 1543 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
5e−01
1e−01
2e−02
5e−03
1e−03
2e−04
Groundwater Elevation (level)
408
406
404
402
400
2012
2014
2016
2018
2020
2022
Date

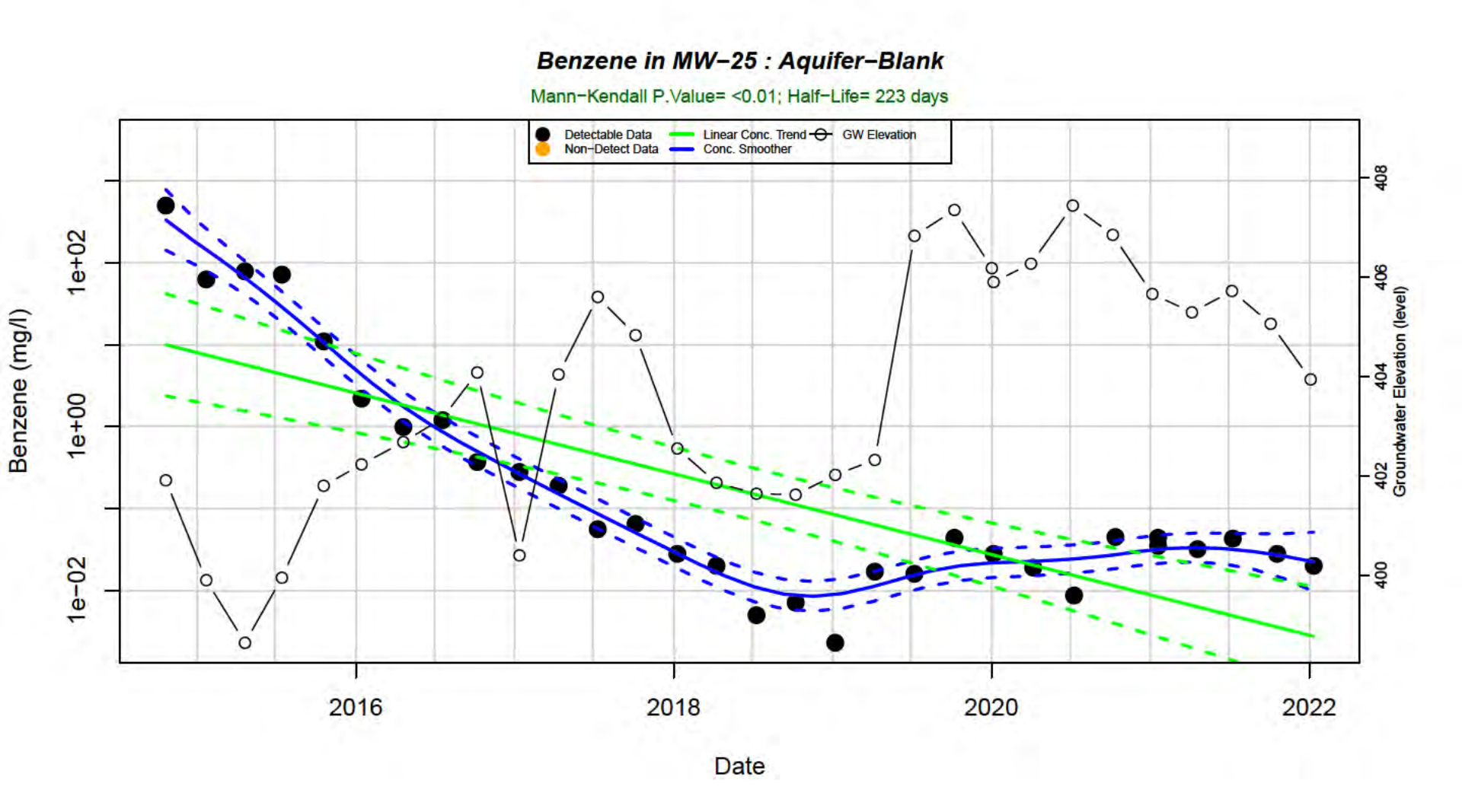

Benzene in P−59 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 1485 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
Groundwater Elevation (level)
Date
2012
2014
2016
2018
2020
2022
2
5
10
20
398
400
402
404
406
408

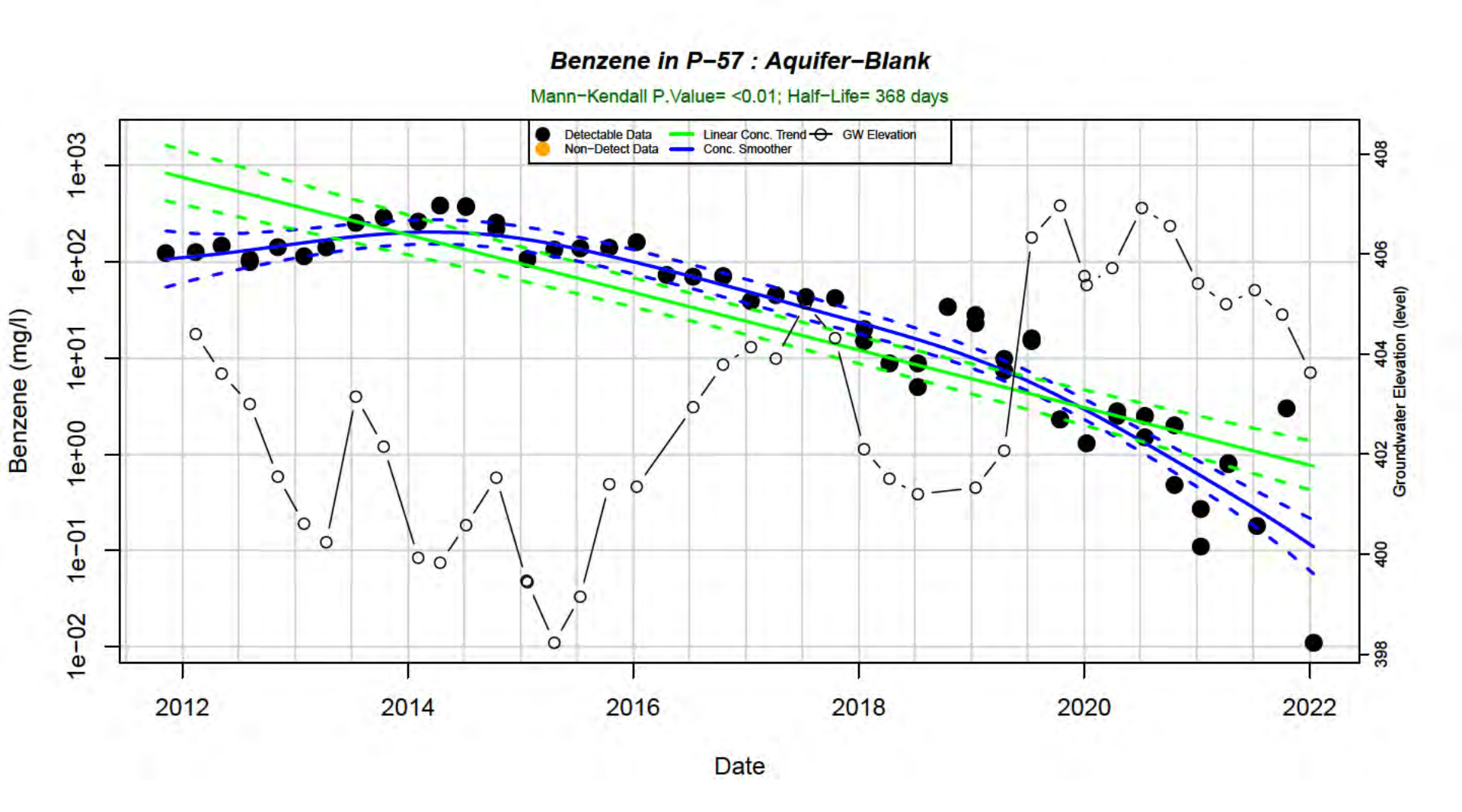

Benzene in T−12 : Aquifer−Blank
Mann−Kendall P.Value= 0.459; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
1.5
2.0
2.5
3.0
Groundwater Elevation (level)
398
400
402
404
406
408
2012
2014
2016
2018
2020
2022
Date

Public Works Yard Area


Benzene in MW−07 : Aquifer−Blank
Mann−Kendall P.Value= 0.335; Half−Life> 5 Years
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
500
1000
1500
2000
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
Date


Benzene in MW−08 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 1405 days
Detectable Data
Non−Detect Data
Linear Conc. Trend
Conc. Smoother
GW Elevation
Benzene (mg/l)
50
100
200
500
1000
Groundwater Elevation (level)
400
402
404
406
408
2012
2014
2016
2018
2020
2022
Date


Benzene in MW−25 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 223 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
Date


Benzene in P−57 : Aquifer−Blank
Mann−Kendall P.Value= <0.01; Half−Life= 368 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
2012
2014
2016
2018
2020
2022
Date

Melissa Remiger
Environmental Scientist
M: 314/449-2913
E: melissa.remiger@aecom.com

AECOM
100 N. Broadway, 20th Floor
St. Louis, MO 63102
aecom.com