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)

2 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 Paula Stine and Gina Search with IEPA.

AECOM
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July 13, 2020

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 – 2nd Quarter 2020
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 (SOPUS), 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 Mses. Paula Stine and Gina Search with Illinois Environmental Protection Agency (IEPA).

If you have any questions during your review, please contact Dan Kirk, SOPUS Principal Program Manager, at dan.kirk@shell.com (281/544-9796), or Bob Billman at bob.billman@aecom.com (314/802-1122).

Sincerely,

AECOM, on behalf of Shell Oil Products US

Melissa Remiger
Environmental Scientist

Robert E. Mooshegian, STS
Senior Program Manager

Enclosures: 2nd Quarter 2020 Report, Roxana Interim Groundwater Monitoring Program
RCRA Facility Groundwater, Leachate and Gas Reporting Form
(Original plus 1 copy)

cc: Dan Kirk, SOPUS
Thomas Morgan, Phillips 66
Paula Stine, IEPA, Springfield
Gina Search, IEPA, Collinsville
Lori Littrell, Atlantic Richfield Company
Erika Reynolds, Greensfelder, Hemker & Gale P.C.
Repositories – Roxana Public Library, website

AECOM

2nd Quarter 2020 Report

Roxana Interim Groundwater Monitoring Program

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

Project Number: 60619901
July 2020

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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 (SOPUS) for the 2nd Quarter 2020 (2Q20) groundwater monitoring well gauging and sampling conducted in the Village of Roxana, Illinois (**Figure 1**). The Interim Groundwater Monitoring Program (IGMP) 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."

In an effort to streamline the Interim Groundwater Monitoring Program reporting, format changes are being made beginning with this report and includes:

- Creating **Appendix A** to present regulatory history; and
- Creating **Section 4** to present Summary and Conclusions in stand-alone section.

The bulleted list below summarizes regulatory-related activity between AECOM, on behalf of SOPUS, and the IEPA during this reporting period (April 2020 through June 2020).

- SOPUS's current Resource Conservation and Recovery Act (RCRA) Hazardous Waste Management Post-Closure Permit (Permit) at the WRR was issued by IEPA on September 23, 2010 and expires 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.

- On December 20, 2019, IEPA issued a letter with approval and comments related to several Permit Modifications requests and included a modified Permit. The letter included a condition requesting the installation of new groundwater monitoring well to be added to the Roxana Interim Groundwater Monitoring Program. AECOM and SOPUS are currently responding to this request.

Groundwater samples were collected and analyzed during 2Q20 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**.

2.1 Health & Safety

Health & Safety

The quarterly sampling activities were performed in general accordance with the project-specific Health and Safety Plan (HASP), dated December 30, 2019 (AECOM, 2019).

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.

Prior to beginning site work and at the start of work each day, a daily safety meeting was held. The purpose of this meeting was to discuss the day's planned activities and to address any potential health and safety concerns. As a part of the daily safety meeting, job hazard analyses (JHAs) were reviewed to address task specific safety concerns.

AECOM field personnel wore U.S. Environmental Protection Agency (USEPA) Level D personal protective equipment (PPE). In addition, work within the WRR was performed wearing flame retardant clothing (FRCs) per WRR requirements (in areas where required).

A PID with a 10.6 electron volt (eV) lamp, combustible gas indicator (CGI), and individual hydrogen sulfide gas detectors (for locations inside WRR) were used during the field activities to monitor air quality. A benzene gas monitor with a 9.8 eV lamp was available during field activities to monitor benzene levels, if necessary. Field instruments were calibrated prior to use each day in accordance with the manufacturers' specifications.

2.2 Additional Activities or Modifications

The following additional work activities were conducted during 2Q20:

- Well integrity inspections were performed at the groundwater monitoring wells listed in the Roxana Interim Groundwater Monitoring Program. In June 2020, well maintenance activities were performed including repairing and/or replacing flush mount well protectors and concrete monitoring well pads.

2.3 Groundwater Monitoring Well Gauging and Sampling

Groundwater Monitoring Well Gauging

The comprehensive quarterly groundwater monitoring well gauging event was conducted between April 1 and 3, 2020. The gauging activities were conducted in conjunction with the 2Q20 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 noted in electronic format using Dell Rugged laptop computers (computer), or similar, and on groundwater field gauging sheets. Quarterly groundwater monitoring well gauging results can be found in **Table 1**. The groundwater gauging data table also includes well-head PID results.

Low-Flow Groundwater Purging and Sampling

Groundwater samples were collected from groundwater monitoring wells between April 6 and 21, 2020. Data are included in this report and discussed in **Section 3**.

Groundwater samples were collected using the most current low-flow groundwater purging and sampling standard operating procedures (SOPs). Prior to groundwater monitoring well sampling, the initial water level was measured and recorded in the computer and on low flow groundwater sampling data sheets.

Groundwater monitoring wells MW-1 through MW-14; MW-16; MW-22 through MW-28; P-54; P-56; P-57; 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 Proactive™ Stainless Steel Monsoon Pump (pump), low-flow controller, and designated[1] polyethylene tubing. The pump and designated polyethylene tubing were slowly lowered into the groundwater monitoring well to be sampled and set with the pump intake near the midpoint of the groundwater monitoring well screen.

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. The Well Wizards® typically have a length of 42 inches, an outside diameter of 1.5 inches, and a Teflon® bladder capacity of approximately 495 milliliters (mL). The Well Wizard® and associated bonded polyethylene tubing are dedicated to each well and remain in place between sampling events. The dedicated pump intake is positioned near the midpoint of the well screen and the pump is operated using a QED MP10 MicroPurge® Controller and compressor.

For both sampling methods, the tubing from the sampling pump was connected to a flow-through cell, which discharged into a 5-gallon plastic container. 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 on the low flow groundwater sampling data sheets after every flow-through cell volume. Purging continued until a minimum of three flow-through cell volumes of water were removed and the groundwater quality parameters stabilized, or a maximum purge time of two hours was reached. The final water quality parameters were recorded in the computer and on low flow groundwater sampling data sheets. Once stabilization was achieved or a maximum purge time of two hours was reached, the groundwater flow was diverted from the flow-through cell and groundwater samples were collected for VOCs and semi-volatile organic compound (SVOC) analysis.

Groundwater monitoring wells located inside the WRR and designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-58, and P-68, contained LNAPL when gauged and, therefore, were not sampled.

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

2.4 Decontamination and Investigation-Derived Waste

Decontamination

Field personnel and equipment underwent decontamination procedures 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 by spraying and/or wiping down with isopropyl alcohol, then washing with LiquiNox® and distilled water, and finishing with a distilled water rinse. The wash and rinse water were replaced periodically throughout the day, at least at mid-day. Interface probes were decontaminated by wiping down with LiquiNox® followed by a distilled water rinse. Personnel and small equipment decontamination were performed at the sample locations.

[1] All designated tubing is stored in a sealed bag designated for a particular groundwater monitoring well between sampling events; designated tubing used with Proactive™ Stainless Steel Monsoon pumps is replaced prior to the first quarter sampling event.

Investigation-Derived Waste

Investigation-derived waste (IDW), such as purge water and decontamination fluid generated during groundwater sampling activities, was collected, stored, 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 were initially collected in 5-gallon plastic containers, then transferred to a 30-gallon steel drum, which was staged at the Public Works Yard (satellite accumulation area), and removed by Heritage Environmental Services, LLC (Heritage). This material is managed as hazardous waste based on prior characterization and was disposed at the Heritage facility in Indianapolis, Indiana.

Decontamination fluid and purge water from other groundwater monitoring wells in the Village were initially collected in 5-gallon plastic containers then transferred to 55-gallon steel drums located near the northeastern portion of the former Tannery Property (designated staging area). This material is managed as non-hazardous waste based on prior characterization and was disposed at the Heritage facility in Indianapolis, Indiana.

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

2.5 Groundwater Sample Handling and Laboratory Testing

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

Upon collection and labeling, sample containers were immediately placed inside an iced cooler and packed in such a way as to help prevent breakage and maintain sample temperature within 0-6°C without freezing. The samples were then delivered via overnight courier, under the proper COC documentation, to 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. Evaluation of the data followed procedures outlined in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2017). 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.

The following documentation was completed and supplements the COC records:

- Field logbooks;
- Equipment calibration forms;
- Groundwater field gauging sheets;
- Low Flow Groundwater Sampling Data Sheets;
- Field sample collection data via computer; and
- Safety documentation.

3 Groundwater Sampling Results

This section presents the results of the 2Q20 groundwater gauging and sampling event.

3.1 Groundwater Monitoring Well Gauging Results

The comprehensive quarterly groundwater monitoring well gauging for the 2Q20 event was conducted between April 1 and 3, 2020. This groundwater monitoring well gauging was conducted in accordance with the Interim Groundwater Monitoring Program, and the results can be found in **Table 1**. Groundwater levels in most wells in the vicinity of the West Fenceline have risen approximately 0.25 to 0.75 feet since the 1Q20 gauging event. Groundwater levels in most wells in the central portion of the WRR have risen approximately 0.5 to 1.25 feet, and groundwater levels in most wells in the eastern portion of the WRR have risen approximately 1.25 to 1.75 since the 1Q20 gauging event. Water levels are above the top of the screens in the majority of the wells gauged during the 2Q20 event. The potentiometric surface observed during the 2Q20 groundwater monitoring well gauging (**Figures 3a** and **3b**) illustrates groundwater flow toward the WRR groundwater production wells.

During the 2Q20 quarterly groundwater monitoring well gauging event, LNAPL was detected in three Interim Groundwater Monitoring Program groundwater monitoring wells (P-55R, P-58, and P-68). All of these monitoring wells are located in the WRR (**Table 1**). In these wells, LNAPL thicknesses ranged from 0.01 to 0.04 feet. **Figures 4a** and **4b** illustrate the measured LNAPL thickness observed along the West Fenceline and inside the refinery, respectively, during the 2Q20 gauging event. LNAPL was not observed in groundwater monitoring wells located in the Village.

LNAPL thickness greater than 0.10 feet was not observed during 2Q20; therefore LNAPL recovery efforts were not performed during 2Q20.

3.2 Data Quality Review Results

A total of 15 sample delivery groups (SDGs) were prepared and sent to TestAmerica for the 2Q20 event. Fifty-two different groundwater sample sets were prepared and analyzed for VOCs and SVOCs (including PAHs). The 52 samples included 41 different investigative sample sets, five field duplicate sets, and three matrix spike/matrix spike duplicate (MS/MSD) sets. SDGs for 2Q20 are presented in **Appendix C**.

Trip blanks (TBs), equipment blanks (EBs), and laboratory method blanks were analyzed to evaluate for the existence and magnitude of any contamination resulting from field and laboratory activities. Five different EB sets were collected for this quarter. A TB set was included in every cooler that contained samples for VOC analysis. A total of 15 TB sets were analyzed for groundwater VOCs. Laboratory method blanks were analyzed with every analytical batch.

Based on laboratory control sample (LCS), MS/MSD, surrogate, holding time, and field duplicate criteria, the groundwater analytical results reported were accepted for their intended use. Due to anomalous polycyclic aromatic hydrocarbon (PAH) results, the laboratory re-analyzed for PAHs in sample P-114R. The results from this re-analysis were consistent with historical data. Based on professional judgement, the results from the re-analysis were used for the purposes of this report. 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 aquifer wells. These results are consistent with those observed in the 1Q20 sampling event. The laboratory analytical results for the

groundwater samples collected during this event are presented in **Table 3**, including the initial and re-analysis PAH results in well P-114R.

Analytical detections were compared to the concentration limits as provided in Condition IV(E) of the Permit for the WRB Refining LP Wood River Refinery[2]. These concentration limits include the Groundwater Quality Standards for Class I: Potable Resource Groundwater (35 IAC 620, Subpart D, Section 410) (Part 620) (IEPA, 2012c), the IEPA Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Groundwater Remediation Objectives for the Groundwater Component of the Groundwater Ingestion Route (35 IAC 742, Appendix B, Table E) (IEPA, 2007), and the IEPA Toxicity Assessment Unit (Chemicals not in TACO, Tier 1 Tables) (IEPA, 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 14 groundwater monitoring wells in the Interim Groundwater Monitoring Program (six in the Village, seven in the WRR along the West Fenceline, and one on WRR Main Property) exhibited exceedances of the groundwater screening criteria for one or more of the following constituents:

- Benzene
- Naphthalene
- 1,3,5-Trimethylbenzene
- 2-Methylnaphthalene
- Ethylbenzene
- 1,2,4-Trimethylbenzene
- bis(2-Ethylhexyl)phthalate
- Phenol

Figure 5 presents concentrations of analytes that exceeded the indicated screening criteria for 2Q20. **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 contains benzene concentration trend plots for selected monitoring wells[3] 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

The data used to develop the plots are included in **Table D-1**.

[2] IEPA requested that the Interim Groundwater Monitoring Program be consistent with the RCRA Part B Permit.
[3] In a meeting with IEPA on April 5, 2018, the AECOM presentation included benzene concentration trend plots pertinent to GMZ discussion.

4 Summary and Conclusions

AECOM conducted the 2Q20 Interim Groundwater Monitoring Program, and the following conclusions are based on the data and information collected as part of this program:

- During 2Q20, groundwater level data indicate groundwater flow from the Investigation Area is moving toward groundwater production wells at the WRR. Groundwater levels in most wells in the vicinity of the West Fenceline have risen approximately 0.25 to 0.75 feet since the 1Q20 gauging event. Groundwater levels in most wells in the central portion of the WRR have risen approximately 0.5 to 1.25 feet, and groundwater levels in most wells in the eastern portion of the WRR have risen 1.25 to 1.75 since the previous quarter.
- The analytical results from 2Q20 are generally similar to those from previous quarters. Concentration plots presented in **Appendix D** continue to show stable or decreasing trends.
- 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

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

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

AECOM, 2016 (AECOM, 2016b); *Proposed Groundwater Management Zone*. Prepared for Shell Oil Products US (SOPUS), 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 (SOPUS), 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 (SOPUS), dated January 2, 2018.

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

AECOM, 2018 (AECOM, 2019); *Shell HAZWOPER Health and Safety Plan: Rand Avenue, Roxana / Route 111, and WRR Investigation and Remediation*. Prepared for Shell Oil Products US (SOPUS), dated December 30, 2019.

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 June 8, 2020.

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

Illinois Environmental Protection Agency, 2010 (IEPA, 2010b); *Hazardous Waste Management RCRA Post-Closure Permit.* Issued to Shell Oil Products US (SOPUS) 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 (SOPUS) 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 (SOPUS) and WRB Refining LP (WRB) Wood River Refinery (WRR), dated August 31, 2011.

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

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

Illinois Environmental Protection Agency, 2012 (IEPA, 2012c); 35 Illinois Administrative Code 620, Subpart D, Section 410. *Groundwater Quality Standards for Class 1: Potable Resource Groundwater (Part 620)*. Effective October 5, 2012; accessed on June 8, 2020.

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

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

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

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

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

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

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

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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											
3Q17	442.65	7/5/2017	NE	37.24	NA	NA	NA	405.41	393.85 - 383.85 (48.80 - 58.80)	11.3	*
4Q17		10/2/2017	NE	37.62	NA	NA	NA	405.03		0.1	*
1Q18		1/2/2018	NE	39.42	NA	NA	NA	403.23		2.6	*
2Q18		4/2/2018	NE	40.76	NA	NA	NA	401.89		0.0	*
3Q18		7/2/2018	NE	41.36	NA	NA	NA	401.29		0.0	*
4Q18		10/1/2018	NE	41.25	NA	NA	NA	401.40		0.0	*
1Q19		1/2/2019	NE	41.04	NA	NA	NA	401.61		0.0	*
2Q19		4/1/2019	NE	41.00	NA	NA	NA	401.65		0.0	*
3Q19	442.83	7/1/2019	NE	36.65	NA	NA	NA	406.18	394.03 - 384.03 (48.80 - 58.80)	0.0	*
4Q19		10/1/2019	NE	35.66	NA	NA	NA	407.17		0.1	*
1Q20		1/2/2020	NE	36.89	NA	NA	NA	405.94		0.0	*
2Q20		4/1/2020	NE	36.72	NA	NA	NA	406.11		0.0	*
MW-02											
3Q17	443.77	7/5/2017	NE	38.69	NA	NA	NA	405.08	393.90 - 383.90 (49.87 - 59.87)	365	*
4Q17		10/2/2017	NE	38.87	NA	NA	NA	404.90		15000	*
1Q18		1/2/2018	NE	41.27	NA	NA	NA	402.50		106	*
2Q18		4/3/2018	NE	41.84	NA	NA	NA	401.93		62.2	*
3Q18		7/2/2018	NE	42.78	NA	NA	NA	400.99		70.0	*
4Q18		10/1/2018	NE	42.68	NA	NA	NA	401.09		1460	*
1Q19		1/2/2019	NE	42.44	NA	NA	NA	401.33		118	*
2Q19		4/1/2019	NE	42.49	NA	NA	NA	401.28		250	*
3Q19	443.93	7/1/2019	NE	38.26	NA	NA	NA	405.67	394.06 - 384.06 (49.87 - 59.87)	200	*
4Q19		10/1/2019	NE	37.11	NA	NA	NA	406.82		34.6	*
1Q20		1/2/2020	NE	38.39	NA	NA	NA	405.54		0.0	*
2Q20		4/1/2020	NE	38.19	NA	NA	NA	405.74		139	*
MW-03											
3Q17	430.08	7/5/2017	NE	24.17	NA	NA	NA	405.91	395.41 - 385.41 (34.67 - 44.67)	3.1	*
4Q17		10/2/2017	NE	24.98	NA	NA	NA	405.10		0.0	*
1Q18		1/2/2018	NE	27.17	NA	NA	NA	402.91		0.4	*
2Q18		4/2/2018	NE	28.03	NA	NA	NA	402.05		0.0	*
3Q18		7/2/2018	NE	28.32	NA	NA	NA	401.76		0.2	*
4Q18		10/1/2018	NE	28.20	NA	NA	NA	401.88		0.0	*
1Q19		1/2/2019	NE	27.95	NA	NA	NA	402.13		0.0	*
2Q19		4/1/2019	NE	27.85	NA	NA	NA	402.23		0.0	*
3Q19	430.23	7/1/2019	NE	23.10	NA	NA	NA	407.13	395.56 - 385.56 (34.67 - 44.67)	0.0	*
4Q19		10/1/2019	NE	22.53	NA	NA	NA	407.70		0.0	*
1Q20		1/2/2020	NE	23.74	NA	NA	NA	406.49		0.0	*
2Q20		4/1/2020	NE	23.75	NA	NA	NA	406.48		0.0	*
MW-04											
3Q17	441.14	7/5/2017	NE	35.65	NA	NA	NA	405.49	396.08 - 386.08 (45.06 - 55.06)	10.6	*
4Q17		10/2/2017	NE	36.20	NA	NA	NA	404.94		0.2	*
1Q18		1/2/2018	NE	38.46	NA	NA	NA	402.68		1.9	*
2Q18		4/2/2018	NE	39.26	NA	NA	NA	401.88		29.2	*
3Q18		7/2/2018	NE	39.73	NA	NA	NA	401.41		0.0	*
4Q18		10/1/2018	NE	39.64	NA	NA	NA	401.50		0.0	*
1Q19		1/2/2019	NE	39.38	NA	NA	NA	401.76		0.0	*
2Q19		4/1/2019	NE	39.27	NA	NA	NA	401.87		0.0	*
3Q19	441.31	7/1/2019	NE	34.84	NA	NA	NA	406.47	396.25 - 386.25 (45.06 - 55.06)	16.9	*
4Q19		10/1/2019	NE	33.97	NA	NA	NA	407.34		0.7	*
1Q20		1/2/2020	NE	35.25	NA	NA	NA	406.06		0.0	*
2Q20		4/1/2020	NE	35.14	NA	NA	NA	406.17		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
MW-05											
3Q17	429.80	7/5/2017	NE	23.96	NA	NA	NA	405.84	395.83 - 385.83 (33.97 - 43.97)	0.3	*
4Q17		10/2/2017	NE	24.78	NA	NA	NA	405.02		0.0	*
1Q18		1/2/2018	NE	27.01	NA	NA	NA	402.79		0.1	*
2Q18		4/2/2018	NE	27.73	NA	NA	NA	402.07		0.0	*
3Q18		7/2/2018	NE	27.99	NA	NA	NA	401.81		0.1	*
4Q18		10/2/2018	NE	27.93	NA	NA	NA	401.87		0.0	*
1Q19		1/2/2019	NE	27.64	NA	NA	NA	402.16		0.0	*
2Q19		4/1/2019	NE	27.50	NA	NA	NA	402.30		0.0	*
3Q19	429.98	7/1/2019	NE	22.80	NA	NA	NA	407.18	396.01 - 386.01 (33.97 - 43.97)	4.1	*
4Q19		10/1/2019	NE	22.24	NA	NA	NA	407.74		0.0	*
1Q20		1/2/2020	NE	23.46	NA	NA	NA	406.52		0.0	*
2Q20		4/1/2020	NE	23.44	NA	NA	NA	406.54		0.0	*
MW-06A											
3Q17	432.14	7/5/2017	NE	26.11	NA	NA	NA	406.03	397.31 - 387.31 (34.83 - 44.83)	0.2	*
4Q17		10/2/2017	NE	26.98	NA	NA	NA	405.16		0.0	*
1Q18		1/2/2018	NE	29.18	NA	NA	NA	402.96		0.0	*
2Q18		4/2/2018	NE	29.82	NA	NA	NA	402.32	398.29 - 388.29 (33.85 - 43.85)	0.0	*
3Q18		7/2/2018	NE	30.05	NA	NA	NA	402.09		0.0	*
4Q18		10/2/2018	NE	30.03	NA	NA	NA	402.11		0.0	*
1Q19		1/2/2019	NE	29.77	NA	NA	NA	402.37		0.0	*
2Q19		4/2/2019	NE	29.42	NA	NA	NA	402.72		0.0	*
3Q19	432.33	7/1/2019	NE	24.94	NA	NA	NA	407.39	398.48 - 388.48 (33.85 - 43.85)	0.0	*
4Q19		10/1/2019	NE	24.40	NA	NA	NA	407.93		0.0	*
1Q20		1/2/2020	NE	25.60	NA	NA	NA	406.73		0.0	*
2Q20		4/1/2020	NE	25.59	NA	NA	NA	406.74		0.0	*
MW-06B											
3Q17	432.29	7/5/2017	NE	26.16	NA	NA	NA	406.13	368.24 - 363.24 (64.05 - 69.05)	37.6	*
4Q17		10/2/2017	NE	27.02	NA	NA	NA	405.27		0.0	*
1Q18		1/2/2018	NE	29.22	NA	NA	NA	403.07		0.0	*
2Q18		4/2/2018	NE	29.88	NA	NA	NA	402.41		0.0	*
3Q18		7/2/2018	NE	30.10	NA	NA	NA	402.19		0.0	*
4Q18		10/2/2018	NE	30.09	NA	NA	NA	402.20		0.0	*
1Q19		1/2/2019	NE	29.81	NA	NA	NA	402.48		0.0	*
2Q19		4/2/2019	NE	29.46	NA	NA	NA	402.83		0.0	*
3Q19	432.37	7/1/2019	NE	24.97	NA	NA	NA	407.40	368.32 - 363.32 (64.05 - 69.05)	0.0	*
4Q19		10/1/2019	NE	24.47	NA	NA	NA	407.90		0.1	*
1Q20		1/2/2020	NE	25.66	NA	NA	NA	406.71		0.0	*
2Q20		4/1/2020	NE	25.64	NA	NA	NA	406.73		0.0	*
MW-06C											
3Q17	432.11	7/5/2017	NE	25.96	NA	NA	NA	406.15	347.16 - 342.16 (84.95 - 89.95)	15.4	*
4Q17		10/2/2017	NE	26.81	NA	NA	NA	405.30		0.0	*
1Q18		1/2/2018	NE	29.01	NA	NA	NA	403.10		0.0	*
2Q18		4/2/2018	NE	29.68	NA	NA	NA	402.43		0.0	*
3Q18		7/2/2018	NE	29.90	NA	NA	NA	402.21		0.0	*
4Q18		10/2/2018	NE	29.87	NA	NA	NA	402.24		0.0	*
1Q19		1/2/2019	NE	29.61	NA	NA	NA	402.50		0.0	*
2Q19		4/2/2019	NE	29.25	NA	NA	NA	402.86		0.0	*
3Q19	432.18	7/1/2019	NE	24.77	NA	NA	NA	407.41	347.23 - 342.23 (84.95 - 89.95)	0.0	*
4Q19		10/1/2019	NE	24.25	NA	NA	NA	407.93		0.1	*
1Q20		1/2/2020	NE	25.46	NA	NA	NA	406.72		0.0	*
2Q20		4/1/2020	NE	25.40	NA	NA	NA	406.78		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-06D											
3Q17	431.99	7/5/2017	NE	25.83	NA	NA	NA	406.16	327.27 - 322.27 (104.72 - 109.72)	0.4	*
4Q17		10/2/2017	NE	26.68	NA	NA	NA	405.31		0.0	*
1Q18		1/2/2018	NE	28.87	NA	NA	NA	403.12		0.0	*
2Q18		4/2/2018	NE	29.53	NA	NA	NA	402.46		0.0	*
3Q18		7/2/2018	NE	29.74	NA	NA	NA	402.25		0.0	*
4Q18		10/2/2018	NE	29.72	NA	NA	NA	402.27		0.0	*
1Q19		1/2/2019	NE	29.45	NA	NA	NA	402.54		0.0	*
2Q19		4/2/2019	NE	29.11	NA	NA	NA	402.88		0.0	*
3Q19	432.06	7/1/2019	NE	24.60	NA	NA	NA	407.46	327.34 - 322.34 (104.72 - 109.72)	0.0	*
4Q19		10/1/2019	NE	24.09	NA	NA	NA	407.97		0.0	*
1Q20		1/2/2020	NE	25.31	NA	NA	NA	406.75		0.0	*
2Q20		4/1/2020	NE	25.25	NA	NA	NA	406.81		0.0	*
MW-07											
3Q17	443.10	7/5/2017	NE	37.82	NA	NA	NA	405.28	400.18 - 390.18 (42.92 - 52.92)	139	*
4Q17		10/2/2017	NE	38.37	NA	NA	NA	404.73		15000	*
1Q18		1/4/2018	NE	40.57	NA	NA	NA	402.53		2840	** PID data from 1/2/2018
2Q18		4/2/2018	NE	41.32	NA	NA	NA	401.78		490	*
3Q18		7/2/2018	NE	41.76	NA	NA	NA	401.34		5380	*
4Q18		10/2/2018	NE	41.72	NA	NA	NA	401.38		15000	*
1Q19		1/2/2019	NE	41.45	NA	NA	NA	401.65		2574	*
2Q19		4/1/2019	NE	41.33	NA	NA	NA	401.77		683	*
3Q19	443.31	7/1/2019	NE	36.94	NA	NA	NA	406.37	400.39 - 390.39 (42.92 - 52.92)	9714	*
4Q19		10/1/2019	NE	36.08	NA	NA	NA	407.23		3349	*
1Q20		1/2/2020	NE	37.39	NA	NA	NA	405.92		1900	*
2Q20		4/1/2020	NE	37.34	NA	NA	NA	405.97		5935	*
MW-08											
3Q17	434.11	7/5/2017	NE	28.55	NA	NA	NA	405.56	400.51 - 390.51 (33.60 - 43.60)	370	*
4Q17		10/2/2017	NE	29.28	NA	NA	NA	404.83		15000	*
1Q18		1/2/2018	NE	31.53	NA	NA	NA	402.58		87.6	*
2Q18		4/2/2018	NE	32.24	NA	NA	NA	401.87		169	*
3Q18		7/2/2018	NE	32.54	NA	NA	NA	401.57		231	*
4Q18		10/2/2018	NE	32.47	NA	NA	NA	401.64		1.4	*
1Q19		1/2/2019	NE	32.20	NA	NA	NA	401.91		0.0	*
2Q19		4/1/2019	NE	32.06	NA	NA	NA	402.05		0.0	*
3Q19	434.43	7/1/2019	NE	27.49	NA	NA	NA	406.94	400.83 - 390.83 (33.60 - 43.60)	6186	*
4Q19		10/1/2019	NE	26.85	NA	NA	NA	407.58		43.8	*
1Q20		1/2/2020	NE	28.06	NA	NA	NA	406.37		2.7	*
2Q20		4/1/2020	NE	28.02	NA	NA	NA	406.41		0.0	*
MW-09											
3Q17	445.20	7/5/2017	NE	38.89	NA	NA	NA	406.31	398.75 - 388.75 (46.45 - 56.45)	0.0	*
4Q17		10/2/2017	NE	39.22	NA	NA	NA	405.98		0.2	*
1Q18		1/2/2018	NE	41.08	NA	NA	NA	404.12		2.9	*
2Q18		4/3/2018	NE	42.12	NA	NA	NA	403.08	399.16 - 389.16 (46.04 - 56.04)	0.0	*
3Q18		7/2/2018	NE	42.86	NA	NA	NA	402.34		0.0	*
4Q18		10/1/2018	NE	42.91	NA	NA	NA	402.29		0.0	*
1Q19		1/3/2019	NE	42.85	NA	NA	NA	402.35		0.0	*
2Q19		4/1/2019	NE	42.90	NA	NA	NA	402.30		0.0	*
3Q19	445.28	7/1/2019	NE	39.16	NA	NA	NA	406.12	399.24 - 389.24 (46.04 - 56.04)	1.9	*
4Q19		10/1/2019	NE	37.90	NA	NA	NA	407.38		0.0	*
1Q20		1/2/2020	NE	38.61	NA	NA	NA	406.67		0.0	*
2Q20		4/1/2020	NE	38.52	NA	NA	NA	406.76		0.0	*

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MW-10											
3Q17	445.03	7/5/2017	NE	38.95	NA	NA	NA	406.08	400.60 - 390.60 (44.43 - 54.43)	0.0	*
4Q17		10/2/2017	NE	39.06	NA	NA	NA	405.97		0.3	*
1Q18		1/2/2018	NE	40.94	NA	NA	NA	404.09		6.9	*
2Q18		4/2/2018	NE	42.10	NA	NA	NA	402.93		0.0	*
3Q18		7/2/2018	NE	42.94	NA	NA	NA	402.09		0.0	*
4Q18		10/2/2018	NE	43.08	NA	NA	NA	401.95		0.0	*
1Q19		1/2/2019	NE	43.02	NA	NA	NA	402.01		0.0	*
2Q19		4/1/2019	NE	43.20	NA	NA	NA	401.83		5.3	*
3Q19	445.06	7/1/2019	NE	39.75	NA	NA	NA	405.31	400.63 - 390.63 (44.43 - 54.43)	0.0	*
4Q19		10/1/2019	NE	38.24	NA	NA	NA	406.82		0.0	*
1Q20		1/2/2020	NE	38.79	NA	NA	NA	406.27		0.0	*
2Q20		4/1/2020	NE	38.54	NA	NA	NA	406.52		0.0	*
MW-11											
3Q17	442.33	7/5/2017	NE	36.46	NA	NA	NA	405.87	400.67 - 390.67 (41.66 - 51.66)	0.0	*
4Q17		10/2/2017	NE	36.69	NA	NA	NA	405.64		0.0	*
1Q18		1/2/2018	NE	38.93	NA	NA	NA	403.40		0.6	*
2Q18		4/2/2018	NE	39.93	NA	NA	NA	402.40		0.0	*
3Q18		7/2/2018	NE	40.59	NA	NA	NA	401.74		0.0	*
4Q18		10/1/2018	NE	40.58	NA	NA	NA	401.75		0.0	*
1Q19		1/3/2019	NE	40.46	NA	NA	NA	401.87		0.0	*
2Q19		4/1/2019	NE	40.47	NA	NA	NA	401.86		0.0	*
3Q19	442.38	7/1/2019	NE	36.33	NA	NA	NA	406.05	400.72 - 390.72 (41.66 - 51.66)	0.0	*
4Q19		10/1/2019	NE	35.20	NA	NA	NA	407.18		0.0	*
1Q20		1/2/2020	NE	36.20	NA	NA	NA	406.18		0.0	*
2Q20		4/1/2020	NE	35.98	NA	NA	NA	406.40		0.0	*
MW-12											
3Q17	442.60	7/5/2017	NE	36.84	NA	NA	NA	405.76	400.68 - 390.68 (41.92 - 51.92)	8.1	*
4Q17		10/2/2017	NE	37.24	NA	NA	NA	405.36		0.0	*
1Q18		1/2/2018	NE	39.55	NA	NA	NA	403.05		0.8	*
2Q18		4/3/2018	NE	40.38	NA	NA	NA	402.22		0.0	*
3Q18		7/2/2018	NE	41.00	NA	NA	NA	401.60		0.0	*
4Q18		10/1/2018	NE	40.94	NA	NA	NA	401.66		0.0	*
1Q19		1/2/2019	NE	40.70	NA	NA	NA	401.90		0.0	*
2Q19		4/1/2019	NE	40.72	NA	NA	NA	401.88		0.0	*
3Q19	442.64	7/1/2019	NE	36.32	NA	NA	NA	406.32	400.72 - 390.72 (41.92 - 51.92)	0.0	*
4Q19		10/1/2019	NE	35.39	NA	NA	NA	407.25		0.0	*
1Q20		1/2/2020	NE	36.56	NA	NA	NA	406.08		0.0	*
2Q20		4/1/2020	NE	36.38	NA	NA	NA	406.26		0.1	*
MW-13											
3Q17	430.27	7/6/2017	NE	23.67	NA	NA	NA	406.60	404.70 - 394.70 (25.57 - 35.57)	162	*
4Q17		10/2/2017	NE	24.95	NA	NA	NA	405.32		69.1	*
1Q18		1/3/2018	NE	26.97	NA	NA	NA	403.30		65.2	
2Q18		4/4/2018	NE	27.92	NA	NA	NA	402.35	405.47 - 395.47 (24.80 - 34.80)	0.0	
3Q18		7/3/2018	NE	27.67	NA	NA	NA	402.60		0.0	
4Q18		10/2/2018	NE	27.56	NA	NA	NA	402.71		4398	
1Q19		1/3/2019	NE	27.27	NA	NA	NA	403.00		231	
2Q19		4/3/2019	NE	27.03	NA	NA	NA	403.24		3.0	
3Q19	430.30	7/1/2019	NE	21.84	NA	NA	NA	408.46	405.50 - 395.50 (24.80 - 34.80)	81.1	*
4Q19		10/2/2019	NE	21.90	NA	NA	NA	408.40		0.4	*
1Q20		1/3/2020	NE	23.29	NA	NA	NA	407.01		0.0	*
2Q20		4/3/2020	NE	23.02	NA	NA	NA	407.28		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
MW-14											
3Q17	434.44	7/6/2017	NE	28.34	NA	NA	NA	406.10	401.02 - 391.02 (33.42 - 43.42)	35.3	*
4Q17		10/3/2017	NE	29.24	NA	NA	NA	405.20		160	*
1Q18		1/4/2018	NE	31.23	NA	NA	NA	403.21		45.2	*
2Q18		4/4/2018	NE	32.17	NA	NA	NA	402.27		40.7	*
3Q18		7/2/2018	NE	32.19	NA	NA	NA	402.25		82.8	*
4Q18		10/3/2018	NE	32.07	NA	NA	NA	402.37		12.0	*
1Q19		1/4/2019	NE	31.78	NA	NA	NA	402.66		73.4	*
2Q19		4/2/2019	NE	31.52	NA	NA	NA	402.92		400	*
3Q19	434.61	7/2/2019	NE	27.22	NA	NA	NA	407.39	401.19 - 391.19 (33.42 - 43.42)	596	*
4Q19		10/2/2019	NE	26.64	NA	NA	NA	407.97		49.8	*
1Q20		1/3/2020	NE	27.98	NA	NA	NA	406.63		69.9	*
2Q20		4/3/2020	NE	27.66	NA	NA	NA	406.95		75.1	*
MW-16											
3Q17	443.39	7/5/2017	NE	38.18	NA	NA	NA	405.21	406.33 - 396.33 (37.06 - 47.06)	4.6	
4Q17		10/2/2017	NE	38.15	NA	NA	NA	405.24		0.0	
1Q18		1/2/2018	NE	40.68	NA	NA	NA	402.71		0.8	
2Q18		4/3/2018	NE	41.42	NA	NA	NA	401.97	405.89 - 395.89 (37.50 - 47.50)	0.0	
3Q18		7/2/2018	NE	42.33	NA	NA	NA	401.06		0.0	
4Q18		10/1/2018	NE	42.27	NA	NA	NA	401.12		0.0	
1Q19		1/11/2019	NE	42.10	NA	NA	NA	401.29		0.0	
2Q19		4/1/2019	NE	42.11	NA	NA	NA	401.28		0.0	
3Q19	443.60	7/2/2019	NE	37.87	NA	NA	NA	405.73	406.10 - 396.10 (37.50 - 47.50)	0.0	
4Q19		10/1/2019	NE	36.74	NA	NA	NA	406.86		0.0	*
1Q20		1/2/2020	NE	37.94	NA	NA	NA	405.66		0.0	
2Q20		4/13/2020	NE	37.64	NA	NA	NA	405.96		0.0	
MW-17											
3Q17	441.57	7/5/2017	NE	36.74	NA	NA	NA	404.83	407.28 - 392.28 (34.29 - 49.29)	0.0	
4Q17		10/2/2017	NE	36.03	NA	NA	NA	405.54		0.0	
1Q18		1/3/2018	NE	38.79	NA	NA	NA	402.78		362	PID data from 1/2/2018
2Q18		4/2/2018	NE	39.67	NA	NA	NA	401.90		0.0	
3Q18		7/2/2018	NE	40.82	NA	NA	NA	400.75		0.0	
4Q18		10/1/2018	NE	40.78	NA	NA	NA	400.79		0.0	
1Q19		1/3/2019	NE	40.54	NA	NA	NA	401.03		0.0	
2Q19		4/1/2019	NE	40.63	NA	NA	NA	400.94		0.0	
3Q19	441.78	7/1/2019	NE	36.88	NA	NA	NA	404.90	407.49 - 392.49 (34.29 - 49.29)	0.0	
4Q19		10/1/2019	NE	35.40	NA	NA	NA	406.38		0.0	
1Q20		1/2/2020	NE	36.67	NA	NA	NA	405.11		157	
2Q20		4/1/2020	NE	35.82	NA	NA	NA	405.96		0.0	
MW-18											
3Q17	442.04	7/5/2017	NE	37.38	NA	NA	NA	404.66	407.12 - 392.12 (34.92 - 49.92)	0.0	
4Q17		10/2/2017	NE	36.62	NA	NA	NA	405.42		0.0	
1Q18		1/2/2018	NE	39.73	NA	NA	NA	402.31		3.2	
2Q18		4/2/2018	NE	40.34	NA	NA	NA	401.70		0.0	
3Q18		7/2/2018	NE	41.47	NA	NA	NA	400.57		0.0	
4Q18		10/1/2018	NE	41.43	NA	NA	NA	400.61		0.0	
1Q19		1/2/2019	NE	41.13	NA	NA	NA	400.91		0.0	
2Q19		4/1/2019	NE	41.29	NA	NA	NA	400.75		0.0	
3Q19	442.24	7/1/2019	NE	37.30	NA	NA	NA	404.94	407.32 - 392.32 (34.92 - 49.92)	0.0	
4Q19		10/2/2019	NE	35.86	NA	NA	NA	406.38		0.0	
1Q20		1/2/2020	NE	37.29	NA	NA	NA	404.95		0.0	
2Q20		4/1/2020	NE	36.38	NA	NA	NA	405.86		0.0	

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
MW-19											
3Q17	442.77	7/5/2017	NE	37.93	NA	NA	NA	404.84	406.43 - 391.43 (36.34 - 51.34)	0.0	
4Q17		10/2/2017	NE	37.51	NA	NA	NA	405.26		0.0	
1Q18		1/4/2018	NE	40.32	NA	NA	NA	402.45		43.8	PID data from 1/2/2018
2Q18		4/3/2018	NE	40.90	NA	NA	NA	401.87		0.0	
3Q18		7/2/2018	NE	42.08	NA	NA	NA	400.69		0.0	
4Q18		10/1/2018	NE	42.04	NA	NA	NA	400.73		0.1	
1Q19		1/2/2019	NE	41.76	NA	NA	NA	401.01		0.0	
2Q19		4/1/2019	NE	41.92	NA	NA	NA	400.85		0.0	
3Q19	442.98	7/1/2019	NE	37.88	NA	NA	NA	405.10	406.64 - 391.64 (36.34 - 51.34)	0.0	
4Q19		10/2/2019	NE	36.49	NA	NA	NA	406.49		22.5	
1Q20		1/2/2020	NE	37.83	NA	NA	NA	405.15		0.0	
2Q20		4/1/2020	NE	37.20	NA	NA	NA	405.78		0.0	
MW-20											
3Q17	443.67	7/5/2017	NE	38.69	NA	NA	NA	404.98	407.79 - 392.79 (35.88 - 50.88)	38.7	
4Q17		10/2/2017	NE	38.64	NA	NA	NA	405.03		0.0	
1Q18		1/3/2018	NE	41.03	NA	NA	NA	402.64		27.0	PID data from 1/2/2018
2Q18		4/3/2018	NE	41.76	NA	NA	NA	401.91		0.0	
3Q18		7/2/2018	NE	42.88	NA	NA	NA	400.79		0.0	
4Q18		10/2/2018	NE	42.77	NA	NA	NA	400.90		0.0	
1Q19		1/2/2019	NE	42.55	NA	NA	NA	401.12		0.0	
2Q19		4/1/2019	NE	42.62	NA	NA	NA	401.05		0.0	
3Q19	443.86	7/1/2019	NE	38.56	NA	NA	NA	405.30	407.98 - 392.98 (35.88 - 50.88)	0.0	
4Q19		10/2/2019	NE	37.22	NA	NA	NA	406.64		0.0	
1Q20		1/2/2020	NE	38.49	NA	NA	NA	405.37		0.0	
2Q20		4/1/2020	NE	38.14	NA	NA	NA	405.72		0.0	
MW-21											
3Q17	443.81	7/5/2017	NE	38.74	NA	NA	NA	405.07	408.80 - 393.80 (35.01 - 50.01)	0.0	
4Q17		10/2/2017	NE	39.12	NA	NA	NA	404.69		0.0	
1Q18		1/2/2018	NE	41.44	NA	NA	NA	402.37		2.0	
2Q18		4/3/2018	NE	41.98	NA	NA	NA	401.83		0.1	
3Q18		7/2/2018	NE	42.74	NA	NA	NA	401.07		0.0	
4Q18		10/2/2018	NE	42.70	NA	NA	NA	401.11		8.7	
1Q19		1/2/2019	NE	42.42	NA	NA	NA	401.39		0.0	
2Q19		4/1/2019	NE	42.39	NA	NA	NA	401.42		0.0	
3Q19	444.01	7/1/2019	NE	38.11	NA	NA	NA	405.90	409.00 - 394.00 (35.01 - 50.01)	0.6	
4Q19		10/1/2019	NE	37.05	NA	NA	NA	406.96		0.0	
1Q20		1/2/2020	NE	38.39	NA	NA	NA	405.62		0.0	
2Q20		4/1/2020	NE	38.25	NA	NA	NA	405.76		0.0	
MW-22											
3Q17	442.16	7/5/2017	NE	36.89	NA	NA	NA	405.27	404.28 - 394.28 (37.88 - 47.88)	16.5	*
4Q17		10/2/2017	NE	36.74	NA	NA	NA	405.42		8.1	*
1Q18		1/3/2018	NE	39.14	NA	NA	NA	403.02		10.1	PID data from 1/2/2018
2Q18		4/3/2018	NE	40.01	NA	NA	NA	402.15	403.73 - 393.73 (38.43 - 48.43)	0.0	
3Q18		7/2/2018	NE	41.00	NA	NA	NA	401.16		0.0	
4Q18		10/2/2018	NE	40.96	NA	NA	NA	401.20		0.0	
1Q19		1/9/2019	NE	40.91	NA	NA	NA	401.25		0.0	
2Q19		4/2/2019	NE	40.79	NA	NA	NA	401.37		0.0	
3Q19	442.38	7/1/2019	NM	NM	NA	NA	NA	NA	403.95 - 393.95 (38.43 - 48.43)	NM	Unable to access
4Q19		10/2/2019	NE	35.50	NA	NA	NA	406.88		0.0	*
1Q20		1/2/2020	NE	36.84	NA	NA	NA	405.54		0.0	*
2Q20		4/1/2020	NE	36.22	NA	NA	NA	406.16		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-23											
3Q17	431.41	7/5/2017	NE	25.08	NA	NA	NA	406.33	402.39 - 392.39 (29.02 - 39.02)	0.5	*
4Q17		10/2/2017	NE	26.35	NA	NA	NA	405.06		0.0	*
1Q18		1/2/2018	NE	28.34	NA	NA	NA	403.07		0.6	*
2Q18		4/2/2018	NE	29.20	NA	NA	NA	402.21		36.4	
3Q18		7/2/2018	NE	29.19	NA	NA	NA	402.22		0.0	
4Q18		10/1/2018	NE	29.08	NA	NA	NA	402.33		0.0	
1Q19		1/3/2019	NE	28.81	NA	NA	NA	402.60		0.0	*
2Q19		4/2/2019	NE	28.49	NA	NA	NA	402.92		0.0	*
3Q19	431.57	7/1/2019	NE	23.34	NA	NA	NA	408.23	402.55 - 392.55 (29.02 - 39.02)	1.2	*
4Q19		10/1/2019	NE	23.30	NA	NA	NA	408.27		0.1	*
1Q20		1/2/2020	NE	24.54	NA	NA	NA	407.03		0.0	*
2Q20		4/1/2020	NE	24.54	NA	NA	NA	407.03		0.1	*
MW-24											
3Q17	443.42	7/5/2017	NE	37.75	NA	NA	NA	405.67	404.53 - 394.53 (38.89 - 48.89)	3.6	*
4Q17		10/2/2017	NE	38.03	NA	NA	NA	405.39		0.0	*
1Q18		1/3/2018	NE	40.22	NA	NA	NA	403.20		0.5	PID data from 1/2/2018
2Q18		4/3/2018	NE	41.17	NA	NA	NA	402.25	403.81 - 393.81 (39.61 - 49.61)	0.2	
3Q18		7/2/2018	NE	41.86	NA	NA	NA	401.56		0.0	
4Q18		10/1/2018	NE	41.83	NA	NA	NA	401.59		1.8	
1Q19		1/2/2019	NE	41.63	NA	NA	NA	401.79		0.0	
2Q19		4/1/2019	NE	41.70	NA	NA	NA	401.72		0.0	
3Q19	443.65	7/1/2019	NE	37.42	NA	NA	NA	406.23	404.04 - 394.04 (39.61 - 49.61)	0.0	*
4Q19		10/1/2019	NE	36.40	NA	NA	NA	407.25		0.0	*
1Q20		1/2/2020	NE	37.42	NA	NA	NA	406.23		0.0	*
2Q20		4/1/2020	NE	37.26	NA	NA	NA	406.39		0.0	*
MW-25											
3Q17	438.35	7/5/2017	NE	32.77	NA	NA	NA	405.58	402.76 - 392.76 (35.59 - 45.59)	61.9	*
4Q17		10/2/2017	NE	33.40	NA	NA	NA	404.95		1999	*
1Q18		1/3/2018	NE	35.51	NA	NA	NA	402.84		69.2	*
2Q18		4/2/2018	NE	36.44	NA	NA	NA	401.91		110	
3Q18		7/2/2018	NE	36.82	NA	NA	NA	401.53		0.5	
4Q18		10/2/2018	NE	36.75	NA	NA	NA	401.60		3.9	
1Q19		1/2/2019	NE	36.47	NA	NA	NA	401.88		44.7	
2Q19		4/1/2019	NE	36.36	NA	NA	NA	401.99		150	
3Q19	438.53	7/1/2019	NE	31.85	NA	NA	NA	406.68	402.94 - 392.94 (35.59 - 45.59)	32.8	*
4Q19		10/1/2019	NE	31.08	NA	NA	NA	407.45		76.5	*
1Q20		1/2/2020	NE	32.35	NA	NA	NA	406.18		99.5	*
2Q20		4/1/2020	NE	32.26	NA	NA	NA	406.27		103	*
MW-26											
3Q17	441.02	7/5/2017	NE	35.60	NA	NA	NA	405.42	402.87 - 392.87 (38.15 - 48.15)	0.0	*
4Q17		10/2/2017	NE	36.05	NA	NA	NA	404.97		0.0	*
1Q18		1/2/2018	NE	38.33	NA	NA	NA	402.69		5.0	
2Q18		4/4/2018	NE	39.35	NA	NA	NA	401.67		0.0	
3Q18		7/2/2018	NE	39.71	NA	NA	NA	401.31		0.2	
4Q18		10/1/2018	NE	39.60	NA	NA	NA	401.42		0.0	
1Q19		1/2/2019	NE	39.38	NA	NA	NA	401.64		0.0	
2Q19		4/1/2019	NE	39.30	NA	NA	NA	401.72		0.0	
3Q19	441.23	7/1/2019	NE	34.94	NA	NA	NA	406.29	403.08 - 393.08 (38.15 - 48.15)	0.0	*
4Q19		10/1/2019	NE	33.99	NA	NA	NA	407.24		0.0	*
1Q20		1/2/2020	NE	35.24	NA	NA	NA	405.99		0.0	*
2Q20		4/3/2020	NE	35.16	NA	NA	NA	406.07		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-27											
3Q17	443.40	7/5/2017	NE	37.35	NA	NA	NA	406.05	403.61 - 393.61 (39.79 - 49.79)	0.0	*
4Q17		10/3/2017	NE	37.25	NA	NA	NA	406.15		0.0	*
1Q18		1/2/2018	NE	38.78	NA	NA	NA	404.62		1.7	*
2Q18		4/3/2018	NE	40.19	NA	NA	NA	403.21		0.0	
3Q18		7/2/2018	NE	41.16	NA	NA	NA	402.24		0.0	
4Q18		10/1/2018	NE	41.11	NA	NA	NA	402.29		0.0	
1Q19		1/3/2019	NE	40.99	NA	NA	NA	402.41		0.0	
2Q19		4/1/2019	NE	41.26	NA	NA	NA	402.14		0.0	
3Q19	443.60	7/1/2019	NE	38.03	NA	NA	NA	405.57	403.81 - 393.81 (39.79 - 49.79)	0.0	*
4Q19		10/1/2019	NE	36.00	NA	NA	NA	407.60		0.0	*
1Q20		1/2/2020	NE	36.80	NA	NA	NA	406.80		0.0	*
2Q20		4/1/2020	NE	36.82	NA	NA	NA	406.78		0.0	*
MW-28											
3Q17	443.34	7/5/2017	NE	36.63	NA	NA	NA	406.71	409.73 - 399.73 (33.61 - 43.61)	0.0	
4Q17		10/2/2017	NE	36.61	NA	NA	NA	406.73		0.1	
1Q18		1/2/2018	NE	37.96	NA	NA	NA	405.38		0.9	
2Q18		4/3/2018	NE	39.39	NA	NA	NA	403.95		0.0	
3Q18		7/2/2018	NE	40.14	NA	NA	NA	403.20		0.0	
4Q18		10/1/2018	NE	40.18	NA	NA	NA	403.16		0.0	
1Q19		1/3/2019	NE	40.20	NA	NA	NA	403.14		0.0	
2Q19		4/1/2019	NE	40.46	NA	NA	NA	402.88		0.0	
3Q19	443.55	7/1/2019	NE	37.56	NA	NA	NA	405.99	409.94 - 399.94 (33.61 - 43.61)	0.0	
4Q19		10/1/2019	NE	35.72	NA	NA	NA	407.83		0.0	
1Q20		1/2/2020	NE	36.11	NA	NA	NA	407.44		0.0	
2Q20		4/1/2020	NE	36.24	NA	NA	NA	407.31		0.0	
P-01											
3Q17	442.73	7/5/2017	NE	26.73	NA	NA	NA	416.00	380.78 - 375.78 (61.95 - 66.95)	0.0	*
4Q17		10/3/2017	NE	28.94	NA	NA	NA	413.79		0.0	*
1Q18		1/4/2018	NE	30.05	NA	NA	NA	412.68		0.0	*
2Q18		4/4/2018	NE	30.60	NA	NA	NA	412.13	380.51 - 375.51 (62.22 - 67.22)	0.0	*
3Q18		7/3/2018	NE	31.03	NA	NA	NA	411.70		0.0	*
4Q18		10/3/2018	NE	31.93	NA	NA	NA	410.80		0.1	*
1Q19		1/3/2019	NE	33.27	NA	NA	NA	409.46		0.0	*
2Q19		4/3/2019	NE	32.24	NA	NA	NA	410.49		0.0	*
3Q19	442.98	7/2/2019	NE	29.96	NA	NA	NA	413.02	380.76 - 375.76 (62.22 - 67.22)	0.0	*
4Q19		10/2/2019	NE	29.51	NA	NA	NA	413.47		0.0	*
1Q20		1/3/2020	NE	29.63	NA	NA	NA	413.35		0.0	*
2Q20		4/1/2020	NE	27.85	NA	NA	NA	415.13		0.0	*
P-4U											
3Q17	442.54	7/5/2017	NE	28.12	NA	NA	NA	414.42	361.39 - 359.39 (81.15 - 83.15)	5.3	*
4Q17		10/3/2017	NE	30.04	NA	NA	NA	412.50		0.0	*
1Q18		1/4/2018	NE	31.25	NA	NA	NA	411.29		0.0	*
2Q18		4/4/2018	NE	32.40	NA	NA	NA	410.14		0.0	*
3Q18		7/3/2018	NE	32.61	NA	NA	NA	409.93		0.0	*
4Q18		10/3/2018	NE	33.25	NA	NA	NA	409.29		0.0	*
1Q19		1/4/2019	NE	34.45	NA	NA	NA	408.09		0.0	*
2Q19		4/3/2019	NE	34.06	NA	NA	NA	408.48		0.0	*
3Q19	442.74	7/2/2019	NE	31.80	NA	NA	NA	410.94	361.59 - 359.59 (81.15 - 83.15)	0.0	*
4Q19		10/2/2019	NE	31.10	NA	NA	NA	411.64		0.0	*
1Q20		1/3/2020	NE	31.11	NA	NA	NA	411.63		0.0	*
2Q20		4/1/2020	NE	29.40	NA	NA	NA	413.34		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-5L											
3Q17	443.84	7/5/2017	NE	27.33	NA	NA	NA	416.51	303.44 - 301.44 (140.40 - 142.40)	2.1	*
4Q17		10/3/2017	NE	30.23	NA	NA	NA	413.61		0.0	*
1Q18		1/3/2018	NE	31.43	NA	NA	NA	412.41		0.0	*
2Q18		4/3/2018	NE	31.85	NA	NA	NA	411.99		0.0	*
3Q18		7/3/2018	NE	32.59	NA	NA	NA	411.25		0.0	*
4Q18		10/3/2018	NE	33.59	NA	NA	NA	410.25		0.0	*
1Q19		1/4/2019	NE	34.93	NA	NA	NA	408.91		0.0	*
2Q19		4/3/2019	NE	34.05	NA	NA	NA	409.79		0.0	*
3Q19	444.01	7/2/2019	NE	31.10	NA	NA	NA	412.91	303.61 - 301.61 (140.40 - 142.40)	0.0	*
4Q19		10/2/2019	NE	30.98	NA	NA	NA	413.03		0.0	*
1Q20		1/3/2020	NE	31.18	NA	NA	NA	412.83		0.0	*
2Q20		4/1/2020	NE	29.25	NA	NA	NA	414.76		0.0	*
P-5U											
3Q17	444.24	7/5/2017	NE	29.11	NA	NA	NA	415.13	313.61 - 311.61 (130.63 - 132.63)	0.0	*
4Q17		10/3/2017	NE	31.40	NA	NA	NA	412.84		0.0	*
1Q18		1/3/2018	NE	32.44	NA	NA	NA	411.80		0.1	*
2Q18		4/3/2018	NE	33.14	NA	NA	NA	411.10		0.0	*
3Q18		7/3/2018	NE	33.86	NA	NA	NA	410.38		0.0	*
4Q18		10/3/2018	NE	34.77	NA	NA	NA	409.47		0.0	*
1Q19		1/4/2019	NE	36.21	NA	NA	NA	408.03		0.0	*
2Q19		4/3/2019	NE	35.29	NA	NA	NA	408.95		0.0	*
3Q19	444.42	7/2/2019	NE	33.08	NA	NA	NA	411.34	313.79 - 311.79 (130.63 - 132.63)	0.0	*
4Q19		10/2/2019	NE	32.31	NA	NA	NA	412.11		0.0	*
1Q20		1/3/2020	NE	32.29	NA	NA	NA	412.13		0.0	*
2Q20		4/1/2020	NE	30.38	NA	NA	NA	414.04		0.0	*
P-6U											
3Q17	443.45	7/5/2017	NE	28.50	NA	NA	NA	414.95	362.95 - 360.95 (80.50 - 82.50)	0.6	*
4Q17		10/3/2017	NE	31.82	NA	NA	NA	411.63		0.0	*
1Q18		1/4/2018	NE	32.14	NA	NA	NA	411.31		0.0	*
2Q18		4/3/2018	NE	32.69	NA	NA	NA	410.76		0.0	*
3Q18		7/3/2018	NE	33.39	NA	NA	NA	410.06		0.0	*
4Q18		10/3/2018	NE	34.06	NA	NA	NA	409.39		0.0	*
1Q19		1/4/2019	NE	35.37	NA	NA	NA	408.08		0.0	*
2Q19		4/3/2019	NE	35.00	NA	NA	NA	408.45		0.0	*
3Q19	443.63	7/2/2019	NE	32.51	NA	NA	NA	411.12	363.13 - 361.13 (80.50 - 82.50)	0.0	*
4Q19		10/2/2019	NE	31.92	NA	NA	NA	411.71		0.0	*
1Q20		1/3/2020	NE	32.04	NA	NA	NA	411.59		0.0	*
2Q20		4/1/2020	NE	30.20	NA	NA	NA	413.43		0.0	*
P-7U											
3Q17	443.91	7/5/2017	NE	28.52	NA	NA	NA	415.39	382.83 - 380.83 (61.08 - 63.08)	5.3	*
4Q17		10/3/2017	NE	31.10	NA	NA	NA	412.81		0.0	*
1Q18		1/3/2018	NE	32.38	NA	NA	NA	411.53		0.0	*
2Q18		4/3/2018	NE	33.01	NA	NA	NA	410.90		0.0	*
3Q18		7/3/2018	NE	33.65	NA	NA	NA	410.26		0.0	*
4Q18		10/3/2018	NE	34.39	NA	NA	NA	409.52		0.0	*
1Q19		1/4/2019	NE	35.76	NA	NA	NA	408.15		0.0	*
2Q19		4/3/2019	NE	35.25	NA	NA	NA	408.66		0.0	*
3Q19	444.08	7/2/2019	NE	32.68	NA	NA	NA	411.40	383.00 - 381.00 (61.08 - 63.08)	0.0	*
4Q19		10/2/2019	NE	32.15	NA	NA	NA	411.93		0.0	*
1Q20		1/3/2020	NE	32.34	NA	NA	NA	411.74		0.0	*
2Q20		4/1/2020	NE	30.45	NA	NA	NA	413.63		0.0	*

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TABLE 1
QUARTERLY GROUNDWATER MONITORING WELL GAUGING RESULTS

WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-8U											
3Q17	441.85	7/6/2017	NE	29.86	NA	NA	NA	411.99	382.33 - 380.33 (59.52 - 61.52)	0.0	*
4Q17		10/3/2017	NE	30.85	NA	NA	NA	411.00		1.6	*
1Q18		1/4/2018	NE	32.20	NA	NA	NA	409.65		83.5	*
2Q18		4/3/2018	NE	33.13	NA	NA	NA	408.72	381.72 - 379.72 (60.13 - 62.13)	0.0	*
3Q18		7/3/2018	NE	33.88	NA	NA	NA	407.97		0.0	*
4Q18		10/2/2018	NE	34.39	NA	NA	NA	407.46		0.0	*
1Q19		1/3/2019	NE	35.60	NA	NA	NA	406.25		0.0	*
2Q19		4/2/2019	NE	35.24	NA	NA	NA	406.61		0.0	*
3Q19	442.07	7/2/2019	NE	33.51	NA	NA	NA	408.56	381.94 - 379.94 (60.13 - 62.13)	0.0	*
4Q19		10/2/2019	NE	32.58	NA	NA	NA	409.49		0.0	*
1Q20		1/3/2020	NE	31.32	NA	NA	NA	410.75		0.0	*
2Q20		4/1/2020	NE	30.70	NA	NA	NA	411.37	382.72 - 380.72 (59.35 - 61.35)	0.0	*
P-9U											
3Q17	445.04	7/6/2017	NE	34.22	NA	NA	NA	410.82	344.45 - 342.45 (100.59 - 102.59)	0.0	*
4Q17		10/3/2017	NE	35.39	NA	NA	NA	409.65		0.0	*
1Q18		1/4/2018	NE	36.60	NA	NA	NA	408.44		40.5	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/3/2018	NE	38.51	NA	NA	NA	406.53		0.0	*
4Q18		10/2/2018	NE	39.11	NA	NA	NA	405.93		0.0	*
1Q19		1/3/2019	NE	40.12	NA	NA	NA	404.92		0.0	*
2Q19		4/2/2019	NE	40.14	NA	NA	NA	404.90		0.0	*
3Q19	445.20	7/2/2019	NE	38.31	NA	NA	NA	406.89	344.61 - 342.61 (100.59 - 102.59)	0.0	*
4Q19		10/2/2019	NE	41.75	NA	NA	NA	403.45		0.0	*
1Q20		1/2/2020	NE	36.80	NA	NA	NA	408.40		0.0	*
2Q20		4/1/2020	NE	35.40	NA	NA	NA	409.80		0.0	*
P-11L											
3Q17	442.55	7/6/2017	NE	31.05	NA	NA	NA	411.50	332.34 - 330.34 (110.21 - 112.21)	0.0	*
4Q17		10/3/2017	NE	31.66	NA	NA	NA	410.89		0.0	*
1Q18		1/4/2018	NE	32.83	NA	NA	NA	409.72		0.0	*
2Q18		4/3/2018	NE	33.92	NA	NA	NA	408.63		0.0	*
3Q18		7/3/2018	NE	34.66	NA	NA	NA	407.89		0.0	*
4Q18		10/2/2018	NE	35.08	NA	NA	NA	407.47		0.0	*
1Q19		1/4/2019	NE	36.07	NA	NA	NA	406.48		0.0	*
2Q19		4/3/2019	NE	36.07	NA	NA	NA	406.48		0.0	*
3Q19	442.76	7/2/2019	NE	34.80	NA	NA	NA	407.96	332.55 - 330.55 (110.21 - 112.21)	0.0	*
4Q19		10/2/2019	NE	33.20	NA	NA	NA	409.56		0.0	*
1Q20		1/3/2020	NE	32.86	NA	NA	NA	409.90		0.0	*
2Q20		4/2/2020	NE	31.37	NA	NA	NA	411.39		0.0	*
P-11U											
3Q17	443.17	7/6/2017	NE	31.65	NA	NA	NA	411.52	343.25 - 341.25 (99.92 - 101.92)	0.0	*
4Q17		10/3/2017	NE	32.27	NA	NA	NA	410.90		0.0	*
1Q18		1/4/2018	NE	33.45	NA	NA	NA	409.72		3.8	*
2Q18		4/3/2018	NE	34.50	NA	NA	NA	408.67		0.0	*
3Q18		7/3/2018	NE	35.25	NA	NA	NA	407.92		0.0	*
4Q18		10/2/2018	NE	35.68	NA	NA	NA	407.49		0.0	*
1Q19		1/4/2019	NE	36.73	NA	NA	NA	406.44		0.0	*
2Q19		4/3/2019	NE	36.67	NA	NA	NA	406.50		0.0	*
3Q19	443.38	7/2/2019	NE	34.94	NA	NA	NA	408.44	343.46 - 341.46 (99.92 - 101.92)	0.0	*
4Q19		10/2/2019	NE	33.80	NA	NA	NA	409.58		0.0	*
1Q20		1/3/2020	NE	33.49	NA	NA	NA	409.89		0.0	*
2Q20		4/2/2020	NE	31.98	NA	NA	NA	411.40		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-14											
3Q17	442.74	7/5/2017	NE	26.80	NA	NA	NA	415.94	395.41 - 385.41 (47.33 - 57.33)	0.0	*
4Q17		10/3/2017	NE	29.00	NA	NA	NA	413.74		0.0	*
1Q18		1/4/2018	NE	30.12	NA	NA	NA	412.62		0.0	*
2Q18		4/4/2018	NE	30.69	NA	NA	NA	412.05	395.27 - 385.27 (47.47 - 57.47)	0.0	*
3Q18		7/3/2018	NE	31.10	NA	NA	NA	411.64		0.0	*
4Q18		10/3/2018	NE	32.01	NA	NA	NA	410.73		0.0	*
1Q19		1/3/2019	NE	33.34	NA	NA	NA	409.40		0.0	*
2Q19		4/3/2019	NE	32.33	NA	NA	NA	410.41		0.0	*
3Q19	443.01	7/2/2019	NE	30.05	NA	NA	NA	412.96	395.54 - 385.54 (47.47 - 57.47)	0.0	*
4Q19		10/2/2019	NE	29.59	NA	NA	NA	413.42		0.0	*
1Q20		1/3/2020	NE	29.71	NA	NA	NA	413.30		0.0	*
2Q20		4/1/2020	NE	27.95	NA	NA	NA	415.06		0.0	*
P-15											
3Q17	443.69	7/5/2017	NE	28.75	NA	NA	NA	414.94	398.24 - 388.24 (45.45 - 55.45)	1.6	*
4Q17		10/3/2017	NE	30.70	NA	NA	NA	412.99		0.0	*
1Q18		1/4/2018	NE	31.93	NA	NA	NA	411.76		0.0	*
2Q18		4/4/2018	NE	33.19	NA	NA	NA	410.50		0.0	*
3Q18		7/3/2018	NE	33.28	NA	NA	NA	410.41		0.0	*
4Q18		10/3/2018	NE	33.86	NA	NA	NA	409.83		0.0	*
1Q19		1/4/2019	NE	35.10	NA	NA	NA	408.59		0.0	*
2Q19		4/3/2019	NE	34.75	NA	NA	NA	408.94		0.0	*
3Q19	443.88	7/2/2019	NE	32.11	NA	NA	NA	411.77	398.43 - 388.43 (45.45 - 55.45)	0.0	*
4Q19		10/2/2019	NE	31.70	NA	NA	NA	412.18		0.0	*
1Q20		1/3/2020	NE	31.80	NA	NA	NA	412.08		0.0	*
2Q20		4/1/2020	NE	30.10	NA	NA	NA	413.78		0.0	*
P-16											
3Q17	442.68	7/5/2017	NE	27.40	NA	NA	NA	415.28	396.94 - 386.94 (45.74 - 55.74)	4.2	*
4Q17		10/3/2017	NE	29.75	NA	NA	NA	412.93		0.0	*
1Q18		1/4/2018	NE	31.07	NA	NA	NA	411.61		0.0	*
2Q18		4/3/2018	NE	31.66	NA	NA	NA	411.02		0.0	*
3Q18		7/3/2018	NE	32.29	NA	NA	NA	410.39		0.0	*
4Q18		10/3/2018	NE	32.99	NA	NA	NA	409.69		0.0	*
1Q19		1/4/2019	NE	34.28	NA	NA	NA	408.40		0.0	*
2Q19		4/3/2019	NE	33.88	NA	NA	NA	408.80		0.0	*
3Q19	442.84	7/2/2019	NE	31.11	NA	NA	NA	411.73	397.10 - 387.10 (45.74 - 55.74)	0.0	*
4Q19		10/2/2019	NE	30.76	NA	NA	NA	412.08		0.0	*
1Q20		1/3/2020	NE	30.91	NA	NA	NA	411.93		0.0	*
2Q20		4/1/2020	NE	29.05	NA	NA	NA	413.79		0.0	*
P-43											
3Q17	444.44	7/6/2017	NE	31.87	NA	NA	NA	412.57	380.88 - 370.88 (63.56 - 73.56)	0.0	*
4Q17		10/3/2017	NE	33.15	NA	NA	NA	411.29		0.0	*
1Q18		1/4/2018	NE	34.34	NA	NA	NA	410.10		0.0	*
2Q18		4/3/2018	NE	35.37	NA	NA	NA	409.07		0.0	*
3Q18		7/3/2018	NE	36.11	NA	NA	NA	408.33		0.0	*
4Q18		10/2/2018	NE	36.53	NA	NA	NA	407.91		0.0	*
1Q19		1/4/2019	NE	37.59	NA	NA	NA	406.85		0.3	*
2Q19		4/3/2019	NE	37.55	NA	NA	NA	406.89		0.0	*
3Q19	444.62	7/2/2019	NE	35.45	NA	NA	NA	409.17	381.06 - 371.06 (63.56 - 73.56)	0.0	*
4Q19		10/2/2019	NE	34.64	NA	NA	NA	409.98		0.0	*
1Q20		1/3/2020	NE	34.37	NA	NA	NA	410.25		0.0	*
2Q20		4/2/2020	NE	32.83	NA	NA	NA	411.79		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-53											
3Q17	446.41	7/5/2017	NE	38.70	NA	NA	NA	407.71	407.91 - 382.91 (38.50 - 63.50)	0.0	
4Q17		10/3/2017	NE	38.92	NA	NA	NA	407.49		0.0	
1Q18		1/2/2018	NE	40.11	NA	NA	NA	406.30		0.5	
2Q18		4/3/2018	NE	41.38	NA	NA	NA	405.03		0.0	
3Q18		7/2/2018	NE	42.12	NA	NA	NA	404.29		0.0	
4Q18		10/2/2018	NE	42.54	NA	NA	NA	403.87		0.0	
1Q19		1/3/2019	NE	42.64	NA	NA	NA	403.77		0.0	
2Q19		4/1/2019	NE	42.79	NA	NA	NA	403.62	406.10 - 381.10 (40.31 - 65.31)	0.0	
3Q19	446.57	7/1/2019	NE	40.33	NA	NA	NA	406.24	406.26 - 381.26 (40.31 - 65.31)	0.0	
4Q19		10/1/2019	NE	38.69	NA	NA	NA	407.88		0.0	*
1Q20		1/2/2020	NE	38.63	NA	NA	NA	407.94		0.0	*
2Q20		4/2/2020	NE	38.36	NA	NA	NA	408.21		0.0	*
P-54											
3Q17	442.32	7/5/2017	NE	36.41	NA	NA	NA	405.91	404.32 - 379.32 (38.00 - 63.00)	0.0	*
4Q17		10/2/2017	NE	36.88	NA	NA	NA	405.44		0.0	*
1Q18		1/2/2018	NE	39.02	NA	NA	NA	403.30		0.4	
2Q18		4/3/2018	NE	39.94	NA	NA	NA	402.38		0.0	
3Q18		7/2/2018	NE	40.51	NA	NA	NA	401.81		0.0	
4Q18		10/2/2018	NE	40.50	NA	NA	NA	401.82		0.0	
1Q19		1/2/2019	NE	40.29	NA	NA	NA	402.03		0.0	
2Q19		4/1/2019	NE	40.36	NA	NA	NA	401.96		0.0	
3Q19	442.52	7/1/2019	NE	35.96	NA	NA	NA	406.56	404.52 - 379.52 (38.00 - 63.00)	0.0	*
4Q19		10/1/2019	NE	35.07	NA	NA	NA	407.45		0.0	*
1Q20		1/2/2020	NE	36.05	NA	NA	NA	406.47		0.0	*
2Q20		4/1/2020	NE	35.92	NA	NA	NA	406.60		0.0	*
P-55R											
3Q17	443.79	7/5/2017	37.88	37.97	405.82	405.91	0.09	405.89	403.36 - 393.36 (40.43 - 50.43)	162	*
4Q17		10/2/2017	37.81	37.98	405.81	405.98	0.17	405.95		104	*
1Q18		1/2/2018	40.30	40.38	403.41	403.49	0.08	403.47		260	*
2Q18		4/2/2018	39.20	41.25	402.54	404.59	2.05	404.18		238	*
3Q18		7/2/2018	41.51	42.12	401.67	402.28	0.61	402.16		152	
4Q18		10/1/2018	41.49	42.18	401.61	402.30	0.69	402.16		153	
1Q19		1/2/2019	41.84	42.27	401.52	401.95	0.43	401.86		15000	
2Q19		4/1/2019	41.21	41.52	402.27	402.58	0.31	402.52		280	
3Q19	444.01	7/1/2019	37.66	38.16	405.85	406.35	0.50	406.25	403.58 - 393.58 (40.43 - 50.43)	66.7	*
4Q19		10/1/2019	36.11	36.17	407.84	407.90	0.06	407.89		210	*
1Q20		1/2/2020	36.73	36.78	407.23	407.28	0.05	407.27		85.8	*
2Q20		4/1/2020	36.62	36.65	407.36	407.39	0.03	407.38		67.0	*
P-56											
3Q17	446.14	7/5/2017	NE	41.18	NA	NA	NA	404.96	405.32 - 380.32 (40.82 - 65.82)	0.2	
4Q17		10/2/2017	NE	41.05	NA	NA	NA	405.09		91.2	
1Q18		1/3/2018	NE	43.51	NA	NA	NA	402.63		209	
2Q18		4/3/2018	NE	44.24	NA	NA	NA	401.90		0.0	
3Q18		7/2/2018	NE	45.34	NA	NA	NA	400.80		0.0	
4Q18		10/1/2018	NE	45.27	NA	NA	NA	400.87		0.0	
1Q19		1/2/2019	NE	45.11	NA	NA	NA	401.03		0.0	
2Q19		4/1/2019	NE	45.07	NA	NA	NA	401.07		0.0	
3Q19	446.32	7/1/2019	NE	41.09	NA	NA	NA	405.23	405.50 - 380.50 (40.82 - 65.82)	0.1	
4Q19		10/1/2019	NE	39.72	NA	NA	NA	406.60		109	*
1Q20		1/2/2020	NE	41.01	NA	NA	NA	405.31		112	
2Q20		4/1/2020	NE	40.70	NA	NA	NA	405.62		113	*

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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-57											
3Q17	446.96	7/5/2017	NE	41.92	NA	NA	NA	405.04	402.77 - 392.77 (44.19 - 54.19)	132	*
4Q17		10/2/2017	NE	42.35	NA	NA	NA	404.61		47.2	*
1Q18		1/2/2018	NE	44.59	NA	NA	NA	402.37		190	
2Q18		4/3/2018	NE	45.10	NA	NA	NA	401.86		1.3	
3Q18		7/2/2018	NE	45.89	NA	NA	NA	401.07		1.7	
4Q18		10/2/2018	NE	45.86	NA	NA	NA	401.10		0.2	
1Q19		1/2/2019	NE	45.66	NA	NA	NA	401.30		0.0	
2Q19		4/1/2019	NE	45.49	NA	NA	NA	401.47		0.0	
3Q19	447.15	7/1/2019	NE	41.35	NA	NA	NA	405.80	402.96 - 392.96 (44.19 - 54.19)	6.8	*
4Q19		10/1/2019	NE	40.19	NA	NA	NA	406.96		85.8	*
1Q20		1/2/2020	NE	41.59	NA	NA	NA	405.56		64.2	*
2Q20		4/1/2020	NE	41.43	NA	NA	NA	405.72		105	*
P-58											
3Q17	444.94	7/5/2017	NE	39.81	NA	NA	NA	405.13	404.73 - 379.73 (40.21 - 65.21)	11.4	*
4Q17		10/2/2017	40.32	40.35	404.59	404.62	0.03	404.61		5.1	
1Q18		1/2/2018	42.53	42.55	402.39	402.41	0.02	402.41		180	
2Q18		4/2/2018	NE	43.19	NA	NA	NA	401.75		0.0	
3Q18		7/2/2018	NE	43.70	NA	NA	NA	401.24		0.0	
		7/12/2018	43.63	43.64	401.30	401.31	0.01	401.31		0.0	
4Q18		10/1/2018	NE	43.66	NA	NA	NA	401.28		0.0	
1Q19		1/2/2019	43.42	43.43	401.51	401.52	0.01	401.52		0.0	
2Q19		4/1/2019	NE	43.19	NA	NA	NA	401.75		0.0	
3Q19	445.16	7/1/2019	NE	38.92	NA	NA	NA	406.24	404.95 - 379.95 (40.21 - 65.21)	2.5	*
4Q19		10/1/2019	37.93	37.94	407.22	407.23	0.01	407.23		67.2	*
1Q20		1/2/2020	39.38	40.00	405.16	405.78	0.62	405.66		38.5	*
2Q20		4/1/2020	39.30	39.31	405.85	405.86	0.01	405.86		41.0	*
P-59											
3Q17	446.86	7/5/2017	NE	42.08	NA	NA	NA	404.78	398.95 - 373.95 (47.91 - 72.91)	322	*
4Q17		10/2/2017	NE	41.57	NA	NA	NA	405.29		189	*
1Q18		1/4/2018	NE	44.44	NA	NA	NA	402.42		3119	*
2Q18		4/3/2018	NE	44.99	NA	NA	NA	401.87		108	*
3Q18		7/2/2018	NE	46.26	NA	NA	NA	400.60		214	*
4Q18		10/1/2018	NE	46.19	NA	NA	NA	400.67		179	*
1Q19		1/2/2019	NE	45.95	NA	NA	NA	400.91		15000	*
2Q19		4/1/2019	46.05	46.06	400.80	400.81	0.01	400.81		313	*
3Q19	447.07	7/1/2019	NE	42.06	NA	NA	NA	405.01	399.16 - 374.16 (47.91 - 72.91)	400	*
		7/15/2019	41.53	41.54	405.53	405.54	0.01	405.54		406	*
4Q19		10/1/2019	NE	40.61	NA	NA	NA	406.46		180	*
1Q20		1/2/2020	NE	41.99	NA	NA	NA	405.08		113	*
2Q20		4/1/2020	NE	41.35	NA	NA	NA	405.72		161	*
P-60											
3Q17	446.69	7/5/2017	41.49	41.51	405.18	405.20	0.02	405.20	403.24 - 383.24 (43.45 - 63.45)	15.0	*
4Q17		10/2/2017	41.12	41.15	405.54	405.57	0.03	405.56		34.9	*
1Q18		1/2/2018	43.54	43.56	403.13	403.15	0.02	403.15		118	
2Q18		4/3/2018	NE	44.25	NA	NA	NA	402.44	402.04 - 382.04 (44.65 - 64.65)	15.6	*
3Q18		7/2/2018	45.61	45.62	401.07	401.08	0.01	401.08		40.7	
4Q18		10/1/2018	45.61	45.63	401.06	401.08	0.02	401.08		36.7	
1Q19		1/2/2019	45.48	45.54	401.15	401.21	0.06	401.20		923	
2Q19		4/1/2019	45.62	45.63	401.06	401.07	0.01	401.07		83.5	
3Q19	446.88	7/1/2019	NE	41.98	NA	NA	NA	404.90	402.23 - 382.23 (44.65 - 64.65)	31.7	*
4Q19		10/1/2019	NE	40.42	NA	NA	NA	406.46		1.7	*
		10/15/2019	40.41	40.42	406.46	406.47	0.01	406.47		1.7	*
1Q20		1/2/2020	41.44	41.45	405.43	405.44	0.01	405.44		6.6	*
2Q20		4/1/2020	NE	40.87	NA	NA	NA	406.01		3.4	*

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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-61											
3Q17	444.47	7/6/2017	39.60	39.71	404.76	404.87	0.11	404.85	398.80 - 373.80 (45.68 - 70.68)	935	*
4Q17		10/2/2017	39.43	39.61	404.86	405.04	0.18	405.00		20.1	*
1Q18		1/2/2018	41.78	41.84	402.63	402.69	0.06	402.68		313	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/2/2018	43.77	44.20	400.27	400.70	0.43	400.61		91.3	*
4Q18		10/2/2018	43.89	43.93	400.54	400.58	0.04	400.57		237	*
1Q19		1/3/2019	43.79	43.83	400.64	400.68	0.04	400.67		375	*
2Q19		4/1/2019	43.80	43.81	400.66	400.67	0.01	400.67		417	*
3Q19	444.66	7/1/2019	40.39	40.40	404.26	404.27	0.01	404.27	398.98 - 373.98 (45.68 - 70.68)	220	*
4Q19		10/1/2019	NE	38.74	NA	NA	NA	405.92		68.4	*
1Q20		1/7/2020	40.07	40.08	404.58	404.59	0.01	404.59		8.5	*
2Q20		4/2/2020	39.46	39.49	405.17	405.20	0.03	405.19		37.0	*
P-62											
3Q17	442.43	7/5/2017	37.28	37.33	405.10	405.15	0.05	405.14	400.96 - 375.96 (41.47 - 66.47)	32.0	*
4Q17		10/3/2017	37.49	37.52	404.91	404.94	0.03	404.93		201	*
1Q18		1/3/2018	39.05	39.09	403.34	403.38	0.04	403.37		345	*
2Q18		4/2/2018	40.03	41.01	401.42	402.40	0.98	402.20		151	*
3Q18		7/2/2018	41.38	42.49	399.94	401.05	1.11	400.83		0.0	
4Q18		10/3/2018	41.43	42.42	400.01	401.00	0.99	400.80		0.4	
1Q19		1/3/2019	41.47	42.57	399.86	400.96	1.10	400.74		1.2	
2Q19		4/1/2019	41.58	42.34	400.09	400.85	0.76	400.70		63.7	
3Q19	442.60	7/1/2019	38.86	38.89	403.71	403.74	0.03	403.73	401.13 - 376.13 (41.47 - 66.47)	301	*
4Q19		10/1/2019	37.05	37.08	405.52	405.55	0.03	405.54		104	*
1Q20		1/2/2020	37.59	37.65	404.95	405.01	0.06	405.00		40.1	*
2Q20		4/2/2020	37.19	37.21	405.39	405.41	0.02	405.41		46.0	*
P-63											
3Q17	445.85	7/6/2017	40.97	41.01	404.84	404.88	0.04	404.87	398.56 - 373.56 (47.29 - 72.29)	208	*
4Q17		10/3/2017	41.32	41.35	404.50	404.53	0.03	404.52		113	*
1Q18		1/3/2018	42.27	42.29	403.56	403.58	0.02	403.58		33.8	*
2Q18		4/4/2018	44.09	44.11	401.74	401.76	0.02	401.76		36.5	*
3Q18		7/3/2018	45.41	45.43	400.42	400.44	0.02	400.44		222	*
4Q18		10/2/2018	45.59	45.62	400.23	400.26	0.03	400.25		70.1	*
1Q19		1/3/2019	45.58	45.61	400.24	400.27	0.03	400.26		68.2	*
2Q19		4/1/2019	45.62	45.65	400.20	400.23	0.03	400.22		852	*
3Q19	446.06	7/1/2019	43.86	43.91	402.15	402.20	0.05	402.19	398.77 - 373.77 (47.29 - 72.29)	81.2	*
4Q19		10/2/2019	41.89	41.92	404.14	404.17	0.03	404.16		5.0	*
1Q20		1/2/2020	41.63	41.65	404.41	404.43	0.02	404.43		8.7	*
2Q20		4/2/2020	41.16	41.17	404.89	404.90	0.01	404.90		10.5	*
P-64											
3Q17	446.89	7/6/2017	42.09	42.16	404.73	404.80	0.07	404.79	399.66 - 374.66 (47.23 - 72.23)	332	*
4Q17		10/3/2017	NE	42.60	NA	NA	NA	404.29		215	*
1Q18		1/3/2018	43.20	43.23	403.66	403.69	0.03	403.68		278	*
2Q18		4/4/2018	45.14	45.19	401.70	401.75	0.05	401.74		184	*
3Q18		7/3/2018	46.69	46.73	400.16	400.20	0.04	400.19		269	*
4Q18		10/2/2018	46.94	46.99	399.90	399.95	0.05	399.94		178	*
1Q19		1/2/2019	47.21	47.53	399.36	399.68	0.32	399.62		2559	
2Q19		4/1/2019	46.96	47.08	399.81	399.93	0.12	399.91		1220	*
3Q19	446.78	7/1/2019	45.63	45.72	401.06	401.15	0.09	401.13	399.55 - 374.55 (47.23 - 72.23)	206	*
4Q19		10/2/2019	43.58	43.61	403.17	403.20	0.03	403.19		77.5	*
1Q20		1/2/2020	42.98	43.04	403.74	403.80	0.06	403.79		38.9	*
2Q20		4/1/2020	42.35	42.40	404.38	404.43	0.05	404.42		154	*

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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-65											
3Q17	444.60	7/6/2017	NE	39.89	NA	NA	NA	404.71	397.58 - 372.58 (47.02 - 72.02)	65.6	*
4Q17		10/3/2017	NE	40.14	NA	NA	NA	404.46		83.2	*
1Q18		1/3/2018	NE	41.10	NA	NA	NA	403.50		5.0	*
2Q18		4/4/2018	NE	43.02	NA	NA	NA	401.58		3.5	*
3Q18		7/3/2018	NE	43.58	NA	NA	NA	401.02		24.9	*
4Q18		10/2/2018	NE	43.91	NA	NA	NA	400.69		4.0	*
1Q19		1/3/2019	NE	44.19	NA	NA	NA	400.41		115	*
2Q19		4/1/2019	43.92	43.93	400.67	400.68	0.01	400.68		185	*
3Q19	444.77	7/1/2019	NE	41.97	NA	NA	NA	402.80	397.75 - 372.75 (47.02 - 72.02)	72.8	*
4Q19		10/2/2019	40.01	40.02	404.75	404.76	0.01	404.76		31.1	*
1Q20		1/2/2020	NE	39.96	NA	NA	NA	404.81		9.0	*
2Q20		4/2/2020	NE	39.54	NA	NA	NA	405.23		1.3	*
P-66											
3Q17	436.81	7/6/2017	NE	31.32	NA	NA	NA	405.49	402.09 - 377.09 (34.72 - 59.72)	29.9	*
4Q17		10/2/2017	NE	31.96	NA	NA	NA	404.85		870	*
1Q18		1/4/2018	NE	34.06	NA	NA	NA	402.75		68.7	*
2Q18		4/4/2018	NE	35.12	NA	NA	NA	401.69		3.7	
3Q18		7/2/2018	NE	35.20	NA	NA	NA	401.61		0.0	
4Q18		10/3/2018	NE	35.03	NA	NA	NA	401.78		8.0	
1Q19		1/4/2019	NE	34.75	NA	NA	NA	402.06		1.2	
2Q19		4/2/2019	NE	34.48	NA	NA	NA	402.33		2.6	*
3Q19	437.00	7/2/2019	NE	30.27	NA	NA	NA	406.73	402.28 - 377.28 (34.72 - 59.72)	87.7	*
4Q19		10/2/2019	NE	29.50	NA	NA	NA	407.50		42.2	*
1Q20		1/3/2020	NE	30.98	NA	NA	NA	406.02		77.3	*
2Q20		4/3/2020	NE	30.84	NA	NA	NA	406.16		122	*
P-67											
3Q17	444.10	7/6/2017	NE	37.52	NA	NA	NA	406.58	402.12 - 377.12 (41.98 - 66.98)	4.9	*
4Q17		10/2/2017	NE	38.10	NA	NA	NA	406.00		366	*
1Q18		1/4/2018	39.98	39.99	404.11	404.12	0.01	404.12		36.7	*
2Q18		4/4/2018	NE	41.04	NA	NA	NA	403.06		6.0	*
3Q18		7/2/2018	41.21	41.24	402.86	402.89	0.03	402.88		0.0	*
4Q18		10/3/2018	41.12	41.14	402.96	402.98	0.02	402.98		0.0	*
1Q19		1/4/2019	40.97	41.00	403.10	403.13	0.03	403.12		25.0	*
2Q19		4/2/2019	40.81	40.82	403.28	403.29	0.01	403.29		99.9	*
3Q19	444.30	7/2/2019	37.20	37.24	407.06	407.10	0.04	407.09	402.32 - 377.32 (41.98 - 66.98)	1.1	*
4Q19		10/2/2019	36.27	36.32	407.98	408.03	0.05	408.02		0.9	*
1Q20		1/3/2020	37.30	37.31	406.99	407.00	0.01	407.00		4.4	*
2Q20		4/3/2020	36.91	36.92	407.38	407.39	0.01	407.39		12.0	*
P-68											
3Q17	445.18	7/5/2017	40.10	40.12	405.06	405.08	0.02	405.08	399.92 - 374.92 (45.26 - 70.26)	181	*
4Q17		10/2/2017	39.54	39.56	405.62	405.64	0.02	405.64		125	*
1Q18		1/3/2018	42.05	42.07	403.11	403.13	0.02	403.13		137	*
2Q18		4/3/2018	42.89	42.94	402.24	402.29	0.05	402.28	401.42 - 376.42 (43.76 - 68.76)	92.0	*
3Q18		7/2/2018	44.25	44.32	400.86	400.93	0.07	400.92		136	
4Q18		10/2/2018	44.22	44.31	400.87	400.96	0.09	400.94		169	
1Q19		1/3/2019	44.07	44.26	400.92	401.11	0.19	401.07		187	
2Q19		4/1/2019	44.21	44.34	400.84	400.97	0.13	400.94		468	
3Q19	445.38	7/1/2019	40.75	40.88	404.50	404.63	0.13	404.60	401.62 - 376.62 (43.76 - 68.76)	259	*
4Q19		10/1/2019	39.13	39.17	406.21	406.25	0.04	406.24		189	*
1Q20		1/2/2020	40.15	40.20	405.18	405.23	0.05	405.22		115	*
2Q20		4/2/2020	39.42	39.46	405.92	405.96	0.04	405.95		181	*

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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-69											
3Q17	443.40	7/5/2017	NE	38.76	NA	NA	NA	404.64	402.58 - 377.58 (40.82 - 65.82)	142	*
4Q17		10/2/2017	NE	38.04	NA	NA	NA	405.36		210	*
1Q18		1/3/2018	NE	40.76	NA	NA	NA	402.64		120	*
2Q18		4/4/2018	NE	42.00	NA	NA	NA	401.40		0.0	
3Q18		7/2/2018	NE	43.00	NA	NA	NA	400.40		0.0	
4Q18		10/2/2018	NE	42.95	NA	NA	NA	400.45		0.0	
1Q19		1/3/2019	NE	42.80	NA	NA	NA	400.60		0.1	
2Q19		4/1/2019	NE	42.96	NA	NA	NA	400.44		0.0	
3Q19	443.77	7/1/2019	NE	39.38	NA	NA	NA	404.39	402.95 - 377.95 (40.82 - 65.82)	270	*
4Q19		10/1/2019	NE	37.70	NA	NA	NA	406.07		42.3	*
1Q20		1/2/2020	NE	38.94	NA	NA	NA	404.83		21.2	*
2Q20		4/2/2020	NE	38.05	NA	NA	NA	405.72		72.0	*
P-70											
3Q17	442.95	7/6/2017	38.00	38.03	404.92	404.95	0.03	404.94	398.28 - 373.28 (44.67 - 69.67)	2525	*
4Q17		10/2/2017	37.73	37.76	405.19	405.22	0.03	405.21		187	*
1Q18		1/2/2018	40.03	40.06	402.89	402.92	0.03	402.91		282	*
2Q18		4/2/2018	40.94	40.98	401.97	402.01	0.04	402.00		90.4	*
3Q18		7/2/2018	42.23	42.26	400.69	400.72	0.03	400.71		238	*
4Q18		10/2/2018	42.25	42.27	400.68	400.70	0.02	400.70		297	*
1Q19		1/3/2019	42.18	42.19	400.76	400.77	0.01	400.77		204	*
2Q19		4/1/2019	42.26	42.27	400.68	400.69	0.01	400.69		1406	*
3Q19	443.11	7/1/2019	38.92	38.93	404.18	404.19	0.01	404.19	398.44 - 373.44 (44.67 - 69.67)	371	*
4Q19		10/1/2019	37.22	37.23	405.88	405.89	0.01	405.89		221	*
1Q20		1/2/2020	NE	38.15	NA	NA	NA	404.96		150	*
2Q20		4/2/2020	37.65	37.66	405.45	405.46	0.01	405.46		190	*
P-71											
3Q17	444.94	7/6/2017	NE	39.66	NA	NA	NA	405.28	402.33 - 377.33 (42.61 - 67.61)	555	*
4Q17		10/3/2017	NE	40.01	NA	NA	NA	404.93		82.3	*
1Q18		1/3/2018	NE	41.42	NA	NA	NA	403.52		6.0	*
2Q18		4/4/2018	NE	42.99	NA	NA	NA	401.95		50.4	
3Q18		7/3/2018	NE	43.36	NA	NA	NA	401.58		41.2	
4Q18		10/2/2018	NE	43.61	NA	NA	NA	401.33		108	
1Q19		1/3/2019	NE	43.73	NA	NA	NA	401.21		123	
2Q19		4/1/2019	NE	43.38	NA	NA	NA	401.56		350	
3Q19	445.09	7/1/2019	NE	40.85	NA	NA	NA	404.24	402.48 - 377.48 (42.61 - 67.61)	52.7	*
4Q19		10/1/2019	NE	38.67	NA	NA	NA	406.42		72.4	*
1Q20		1/2/2020	NE	39.49	NA	NA	NA	405.60		49.6	*
2Q20		4/2/2020	NE	39.30	NA	NA	NA	405.79		101	*
P-72											
3Q17	444.49	7/6/2017	NE	39.27	NA	NA	NA	405.22	398.72 - 373.72 (45.77 - 70.77)	32.9	*
4Q17		10/3/2017	NE	39.69	NA	NA	NA	404.80		6.9	*
1Q18		1/3/2018	NE	40.84	NA	NA	NA	403.65		40.0	*
2Q18		4/4/2018	NE	42.81	NA	NA	NA	401.68		2.6	*
3Q18		7/3/2018	NE	42.90	NA	NA	NA	401.59		2.3	*
4Q18		10/3/2018	43.01	43.02	401.47	401.48	0.01	401.48		7.2	*
1Q19		1/3/2019	43.11	43.12	401.37	401.38	0.01	401.38		135	*
2Q19		4/1/2019	42.93	42.94	401.55	401.56	0.01	401.56		83.4	*
3Q19	444.70	7/1/2019	NE	40.20	NA	NA	NA	404.50	398.93 - 373.93 (45.77 - 70.77)	11.0	*
4Q19		10/2/2019	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
1Q20		1/2/2020	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
2Q20		4/2/2020	NE	38.84	NA	NA	NA	405.86		0.8	*

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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-73											
3Q17	443.86	7/6/2017	NE	39.59	NA	NA	NA	404.27	402.27 - 377.27 (41.59 - 66.59)	848	*
4Q17		10/3/2017	NE	40.25	NA	NA	NA	403.61		127	*
1Q18		1/3/2018	NE	41.93	NA	NA	NA	401.93		67.8	
2Q18		4/4/2018	NE	43.21	NA	NA	NA	400.65		0.0	
3Q18		7/3/2018	NE	43.43	NA	NA	NA	400.43		0.0	
4Q18		10/3/2018	NE	43.24	NA	NA	NA	400.62		1.8	
1Q19		1/3/2019	NE	43.06	NA	NA	NA	400.80		6.6	
2Q19		4/2/2019	NE	42.70	NA	NA	NA	401.16		2.6	
3Q19	444.02	7/1/2019	NE	38.98	NA	NA	NA	405.04	402.42 - 377.42 (41.59 - 66.59)	488	*
4Q19		10/1/2019	NE	37.68	NA	NA	NA	406.34		226	*
1Q20		1/2/2020	NE	39.30	NA	NA	NA	404.72		38.4	*
2Q20		4/2/2020	NE	38.75	NA	NA	NA	405.27		42.8	*
P-74											
3Q17	442.72	7/5/2017	NE	38.04	NA	NA	NA	404.68	398.29 - 373.29 (44.43 - 69.43)	0.0	*
4Q17		10/2/2017	NE	37.43	NA	NA	NA	405.29		0.0	*
1Q18		1/3/2018	NE	40.21	NA	NA	NA	402.51		1.6	*
2Q18		4/4/2018	NE	39.81	NA	NA	NA	402.91	398.89 - 373.89 (43.83 - 68.83)	0.0	*
3Q18		7/2/2018	NE	42.35	NA	NA	NA	400.37		0.0	*
4Q18		10/2/2018	NE	42.18	NA	NA	NA	400.54		1.1	*
1Q19		1/3/2019	NE	41.95	NA	NA	NA	400.77		0.0	*
2Q19		4/1/2019	NE	40.46	NA	NA	NA	402.26		0.7	* Gauging result anomalous
3Q19	442.93	7/1/2019	NE	38.32	NA	NA	NA	404.61	399.10 - 374.10 (43.83 - 68.83)	0.0	*
4Q19		10/1/2019	NE	36.71	NA	NA	NA	406.22		0.2	*
1Q20		1/2/2020	NE	38.07	NA	NA	NA	404.86		0.0	*
2Q20		4/2/2020	NE	37.28	NA	NA	NA	405.65		0.0	*
P-75											
3Q17	446.42	7/6/2017	NE	42.45	NA	NA	NA	403.97	403.29 - 378.29 (43.13 - 68.13)	12.4	*
4Q17		10/2/2017	NE	41.90	NA	NA	NA	404.52		57.8	*
1Q18		1/4/2018	NE	44.01	NA	NA	NA	402.41		3.0	
2Q18		4/4/2018	NE	45.06	NA	NA	NA	401.36		0.0	
3Q18		7/2/2018	NE	45.15	NA	NA	NA	401.27		0.0	
4Q18		10/3/2018	NE	45.06	NA	NA	NA	401.36		14.4	
1Q19		1/4/2019	NE	44.74	NA	NA	NA	401.68		4.6	
2Q19		4/2/2019	NE	44.43	NA	NA	NA	401.99		21.6	
3Q19	446.68	7/2/2019	NE	40.50	NA	NA	NA	406.18	403.55 - 378.55 (43.13 - 68.13)	10.5	*
4Q19		10/2/2019	NE	39.53	NA	NA	NA	407.15		5.7	*
1Q20		1/3/2020	NE	41.08	NA	NA	NA	405.60		33.8	*
2Q20		4/3/2020	NE	40.65	NA	NA	NA	406.03		87.7	*
P-82A											
3Q17	435.02	7/6/2017	NE	24.70	NA	NA	NA	410.32	401.81 - 386.81 (33.21 - 48.21)	0.0	*
4Q17		10/3/2017	NE	25.97	NA	NA	NA	409.05		0.0	*
1Q18		1/3/2018	NE	27.54	NA	NA	NA	407.48		0.0	*
2Q18		4/3/2018	NE	27.83	NA	NA	NA	407.19		0.0	*
3Q18		7/2/2018	NE	28.14	NA	NA	NA	406.88		0.0	*
4Q18		10/3/2018	NE	28.38	NA	NA	NA	406.64		0.0	*
1Q19		1/4/2019	NE	28.25	NA	NA	NA	406.77		0.0	*
2Q19		4/2/2019	NE	27.83	NA	NA	NA	407.19		0.0	*
3Q19	434.94	7/1/2019	NE	24.08	NA	NA	NA	410.86	401.73 - 386.73 (33.21 - 48.21)	0.0	*
4Q19		10/1/2019	NE	23.86	NA	NA	NA	411.08		0.1	*
1Q20		1/2/2020	NE	24.67	NA	NA	NA	410.27		0.0	*
2Q20		4/2/2020	NE	24.11	NA	NA	NA	410.83		0.0	*

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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-82B											
3Q17	434.48	7/6/2017	NE	24.42	NA	NA	NA	410.06	370.88 - 368.88 (63.60 - 65.60)	0.0	*
4Q17		10/3/2017	NE	25.70	NA	NA	NA	408.78		0.0	*
1Q18		1/3/2018	NE	27.26	NA	NA	NA	407.22		0.0	*
2Q18		4/3/2018	NE	27.54	NA	NA	NA	406.94	371.68 - 369.68 (62.80 - 64.80)	0.0	*
3Q18		7/2/2018	NE	27.85	NA	NA	NA	406.63		0.0	*
4Q18		10/3/2018	NE	28.09	NA	NA	NA	406.39		0.0	*
1Q19		1/4/2019	NE	27.97	NA	NA	NA	406.51		0.0	*
2Q19		4/2/2019	NE	27.55	NA	NA	NA	406.93		0.0	*
3Q19	434.68	7/1/2019	NE	23.78	NA	NA	NA	410.90	371.88 - 369.88 (62.80 - 64.80)	0.0	*
4Q19		10/1/2019	NE	23.59	NA	NA	NA	411.09		0.0	*
1Q20		1/2/2020	NE	24.40	NA	NA	NA	410.28		0.0	*
2Q20		4/2/2020	NE	23.82	NA	NA	NA	410.86		0.0	*
P-82C											
3Q17	434.21	7/6/2017	NE	24.12	NA	NA	NA	410.09	351.44 - 349.44 (82.77 - 84.77)	0.0	*
4Q17		10/3/2017	NE	25.41	NA	NA	NA	408.80		0.0	*
1Q18		1/3/2018	NE	26.98	NA	NA	NA	407.23		0.0	*
2Q18		4/3/2018	NE	27.22	NA	NA	NA	406.99		0.0	*
3Q18		7/2/2018	NE	27.65	NA	NA	NA	406.56		0.0	*
4Q18		10/3/2018	NE	27.79	NA	NA	NA	406.42		0.0	*
1Q19		1/4/2019	NE	27.67	NA	NA	NA	406.54		0.0	*
2Q19		4/2/2019	NE	27.25	NA	NA	NA	406.96		0.0	*
3Q19	434.41	7/1/2019	NE	23.49	NA	NA	NA	410.92	351.64 - 349.64 (82.77 - 84.77)	0.0	*
4Q19		10/1/2019	NE	23.30	NA	NA	NA	411.11		0.0	*
1Q20		1/2/2020	NE	24.72	NA	NA	NA	409.69		0.0	*
2Q20		4/2/2020	NE	23.52	NA	NA	NA	410.89		0.0	*
P-82D											
3Q17	434.89	7/6/2017	NE	24.90	NA	NA	NA	409.99	323.47 - 321.47 (111.42 - 113.42)	0.0	*
4Q17		10/3/2017	NE	26.20	NA	NA	NA	408.69		0.0	*
1Q18		1/3/2018	NE	27.78	NA	NA	NA	407.11		0.0	*
2Q18		4/3/2018	NE	27.99	NA	NA	NA	406.90	323.35 - 321.35 (111.54 - 113.54)	0.0	*
3Q18		7/2/2018	NE	28.35	NA	NA	NA	406.54		0.0	*
4Q18		10/3/2018	NE	28.57	NA	NA	NA	406.32		0.0	*
1Q19		1/4/2019	NE	28.42	NA	NA	NA	406.47		0.0	*
2Q19		4/2/2019	NE	27.99	NA	NA	NA	406.90		0.0	*
3Q19	435.09	7/1/2019	NE	24.20	NA	NA	NA	410.89	323.55 - 321.55 (111.54 - 113.54)	0.0	*
4Q19		10/1/2019	NE	24.02	NA	NA	NA	411.07		0.0	*
1Q20		1/2/2020	NE	25.86	NA	NA	NA	409.23		0.0	*
2Q20		4/2/2020	NE	24.27	NA	NA	NA	410.82		0.0	*
P-83A											
3Q17	445.36	7/6/2017	NE	38.15	NA	NA	NA	407.21	398.71 - 383.71 (46.65 - 61.65)	0.0	*
4Q17		10/3/2017	NE	38.88	NA	NA	NA	406.48		0.0	*
1Q18		1/3/2018	NE	39.76	NA	NA	NA	405.60		0.0	*
2Q18		4/2/2018	NE	40.74	NA	NA	NA	404.62		0.0	*
3Q18		7/2/2018	NE	42.59	NA	NA	NA	402.77		0.0	*
4Q18		10/1/2018	NE	43.03	NA	NA	NA	402.33		0.0	*
1Q19		1/2/2019	NE	43.55	NA	NA	NA	401.81		0.0	*
2Q19		4/2/2019	NE	43.34	NA	NA	NA	402.02	397.96 - 382.96 (47.40 - 62.40)	0.0	*
3Q19	445.54	7/1/2019	NE	41.95	NA	NA	NA	403.59	398.14 - 383.14 (47.40 - 62.40)	0.0	*
4Q19		10/2/2019	NE	40.55	NA	NA	NA	404.99		0.0	*
1Q20		1/2/2020	NE	39.80	NA	NA	NA	405.74		0.0	*
2Q20		4/2/2020	NE	38.84	NA	NA	NA	406.70		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-83B											
3Q17	445.55	7/6/2017	NE	38.71	NA	NA	NA	406.84	375.90 - 373.90 (69.65 - 71.65)	0.0	*
4Q17		10/3/2017	NE	39.13	NA	NA	NA	406.42		0.0	*
1Q18		1/3/2018	NE	40.01	NA	NA	NA	405.54		0.6	*
2Q18		4/2/2018	NE	41.01	NA	NA	NA	404.54	371.75 - 369.75 (73.80 - 75.80)	0.0	*
3Q18		7/2/2018	NE	42.83	NA	NA	NA	402.72		0.0	*
4Q18		10/1/2018	NE	43.29	NA	NA	NA	402.26		0.0	*
1Q19		1/2/2019	NE	43.80	NA	NA	NA	401.75		0.0	*
2Q19		4/2/2019	NE	43.59	NA	NA	NA	401.96		0.0	*
3Q19	445.77	7/1/2019	NE	42.20	NA	NA	NA	403.57	371.97 - 369.97 (73.80 - 75.80)	0.0	*
4Q19		10/2/2019	NE	40.80	NA	NA	NA	404.97		0.0	*
1Q20		1/2/2020	NE	40.06	NA	NA	NA	405.71		0.0	*
2Q20		4/2/2020	NE	39.09	NA	NA	NA	406.68		0.0	*
P-83C											
3Q17	445.78	7/6/2017	NE	38.56	NA	NA	NA	407.22	353.39 - 351.39 (92.39 - 94.39)	0.0	*
4Q17		10/3/2017	NE	39.27	NA	NA	NA	406.51		0.0	*
1Q18		1/3/2018	NE	40.16	NA	NA	NA	405.62		0.0	*
2Q18		4/2/2018	NE	41.15	NA	NA	NA	404.63		0.0	*
3Q18		7/2/2018	NE	42.99	NA	NA	NA	402.79		0.0	*
4Q18		10/1/2018	NE	43.44	NA	NA	NA	402.34		0.0	*
1Q19		1/2/2019	NE	43.95	NA	NA	NA	401.83		0.0	*
2Q19		4/2/2019	NE	43.75	NA	NA	NA	402.03		0.0	*
3Q19	445.95	7/1/2019	NE	42.44	NA	NA	NA	403.51	353.56 - 351.56 (92.39 - 94.39)	0.0	*
4Q19		10/2/2019	NE	40.96	NA	NA	NA	404.99		0.0	*
1Q20		1/2/2020	NE	40.21	NA	NA	NA	405.74		0.0	*
2Q20		4/2/2020	NE	39.25	NA	NA	NA	406.70		0.0	*
P-83D											
3Q17	445.70	7/6/2017	NE	38.51	NA	NA	NA	407.19	311.99 - 309.99 (133.71 - 135.71)	0.0	*
4Q17		10/3/2017	NE	39.25	NA	NA	NA	406.45		0.0	*
1Q18		1/3/2018	NE	40.11	NA	NA	NA	405.59		0.0	*
2Q18		4/2/2018	NE	41.13	NA	NA	NA	404.57	311.90 - 309.90 (133.80 - 135.80)	0.0	*
3Q18		7/2/2018	NE	43.96	NA	NA	NA	401.74		0.0	*
4Q18		10/1/2018	NE	43.41	NA	NA	NA	402.29		0.0	*
1Q19		1/2/2019	NE	43.93	NA	NA	NA	401.77		0.0	*
2Q19		4/2/2019	NE	43.72	NA	NA	NA	401.98		0.0	*
3Q19	445.86	7/1/2019	NE	42.40	NA	NA	NA	403.46	312.06 - 310.06 (133.8 - 135.8)	0.0	*
4Q19		10/2/2019	NE	40.94	NA	NA	NA	404.92		0.0	*
1Q20		1/2/2020	NE	40.19	NA	NA	NA	405.67		0.0	*
2Q20		4/2/2020	NE	39.22	NA	NA	NA	406.64		0.0	*
P-84A											
3Q17	446.49	7/5/2017	NM	NM	NA	NA	NA	NA	397.99 - 382.99 (48.50 - 63.50)	NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.69	NA	NA	NA	406.80		0.0	*
1Q18		1/3/2018	NE	40.84	NA	NA	NA	405.65		0.1	*
2Q18		4/4/2018	NE	42.22	NA	NA	NA	404.27	397.57 - 382.57 (48.92 - 63.92)	0.0	*
3Q18		7/3/2018	NE	43.16	NA	NA	NA	403.33		0.0	*
4Q18		10/3/2018	NE	43.55	NA	NA	NA	402.94		0.0	*
1Q19		1/3/2019	NE	43.79	NA	NA	NA	402.70		0.0	*
2Q19		4/2/2019	NE	43.79	NA	NA	NA	402.70		0.0	*
3Q19	446.63	7/1/2019	NE	41.69	NA	NA	NA	404.94	397.71 - 382.71 (48.92 - 63.92)	0.0	*
4Q19		10/1/2019	NE	40.00	NA	NA	NA	406.63		0.0	*
1Q20		1/2/2020	NE	39.85	NA	NA	NA	406.78		0.0	*
2Q20		4/1/2020	NE	39.39	NA	NA	NA	407.24		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-84B											
3Q17	446.21	7/5/2017	NM	NM	NA	NA	NA	NA	372.71 - 370.71 (73.50 - 75.50)	NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.43	NA	NA	NA	406.78		0.0	*
1Q18		1/3/2018	NE	40.56	NA	NA	NA	405.65		0.1	*
2Q18		4/4/2018	NE	41.94	NA	NA	NA	404.27		0.0	*
3Q18		7/3/2018	NE	42.90	NA	NA	NA	403.31		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.93		0.0	*
1Q19		1/3/2019	NE	43.51	NA	NA	NA	402.70		0.1	*
2Q19		4/2/2019	NE	43.51	NA	NA	NA	402.70		0.0	*
3Q19	446.35	7/1/2019	NE	41.41	NA	NA	NA	404.94	372.85 - 370.85 (73.50 - 75.50)	0.0	*
4Q19		10/1/2019	NE	39.72	NA	NA	NA	406.63		0.0	*
1Q20		1/2/2020	NE	39.56	NA	NA	NA	406.79		0.0	*
2Q20		4/1/2020	NE	39.14	NA	NA	NA	407.21		0.0	*
P-84C											
3Q17	446.22	7/5/2017	NM	NM	NA	NA	NA	NA	352.17 - 350.17 (94.05 - 96.05)	NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.42	NA	NA	NA	406.80		0.0	*
1Q18		1/3/2018	NE	40.57	NA	NA	NA	405.65		0.0	*
2Q18		4/4/2018	NE	41.96	NA	NA	NA	404.26		0.0	*
3Q18		7/3/2018	NE	43.89	NA	NA	NA	402.33		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.94		0.0	*
1Q19		1/3/2019	NE	43.53	NA	NA	NA	402.69		0.1	*
2Q19		4/2/2019	NE	43.52	NA	NA	NA	402.70		0.0	*
3Q19	446.37	7/1/2019	NE	41.45	NA	NA	NA	404.92	352.32 - 350.32 (94.05 - 96.05)	0.0	*
4Q19		10/1/2019	NE	39.75	NA	NA	NA	406.62		0.0	*
1Q20		1/2/2020	NE	38.57	NA	NA	NA	407.80		0.0	*
2Q20		4/1/2020	NE	39.13	NA	NA	NA	407.24		0.0	*
P-84D											
3Q17	446.24	7/5/2017	NM	NM	NA	NA	NA	NA	325.09 - 323.09 (121.15 - 123.15)	NM	Inaccess ble due to construction
4Q17		10/3/2017	NE	39.45	NA	NA	NA	406.79		0.0	*
1Q18		1/3/2018	NE	40.58	NA	NA	NA	405.66		0.1	*
2Q18		4/4/2018	NE	41.97	NA	NA	NA	404.27	325.41 - 323.41 (120.83 - 122.83)	0.0	*
3Q18		7/3/2018	NE	42.89	NA	NA	NA	403.35		0.0	*
4Q18		10/3/2018	NE	43.28	NA	NA	NA	402.96		0.0	*
1Q19		1/3/2019	NE	43.51	NA	NA	NA	402.73		NM	*
2Q19		4/2/2019	NE	43.52	NA	NA	NA	402.72		0.0	*
3Q19	446.38	7/1/2019	NE	41.42	NA	NA	NA	404.96	325.55 - 323.55 (120.83 - 122.83)	0.0	*
4Q19		10/1/2019	NE	39.73	NA	NA	NA	406.65		0.0	*
1Q20		1/2/2020	NE	39.57	NA	NA	NA	406.81		0.0	*
2Q20		4/1/2020	NE	39.14	NA	NA	NA	407.24		0.0	*
P-88A											
3Q17	443.09	7/6/2017	NE	30.57	NA	NA	NA	412.52	404.69 - 389.69 (38.40 - 53.40)	0.0	*
4Q17		10/2/2017	NE	31.10	NA	NA	NA	411.99		0.0	*
1Q18		1/4/2018	NE	32.60	NA	NA	NA	410.49		0.0	*
2Q18		4/4/2018	NE	34.04	NA	NA	NA	409.05		0.0	*
3Q18		7/2/2018	NE	33.86	NA	NA	NA	409.23		0.0	*
4Q18		10/3/2018	NE	34.01	NA	NA	NA	409.08		0.0	*
1Q19		1/4/2019	NE	34.31	NA	NA	NA	408.78		0.0	*
2Q19		4/2/2019	NE	34.22	NA	NA	NA	408.87		0.0	*
3Q19	443.27	7/2/2019	NE	31.34	NA	NA	NA	411.93	404.87 - 389.87 (38.40 - 53.40)	0.0	*
4Q19		10/2/2019	NE	30.41	NA	NA	NA	412.86		0.0	*
1Q20		1/3/2020	NE	30.75	NA	NA	NA	412.52		0.0	*
2Q20		4/3/2020	NE	30.01	NA	NA	NA	413.26		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-88B											
3Q17	443.16	7/6/2017	NE	30.64	NA	NA	NA	412.52	371.16 - 369.16 (72.00 - 74.00)	0.0	*
4Q17		10/2/2017	NE	31.15	NA	NA	NA	412.01		0.0	*
1Q18		1/4/2018	NE	32.67	NA	NA	NA	410.49		0.0	*
2Q18		4/4/2018	NE	34.09	NA	NA	NA	409.07	371.51 - 369.51 (71.65 - 73.65)	0.0	*
3Q18		7/2/2018	NE	33.84	NA	NA	NA	409.32		0.0	*
4Q18		10/3/2018	NE	34.08	NA	NA	NA	409.08		0.1	*
1Q19		1/4/2019	NE	34.37	NA	NA	NA	408.79		0.0	*
2Q19		4/2/2019	NE	34.29	NA	NA	NA	408.87		0.0	*
3Q19	443.35	7/2/2019	NE	31.41	NA	NA	NA	411.94	371.70 - 369.70 (71.65 - 73.65)	0.0	*
4Q19		10/2/2019	NE	30.47	NA	NA	NA	412.88		0.0	*
1Q20		1/3/2020	NE	30.80	NA	NA	NA	412.55		0.0	*
2Q20		4/3/2020	NE	30.07	NA	NA	NA	413.28		0.0	*
P-88C											
3Q17	443.13	7/6/2017	NE	30.60	NA	NA	NA	412.53	350.83 - 348.83 (92.30 - 94.30)	0.0	*
4Q17		10/2/2017	NE	31.10	NA	NA	NA	412.03		0.0	*
1Q18		1/4/2018	NE	32.62	NA	NA	NA	410.51		0.0	*
2Q18		4/4/2018	NE	34.05	NA	NA	NA	409.08		0.0	*
3Q18		7/2/2018	NE	33.88	NA	NA	NA	409.25		0.0	*
4Q18		10/3/2018	NE	34.02	NA	NA	NA	409.11		0.0	*
1Q19		1/4/2019	NE	34.32	NA	NA	NA	408.81		0.0	*
2Q19		4/2/2019	NE	34.24	NA	NA	NA	408.89		0.0	*
3Q19	443.31	7/2/2019	NE	31.37	NA	NA	NA	411.94	351.01 - 349.01 (92.30 - 94.30)	0.0	*
4Q19		10/2/2019	NE	30.44	NA	NA	NA	412.87		0.0	*
1Q20		1/3/2020	NE	30.77	NA	NA	NA	412.54		0.0	*
2Q20		4/3/2020	NE	30.04	NA	NA	NA	413.27		0.0	*
P-88D											
3Q17	443.20	7/6/2017	NE	30.69	NA	NA	NA	412.51	329.50 - 327.50 (113.70 - 115.70)	0.0	*
4Q17		10/2/2017	NE	31.29	NA	NA	NA	411.91		0.0	*
1Q18		1/4/2018	NE	32.82	NA	NA	NA	410.38		0.0	*
2Q18		4/4/2018	NE	34.17	NA	NA	NA	409.03	331.03 - 329.03 (112.17 - 114.17)	0.0	*
3Q18		7/2/2018	NE	34.09	NA	NA	NA	409.11		0.0	*
4Q18		10/3/2018	NE	34.26	NA	NA	NA	408.94		0.0	*
1Q19		1/4/2019	NE	34.45	NA	NA	NA	408.75		0.0	*
2Q19		4/2/2019	NE	34.30	NA	NA	NA	408.90		0.0	*
3Q19	443.38	7/2/2019	NE	31.35	NA	NA	NA	412.03	331.21 - 329.21 (112.17 - 114.17)	0.0	*
4Q19		10/2/2019	NE	30.56	NA	NA	NA	412.82		0.0	*
1Q20		1/3/2020	NE	30.89	NA	NA	NA	412.49		0.0	*
2Q20		4/3/2020	NE	29.97	NA	NA	NA	413.41		0.0	*
P-89B											
3Q17	447.44	7/6/2017	NE	37.49	NA	NA	NA	409.95	370.08 - 368.08 (77.36 - 79.36)	0.0	*
4Q17		10/3/2017	NE	38.17	NA	NA	NA	409.27		0.0	*
1Q18		1/4/2018	NE	39.23	NA	NA	NA	408.21		0.0	*
2Q18		4/3/2018	NE	40.47	NA	NA	NA	406.97		0.0	*
3Q18		7/3/2018	NE	41.39	NA	NA	NA	406.05		0.0	*
4Q18		10/2/2018	NE	41.74	NA	NA	NA	405.70		0.0	*
1Q19		1/3/2019	NE	42.63	NA	NA	NA	404.81		0.0	*
2Q19		4/2/2019	NE	42.41	NA	NA	NA	405.03		0.0	*
3Q19	447.64	7/2/2019	NE	41.60	NA	NA	NA	406.04	370.28 - 368.28 (77.36 - 79.36)	0.0	*
4Q19		10/2/2019	NE	40.11	NA	NA	NA	407.53		0.0	*
1Q20		1/2/2020	NE	39.20	NA	NA	NA	408.44		0.0	*
2Q20		4/3/2020	NE	37.98	NA	NA	NA	409.66		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-89C											
3Q17	447.76	7/6/2017	NE	37.85	NA	NA	NA	409.91	350.13 - 348.13 (97.63 - 99.63)	0.0	*
4Q17		10/3/2017	NE	38.53	NA	NA	NA	409.23		0.0	*
1Q18		1/4/2018	NE	39.65	NA	NA	NA	408.11		0.0	*
2Q18		4/3/2018	NE	40.79	NA	NA	NA	406.97		0.0	*
3Q18		7/3/2018	NE	42.09	NA	NA	NA	405.67		0.0	*
4Q18		10/2/2018	NE	42.11	NA	NA	NA	405.65		0.0	*
1Q19		1/3/2019	NE	43.03	NA	NA	NA	404.73		0.0	*
2Q19		4/2/2019	NE	42.75	NA	NA	NA	405.01	351.36 - 349.36 (96.40 - 98.40)	0.0	*
3Q19	447.96	7/2/2019	NE	41.95	NA	NA	NA	406.01	351.56 - 349.56 (96.40 - 98.40)	0.0	*
4Q19		10/2/2019	NE	40.46	NA	NA	NA	407.50		0.0	*
1Q20		1/2/2020	NE	39.54	NA	NA	NA	408.42		0.0	*
2Q20		4/3/2020	NE	38.27	NA	NA	NA	409.69		0.0	*
P-89D											
3Q17	447.63	7/6/2017	NE	37.84	NA	NA	NA	409.79	307.29 - 305.29 (140.34 - 142.34)	0.0	*
4Q17		10/3/2017	NE	38.48	NA	NA	NA	409.15		0.0	*
1Q18		1/4/2018	NE	39.48	NA	NA	NA	408.15		2.0	*
2Q18		4/3/2018	NE	40.95	NA	NA	NA	406.68		0.0	*
3Q18		7/3/2018	NE	41.76	NA	NA	NA	405.87		0.0	*
4Q18		10/2/2018	NE	42.15	NA	NA	NA	405.48		0.0	*
1Q19		1/3/2019	NE	43.11	NA	NA	NA	404.52		0.0	*
2Q19		4/2/2019	NE	42.87	NA	NA	NA	404.76		0.0	*
3Q19	447.83	7/2/2019	NE	42.05	NA	NA	NA	405.78	309.33 - 307.33 (138.50 - 140.50)	0.0	*
4Q19		10/2/2019	NE	40.53	NA	NA	NA	407.30		0.0	*
1Q20		1/2/2020	NE	39.58	NA	NA	NA	408.25		0.0	*
2Q20		4/3/2020	NE	38.29	NA	NA	NA	409.54		0.0	*
P-91A											
3Q17	447.24	7/6/2017	43.18	43.21	404.03	404.06	0.03	404.05	395.72 - 380.72 (51.51 - 66.51)	304	*
4Q17		10/3/2017	43.79	43.80	403.44	403.45	0.01	403.45		106	*
1Q18		1/2/2018	44.43	44.45	402.79	402.81	0.02	402.81		25.8	*
2Q18		4/3/2018	NE	45.39	NA	NA	NA	401.85		43.1	*
3Q18		7/2/2018	NE	48.52	NA	NA	NA	398.72		151	*
4Q18		10/1/2018	NE	48.70	NA	NA	NA	398.54		5.6	*
1Q19		1/2/2019	48.87	48.90	398.34	398.37	0.03	398.36		1129	*
2Q19		4/2/2019	48.58	48.59	398.65	398.66	0.01	398.66		413	*
3Q19	447.43	7/1/2019	47.77	47.78	399.65	399.66	0.01	399.66	395.92 - 380.92 (51.51 - 66.51)	14.7	*
4Q19		10/2/2019	NE	45.72	NA	NA	NA	401.71		9.5	*
1Q20		1/2/2020	44.69	44.70	402.73	402.74	0.01	402.74		7.4	*
2Q20		4/1/2020	NE	44.10	NA	NA	NA	403.33		38.0	*
P-91B											
3Q17	447.28	7/6/2017	NE	43.26	NA	NA	NA	404.02	372.59 - 370.59 (74.69 - 76.69)	28.7	*
4Q17		10/3/2017	NE	43.88	NA	NA	NA	403.40		8.4	*
1Q18		1/2/2018	NE	44.23	NA	NA	NA	403.05		102	*
2Q18		4/3/2018	NE	45.45	NA	NA	NA	401.83		0.5	*
3Q18		7/2/2018	NE	48.69	NA	NA	NA	398.59		11.0	*
4Q18		10/1/2018	NE	48.88	NA	NA	NA	398.40		12.1	*
1Q19		1/2/2019	NE	49.04	NA	NA	NA	398.24		73.3	*
2Q19		4/2/2019	NE	48.75	NA	NA	NA	398.53		116	*
3Q19	447.47	7/1/2019	NE	47.97	NA	NA	NA	399.50	372.78 - 370.78 (74.69 - 76.69)	3.5	*
4Q19		10/2/2019	NE	45.89	NA	NA	NA	401.58		6.5	*
1Q20		1/2/2020	NE	44.85	NA	NA	NA	402.62		0.0	*
2Q20		4/1/2020	NE	44.05	NA	NA	NA	403.42		15.5	*

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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-91C											
3Q17	447.07	7/6/2017	NE	43.03	NA	NA	NA	404.04	352.34 - 350.34 (94.73 - 96.73)	0.0	*
4Q17		10/3/2017	NE	43.66	NA	NA	NA	403.41		0.4	*
1Q18		1/2/2018	NE	44.00	NA	NA	NA	403.07		9.5	*
2Q18		4/3/2018	NE	45.21	NA	NA	NA	401.86		0.0	*
3Q18		7/2/2018	NE	48.44	NA	NA	NA	398.63		0.0	*
4Q18		10/1/2018	NE	48.61	NA	NA	NA	398.46		0.0	*
1Q19		1/2/2019	NE	48.80	NA	NA	NA	398.27		1.2	*
2Q19		4/2/2019	NE	48.47	NA	NA	NA	398.60		0.0	*
3Q19	447.27	7/1/2019	NE	47.69	NA	NA	NA	399.58	352.54 - 350.54 (94.73 - 96.73)	0.0	*
4Q19		10/2/2019	NE	45.63	NA	NA	NA	401.64		0.0	*
1Q20		1/2/2020	NE	44.60	NA	NA	NA	402.67		0.1	*
2Q20		4/1/2020	NE	43.80	NA	NA	NA	403.47		0.0	*
P-91D											
3Q17	447.06	7/6/2017	NE	43.02	NA	NA	NA	404.04	278.74 - 276.74 (168.32 - 170.32)	0.0	*
4Q17		10/3/2017	NE	43.64	NA	NA	NA	403.42		0.0	*
1Q18		1/2/2018	NE	43.98	NA	NA	NA	403.08		3.4	*
2Q18		4/3/2018	NE	45.20	NA	NA	NA	401.86		0.0	*
3Q18		7/2/2018	NE	48.41	NA	NA	NA	398.65		0.0	*
4Q18		10/1/2018	NE	48.56	NA	NA	NA	398.50		0.0	*
1Q19		1/2/2019	NE	48.76	NA	NA	NA	398.30		1.6	*
2Q19		4/2/2019	NE	48.44	NA	NA	NA	398.62		0.0	*
3Q19	447.26	7/1/2019	NE	47.66	NA	NA	NA	399.60	278.94 - 276.94 (168.32 - 170.32)	0.0	*
4Q19		10/2/2019	NE	45.60	NA	NA	NA	401.66		0.0	*
1Q20		1/2/2020	NE	44.59	NA	NA	NA	402.67		0.1	*
2Q20		4/1/2020	NE	43.77	NA	NA	NA	403.49		0.8	*
P-92A											
3Q17	446.24	7/6/2017	41.87	41.89	404.35	404.37	0.02	404.37	398.67 - 383.67 (47.57 - 62.57)	215	*
4Q17		10/3/2017	42.12	42.15	404.09	404.12	0.03	404.11		83.7	*
1Q18		1/3/2018	42.91	42.94	403.30	403.33	0.03	403.32		119	*
2Q18		4/4/2018	44.83	44.84	401.40	401.41	0.01	401.41		31.5	*
3Q18		7/3/2018	NE	45.69	NA	NA	NA	400.55		4.0	*
4Q18		10/2/2018	46.04	46.06	400.18	400.20	0.02	400.20		33.8	*
1Q19		1/2/2019	46.39	46.41	399.83	399.85	0.02	399.85		640	*
2Q19		4/1/2019	46.10	46.11	400.13	400.14	0.01	400.14		232	*
3Q19	446.39	7/1/2019	44.54	44.56	401.83	401.85	0.02	401.85	398.82 - 383.82 (47.57 - 62.57)	36.4	*
4Q19		10/2/2019	42.50	42.51	403.88	403.89	0.01	403.89		11.1	*
1Q20		1/2/2020	42.13	42.14	404.25	404.26	0.01	404.26		26.0	*
2Q20		4/2/2020	41.58	41.60	404.79	404.81	0.02	404.81		32.3	*
P-92B											
3Q17	446.18	7/6/2017	NE	41.85	NA	NA	NA	404.33	372.53 - 370.53 (73.65 - 75.65)	1.3	*
4Q17		10/3/2017	NE	42.10	NA	NA	NA	404.08		0.0	*
1Q18		1/3/2018	NE	42.89	NA	NA	NA	403.29		0.2	*
2Q18		4/4/2018	NE	44.79	NA	NA	NA	401.39		0.0	*
3Q18		7/3/2018	NE	45.65	NA	NA	NA	400.53		0.5	*
4Q18		10/2/2018	NE	46.01	NA	NA	NA	400.17		0.1	*
1Q19		1/2/2019	NE	46.34	NA	NA	NA	399.84		0.0	*
2Q19		4/1/2019	NE	46.06	NA	NA	NA	400.12	371.77 - 369.77 (74.41 - 76.41)	1.9	*
3Q19	446.33	7/1/2019	NE	44.53	NA	NA	NA	401.80	371.92 - 369.92 (74.41 - 76.41)	0.3	*
4Q19		10/2/2019	NE	42.46	NA	NA	NA	403.87		0.0	*
1Q20		1/2/2020	NE	42.09	NA	NA	NA	404.24		0.0	*
2Q20		4/2/2020	NE	41.54	NA	NA	NA	404.79		0.9	*

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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-92C											
3Q17	446.17	7/6/2017	NE	41.85	NA	NA	NA	404.32	353.21 - 348.21 (92.96 - 97.96)	0.6	*
4Q17		10/3/2017	NE	42.10	NA	NA	NA	404.07		0.1	*
1Q18		1/3/2018	NE	42.88	NA	NA	NA	403.29		1.2	*
2Q18		4/4/2018	NE	44.76	NA	NA	NA	401.41		0.0	*
3Q18		7/3/2018	NE	45.60	NA	NA	NA	400.57		0.3	*
4Q18		10/2/2018	NE	45.97	NA	NA	NA	400.20		2.5	*
1Q19		1/2/2019	NE	46.34	NA	NA	NA	399.83		83.1	*
2Q19		4/1/2019	NE	46.03	NA	NA	NA	400.14		22.6	*
3Q19	446.34	7/1/2019	NE	44.51	NA	NA	NA	401.83	353.38 - 348.38 (92.96 - 97.96)	4.0	*
4Q19		10/2/2019	NE	42.45	NA	NA	NA	403.89		0.0	*
1Q20		1/2/2020	NE	42.10	NA	NA	NA	404.24		0.1	*
2Q20		4/2/2020	NE	41.53	NA	NA	NA	404.81		12.8	*
P-92D											
3Q17	446.00	7/6/2017	NE	41.73	NA	NA	NA	404.27	305.00 - 303.00 (141.00 - 143.00)	0.0	*
4Q17		10/3/2017	NE	41.97	NA	NA	NA	404.03		0.0	*
1Q18		1/3/2018	NE	42.70	NA	NA	NA	403.30		0.2	*
2Q18		4/4/2018	NE	44.61	NA	NA	NA	401.39		0.0	*
3Q18		7/3/2018	NE	45.50	NA	NA	NA	400.50		0.0	*
4Q18		10/2/2018	NE	45.88	NA	NA	NA	400.12		0.1	*
1Q19		1/2/2019	NE	46.24	NA	NA	NA	399.76		0.0	*
2Q19		4/1/2019	NE	45.94	NA	NA	NA	400.06		0.2	*
3Q19	446.15	7/1/2019	NE	44.45	NA	NA	NA	401.70	305.15 - 303.15 (141.00 - 143.00)	0.0	*
4Q19		10/2/2019	NE	42.35	NA	NA	NA	403.80		0.0	*
1Q20		1/2/2020	NE	41.98	NA	NA	NA	404.17		0.0	*
2Q20		4/2/2020	NE	41.43	NA	NA	NA	404.72		2.7	*
P-93A											
3Q17	445.12	7/5/2017	NE	40.10	NA	NA	NA	405.02	402.05 - 392.05 (43.07 - 53.07)	0.0	*
4Q17		10/2/2017	NE	40.53	NA	NA	NA	404.59		152	*
1Q18		1/4/2018	NE	42.79	NA	NA	NA	402.33		12.8	*
2Q18		4/2/2018	NE	43.58	NA	NA	NA	401.54		21.1	
3Q18		7/2/2018	NE	44.03	NA	NA	NA	401.09		0.0	
4Q18		10/2/2018	NE	43.98	NA	NA	NA	401.14		0.0	
1Q19		1/2/2019	NE	43.83	NA	NA	NA	401.29		0.0	
2Q19		4/1/2019	NE	43.61	NA	NA	NA	401.51		0.3	
3Q19	445.37	7/1/2019	NE	39.40	NA	NA	NA	405.97	402.30 - 392.30 (43.07 - 53.07)	0.0	*
4Q19		10/1/2019	NE	38.34	NA	NA	NA	407.03		1.7	*
1Q20		1/2/2020	NE	39.77	NA	NA	NA	405.60		3.4	*
2Q20		4/1/2020	NE	39.60	NA	NA	NA	405.77		7.3	*
P-93B											
3Q17	446.52	7/5/2017	NE	41.45	NA	NA	NA	405.07	371.92 - 369.92 (74.60 - 76.60)	0.0	*
4Q17		10/2/2017	NE	41.88	NA	NA	NA	404.64		0.0	*
1Q18		1/3/2018	NE	44.25	NA	NA	NA	402.27		0.0	*
2Q18		4/2/2018	NE	44.94	NA	NA	NA	401.58	371.64 - 369.64 (74.88 - 76.88)	0.0	*
3Q18		7/2/2018	NE	45.60	NA	NA	NA	400.92		0.5	*
4Q18		10/2/2018	NE	45.36	NA	NA	NA	401.16		0.0	*
1Q19		1/2/2019	NE	45.19	NA	NA	NA	401.33		12.5	*
2Q19		4/1/2019	NE	44.99	NA	NA	NA	401.53	371.74 - 369.74 (74.78 - 76.78)	0.0	*
3Q19	446.70	7/1/2019	NE	40.31	NA	NA	NA	406.39	371.92 - 369.92 (74.78 - 76.78)	0.1	*
4Q19		10/1/2019	NE	39.67	NA	NA	NA	407.03		0.1	*
1Q20		1/2/2020	NE	41.12	NA	NA	NA	405.58		0.0	*
2Q20		4/1/2020	NE	40.97	NA	NA	NA	405.73		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-93C											
3Q17	446.28	7/5/2017	NE	41.26	NA	NA	NA	405.02	353.81 - 348.81 (92.47 - 97.47)	0.0	*
4Q17		10/2/2017	NE	41.68	NA	NA	NA	404.60		0.0	*
1Q18		1/3/2018	NE	43.77	NA	NA	NA	402.51		0.3	*
2Q18		4/2/2018	NE	44.78	NA	NA	NA	401.50	353.40 - 348.40 (92.88 - 97.88)	0.0	*
3Q18		7/2/2018	NE	45.28	NA	NA	NA	401.00		0.0	*
4Q18		10/2/2018	NE	45.19	NA	NA	NA	401.09		0.0	*
1Q19		1/2/2019	NE	45.02	NA	NA	NA	401.26		0.0	*
2Q19		4/1/2019	NE	44.81	NA	NA	NA	401.47		0.0	*
3Q19	446.55	7/1/2019	NE	40.59	NA	NA	NA	405.96	353.67 - 348.67 (92.88 - 97.88)	0.0	*
4Q19		10/1/2019	NE	39.51	NA	NA	NA	407.04		0.0	*
1Q20		1/2/2020	NE	40.96	NA	NA	NA	405.59		0.0	*
2Q20		4/1/2020	NE	40.80	NA	NA	NA	405.75		0.0	*
P-93D											
3Q17	446.73	7/5/2017	NE	41.65	NA	NA	NA	405.08	320.98 - 318.98 (125.75 - 127.75)	0.0	*
4Q17		10/2/2017	NE	42.10	NA	NA	NA	404.63		0.0	*
1Q18		1/3/2018	NE	44.19	NA	NA	NA	402.54		0.0	*
2Q18		4/2/2018	NE	45.12	NA	NA	NA	401.61		0.0	*
3Q18		7/2/2018	NE	45.67	NA	NA	NA	401.06		0.0	*
4Q18		10/2/2018	NE	45.57	NA	NA	NA	401.16		0.0	*
1Q19		1/2/2019	NE	45.36	NA	NA	NA	401.37		0.0	*
2Q19		4/1/2019	NE	45.18	NA	NA	NA	401.55		0.0	*
3Q19	446.97	7/1/2019	NE	40.97	NA	NA	NA	406.00	321.22 - 319.22 (125.75 - 127.75)	0.0	*
4Q19		10/1/2019	NE	39.87	NA	NA	NA	407.10		0.0	*
1Q20		1/2/2020	NE	41.32	NA	NA	NA	405.65		0.0	*
2Q20		4/1/2020	NE	41.15	NA	NA	NA	405.82	321.31 - 319.31 (125.66 - 127.66)	0.0	*
P-94											
3Q17	445.14	7/6/2017	NE	33.00	NA	NA	NA	412.14	399.29 - 384.29 (45.85 - 60.85)	0.0	*
4Q17		10/3/2017	NE	34.60	NA	NA	NA	410.54		0.0	*
1Q18		1/3/2018	NE	35.80	NA	NA	NA	409.34		0.0	*
2Q18		4/2/2018	NE	37.09	NA	NA	NA	408.05	398.90 - 383.90 (46.24 - 61.24)	0.0	*
3Q18		7/2/2018	NE	37.80	NA	NA	NA	407.34		0.0	*
4Q18		10/1/2018	NE	38.36	NA	NA	NA	406.78		0.0	*
1Q19		1/2/2019	NE	39.49	NA	NA	NA	405.65		0.0	*
2Q19		4/2/2019	NE	39.18	NA	NA	NA	405.96		0.0	*
3Q19	445.04	7/1/2019	NE	37.01	NA	NA	NA	408.03	398.80 - 383.80 (46.24 - 61.24)	0.0	*
4Q19		10/2/2019	NE	36.86	NA	NA	NA	408.18		0.0	*
1Q20		1/2/2020	NE	36.10	NA	NA	NA	408.94		0.0	*
2Q20		4/2/2020	NE	34.53	NA	NA	NA	410.51		0.0	*
P-95											
3Q17	443.42	7/6/2017	NE	28.61	NA	NA	NA	414.81	406.90 - 391.90 (36.52 - 51.52)	0.0	*
4Q17		10/2/2017	NE	29.02	NA	NA	NA	414.40		0.0	*
1Q18		1/4/2018	NE	30.53	NA	NA	NA	412.89		0.0	*
2Q18		4/4/2018	NE	32.02	NA	NA	NA	411.40		0.0	*
3Q18		7/2/2018	NE	31.87	NA	NA	NA	411.55		0.0	*
4Q18		10/3/2018	NE	32.03	NA	NA	NA	411.39		0.1	*
1Q19		1/4/2019	NE	32.63	NA	NA	NA	410.79		0.0	*
2Q19		4/2/2019	NE	32.49	NA	NA	NA	410.93		0.0	*
3Q19	443.95	7/2/2019	NE	30.02	NA	NA	NA	413.93	407.43 - 392.43 (36.52 - 51.52)	0.0	*
4Q19		10/2/2019	NE	28.89	NA	NA	NA	415.06		0.0	*
1Q20		1/3/2020	NE	29.17	NA	NA	NA	414.78		0.0	*
2Q20		4/3/2020	NE	28.24	NA	NA	NA	415.71		0.0	*

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-102											
3Q17	444.97	7/6/2017	NE	31.80	NA	NA	NA	413.17	402.22 - 382.22 (42.75 - 62.75)	15.6	*
4Q17		10/2/2017	NE	32.19	NA	NA	NA	412.78		631	*
1Q18		1/4/2018	NE	33.41	NA	NA	NA	411.56		363	*
2Q18		4/4/2018	NE	35.06	NA	NA	NA	409.91		0.2	*
3Q18		7/2/2018	NE	35.09	NA	NA	NA	409.88		0.0	*
4Q18		10/3/2018	NE	35.32	NA	NA	NA	409.65		6.3	*
1Q19		1/4/2019	NE	36.10	NA	NA	NA	408.87		0.2	*
2Q19		4/2/2019	NE	36.06	NA	NA	NA	408.91		0.0	*
3Q19	445.14	7/2/2019	NE	34.23	NA	NA	NA	410.91	402.39 - 382.39 (42.75 - 62.75)	0.5	*
4Q19		10/2/2019	NE	32.95	NA	NA	NA	412.19		0.1	*
1Q20		1/3/2020	NE	32.88	NA	NA	NA	412.26		0.5	*
2Q20		4/3/2020	NE	31.82	NA	NA	NA	413.32		0.5	*
P-114R											
3Q17	429.26	7/6/2017	NE	22.38	NA	NA	NA	406.88	406.25 - 396.25 (23.01 - 33.01)	43.7	*
4Q17		10/2/2017	NE	24.21	NA	NA	NA	405.05		0.0	
1Q18		1/3/2018	NE	26.16	NA	NA	NA	403.10		9.0	
2Q18		4/9/2018	NE	26.76	NA	NA	NA	402.50		0.1	
3Q18		7/2/2018	NE	26.50	NA	NA	NA	402.76		0.0	
4Q18		10/2/2018	NE	26.26	NA	NA	NA	403.00		0.0	
1Q19		1/3/2019	NE	26.02	NA	NA	NA	403.24		38.7	
2Q19		4/2/2019	NE	25.47	NA	NA	NA	403.79		132	
3Q19	429.48	7/1/2019	NE	19.67	NA	NA	NA	409.81	406.47 - 396.47 (23.01 - 33.01)	1.5	*
4Q19		10/2/2019	NE	20.49	NA	NA	NA	408.99		0.0	*
1Q20		1/2/2020	NE	21.85	NA	NA	NA	407.63		0.0	*
2Q20		4/3/2020	NE	21.72	NA	NA	NA	407.76		0.0	*
P-115											
3Q17	433.36	7/6/2017	NE	26.28	NA	NA	NA	407.08	401.06 - 381.06 (32.30 - 52.30)	0.0	*
4Q17		10/2/2017	NE	28.33	NA	NA	NA	405.03		0.0	*
1Q18		1/3/2018	NE	30.22	NA	NA	NA	403.14		0.0	*
2Q18		4/4/2018	NE	31.03	NA	NA	NA	402.33		0.0	*
3Q18		7/2/2018	NE	30.38	NA	NA	NA	402.98		0.0	*
4Q18		10/2/2018	NE	30.07	NA	NA	NA	403.29		0.0	*
1Q19		1/3/2019	NE	29.83	NA	NA	NA	403.53		0.0	*
2Q19		4/2/2019	NE	29.08	NA	NA	NA	404.28		0.0	*
3Q19	433.54	7/1/2019	NE	23.18	NA	NA	NA	410.36	401.24 - 381.24 (32.30 - 52.30)	0.0	*
4Q19		10/2/2019	NE	24.34	NA	NA	NA	409.20		0.0	*
1Q20		1/3/2020	NE	22.02	NA	NA	NA	411.52		0.0	* Gauging result anomalous
2Q20		4/3/2020	NE	25.46	NA	NA	NA	408.08		0.0	*
P-116											
3Q17	436.63	7/6/2017	NE	29.61	NA	NA	NA	407.02	399.19 - 379.19 (37.44 - 57.44)	2.9	*
4Q17		10/2/2017	NE	32.17	NA	NA	NA	404.46		0.0	*
1Q18		1/3/2018	NE	33.69	NA	NA	NA	402.94		0.0	*
2Q18		4/4/2018	NE	34.47	NA	NA	NA	402.16		0.0	*
3Q18		7/2/2018	NE	33.74	NA	NA	NA	402.89		0.0	*
4Q18		10/2/2018	NE	33.38	NA	NA	NA	403.25		0.0	*
1Q19		1/3/2019	NE	33.18	NA	NA	NA	403.45		0.1	*
2Q19		4/3/2019	NE	32.53	NA	NA	NA	404.10		0.0	*
3Q19	436.79	7/1/2019	NE	26.27	NA	NA	NA	410.52	399.35 - 379.35 (37.44 - 57.44)	0.0	*
4Q19		10/2/2019	NE	27.66	NA	NA	NA	409.13		0.0	*
1Q20		1/2/2020	NE	29.10	NA	NA	NA	407.69		0.1	*
2Q20		4/3/2020	NE	28.80	NA	NA	NA	407.99		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-117											
3Q17	432.71	7/6/2017	NE	25.78	NA	NA	NA	406.93	399.78 - 379.78 (32.93 - 52.93)	0.0	*
4Q17		10/2/2017	NE	28.08	NA	NA	NA	404.63		0.0	*
1Q18		1/3/2018	NE	29.90	NA	NA	NA	402.81		0.0	*
2Q18		4/4/2018	NE	30.68	NA	NA	NA	402.03		0.0	*
3Q18		7/2/2018	NE	29.92	NA	NA	NA	402.79		0.0	*
4Q18		10/2/2018	NE	29.56	NA	NA	NA	403.15		0.0	*
1Q19		1/3/2019	NE	29.37	NA	NA	NA	403.34		0.4	*
2Q19		4/2/2019	NE	28.45	NA	NA	NA	404.26		0.0	*
3Q19	432.87	7/1/2019	NE	22.26	NA	NA	NA	410.61	399.94 - 379.94 (32.93 - 52.93)	0.0	*
4Q19		10/2/2019	NE	23.79	NA	NA	NA	409.08		0.0	*
1Q20		1/2/2020	NE	25.26	NA	NA	NA	407.61		0.0	*
2Q20		4/3/2020	NE	24.98	NA	NA	NA	407.89		0.0	*
P-118											
3Q17	431.31	7/6/2017	NE	24.45	NA	NA	NA	406.86	400.19 - 384.26 (31.12 - 47.05)	0.0	*
4Q17		10/2/2017	NE	27.19	NA	NA	NA	404.12		0.0	*
1Q18		1/3/2018	NE	28.99	NA	NA	NA	402.32		0.0	*
2Q18		4/4/2018	NE	29.57	NA	NA	NA	401.74		0.0	*
3Q18		7/2/2018	NE	28.63	NA	NA	NA	402.68		0.0	*
4Q18		10/3/2018	NE	28.11	NA	NA	NA	403.20		0.0	*
1Q19		1/3/2019	NE	28.03	NA	NA	NA	403.28		0.3	*
2Q19		4/3/2019	NE	26.92	NA	NA	NA	404.39		0.0	*
3Q19	431.48	7/1/2019	NE	20.11	NA	NA	NA	411.37	400.36 - 384.43 (31.12 - 47.05)	0.0	*
4Q19		10/2/2019	NE	22.37	NA	NA	NA	409.11		0.0	*
1Q20		1/2/2020	NE	23.99	NA	NA	NA	407.49		0.0	*
2Q20		4/3/2020	NE	23.53	NA	NA	NA	407.95		0.0	*
P-119											
3Q17	431.90	7/6/2017	NE	25.06	NA	NA	NA	406.84	401.23 - 385.30 (30.67 - 46.60)	1.5	*
4Q17		10/2/2017	NE	26.38	NA	NA	NA	405.52		0.0	*
1Q18		1/3/2018	NE	28.27	NA	NA	NA	403.63		0.0	*
2Q18		4/4/2018	NE	29.24	NA	NA	NA	402.66		0.0	*
3Q18		7/2/2018	NE	29.03	NA	NA	NA	402.87		0.0	*
4Q18		10/2/2018	NE	28.88	NA	NA	NA	403.02		0.0	*
1Q19		1/3/2019	NE	28.62	NA	NA	NA	403.28		0.5	*
2Q19		4/3/2019	NE	28.33	NA	NA	NA	403.57		0.0	*
3Q19	432.11	7/1/2019	NE	23.32	NA	NA	NA	408.79	401.44 - 385.51 (30.67 - 46.60)	0.0	*
4Q19		10/2/2019	NE	23.37	NA	NA	NA	408.74		0.0	*
1Q20		1/3/2020	NE	24.75	NA	NA	NA	407.36		0.0	*
2Q20		4/3/2020	NE	24.34	NA	NA	NA	407.77		0.0	*
P-120											
3Q17	432.82	7/6/2017	NE	25.10	NA	NA	NA	407.72	401.44 - 385.51 (31.38 - 47.31)	0.4	*
4Q17		10/2/2017	NE	26.84	NA	NA	NA	405.98		0.0	*
1Q18		1/3/2018	NE	28.69	NA	NA	NA	404.13		0.0	*
2Q18		4/4/2018	NE	29.48	NA	NA	NA	403.34		0.0	*
3Q18		7/2/2018	NE	29.04	NA	NA	NA	403.78		0.0	*
4Q18		10/2/2018	NE	28.90	NA	NA	NA	403.92		0.0	*
1Q19		1/3/2019	NE	28.65	NA	NA	NA	404.17		0.3	*
2Q19		4/2/2019	NE	27.96	NA	NA	NA	404.86		0.0	*
3Q19	433.00	7/1/2019	NE	22.74	NA	NA	NA	410.26	401.62 - 385.69 (31.38 - 47.31)	0.0	*
4Q19		10/2/2019	NE	23.40	NA	NA	NA	409.60		0.0	*
1Q20		1/3/2020	NE	24.93	NA	NA	NA	408.07		0.0	*
2Q20		4/3/2020	NE	24.21	NA	NA	NA	408.79		0.0	*

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
P-129											
3Q17	432.43	7/6/2017	NE	26.09	NA	NA	NA	406.34	400.46 - 384.53 (31.97 - 47.90)	0.0	*
4Q17		10/2/2017	NE	29.86	NA	NA	NA	402.57		0.0	*
1Q18		1/3/2018	NE	31.67	NA	NA	NA	400.76		0.0	*
2Q18		4/4/2018	NE	31.58	NA	NA	NA	400.85		0.0	*
3Q18		7/3/2018	NE	29.91	NA	NA	NA	402.52		0.0	*
4Q18		10/2/2018	NE	29.62	NA	NA	NA	402.81		0.0	*
1Q19		1/3/2019	NE	29.58	NA	NA	NA	402.85		0.1	*
2Q19		4/2/2019	NE	26.90	NA	NA	NA	405.53		0.0	*
3Q19	432.66	7/8/2019	NE	19.55	NA	NA	NA	413.11	400.69 - 384.76 (31.97 - 47.90)	0.0	*
4Q19		10/2/2019	NE	23.75	NA	NA	NA	408.91		0.0	*
1Q20		1/2/2020	NE	25.92	NA	NA	NA	406.74		0.0	*
2Q20		4/3/2020	NE	24.80	NA	NA	NA	407.86		0.0	*
ROST-3-MW											
3Q17	442.29	7/5/2017	NE	36.64	NA	NA	NA	405.65	404.48 - 394.48 (37.81 - 47.81)	212	*
4Q17		10/2/2017	NE	36.72	NA	NA	NA	405.57		1045	*
1Q18		1/3/2018	NE	38.80	NA	NA	NA	403.49		296	
2Q18		4/2/2018	NE	39.89	NA	NA	NA	402.40		1.3	
3Q18		7/2/2018	NE	40.72	NA	NA	NA	401.57		0.0	
4Q18		10/1/2018	NE	40.78	NA	NA	NA	401.51		0.0	
1Q19		1/3/2019	NE	40.61	NA	NA	NA	401.68		0.0	
2Q19		4/1/2019	NE	40.68	NA	NA	NA	401.61		0.0	
3Q19	442.52	7/1/2019	NE	36.84	NA	NA	NA	405.68	404.71 - 394.71 (37.81 - 47.81)	134	*
4Q19		10/1/2019	NE	35.46	NA	NA	NA	407.06		50.1	*
1Q20		1/2/2020	NE	36.41	NA	NA	NA	406.11		227	*
2Q20		4/1/2020	NE	36.16	NA	NA	NA	406.36		1.1	*
ROST-4-PZ											
3Q17	442.13	7/5/2017	NE	36.55	NA	NA	NA	405.58	407.20 - 397.20 (34.93 - 44.93)	0.0	
4Q17		10/2/2017	NE	36.12	NA	NA	NA	406.01		0.3	
1Q18		1/2/2018	NE	37.88	NA	NA	NA	404.25		60.7	
2Q18		4/2/2018	NE	39.15	NA	NA	NA	402.98		0.0	
3Q18		7/2/2018	NE	39.77	NA	NA	NA	402.36		0.0	
4Q18		10/1/2018	NE	39.81	NA	NA	NA	402.32		0.0	
1Q19		1/2/2019	NE	39.72	NA	NA	NA	402.41		0.0	
2Q19		4/1/2019	NE	40.00	NA	NA	NA	402.13		0.0	
3Q19	442.15	7/1/2019	NE	37.35	NA	NA	NA	404.80	407.22 - 397.22 (34.93 - 44.93)	0.0	
4Q19		10/1/2019	NE	35.10	NA	NA	NA	407.05		31.4	
1Q20		1/2/2020	NE	35.93	NA	NA	NA	406.22		11.2	
2Q20		4/1/2020	NE	35.92	NA	NA	NA	406.23		0.1	
ROST-4-PZ(A)											
3Q17	442.11	7/5/2017	NE	35.80	NA	NA	NA	406.31	407.34 - 397.34 (34.77 - 44.77)	0.0	
4Q17		10/2/2017	NE	35.42	NA	NA	NA	406.69		2.3	
1Q18		1/2/2018	NE	37.16	NA	NA	NA	404.95		1.3	
2Q18		4/2/2018	NE	38.53	NA	NA	NA	403.58		0.0	
3Q18		7/2/2018	NE	39.59	NA	NA	NA	402.52		0.0	
4Q18		10/2/2018	NE	39.67	NA	NA	NA	402.44		0.0	
1Q19		1/2/2019	NE	39.53	NA	NA	NA	402.58		0.0	
2Q19		4/1/2019	NE	40.05	NA	NA	NA	402.06		0.0	
3Q19	442.15	7/1/2019	NE	36.34	NA	NA	NA	405.81	407.38 - 397.38 (34.77 - 44.77)	0.0	
4Q19		10/1/2019	NE	34.38	NA	NA	NA	407.77		6.0	*
1Q20		1/2/2020	NE	35.20	NA	NA	NA	406.95		0.0	
2Q20		4/1/2020	NE	35.24	NA	NA	NA	406.91		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
ROST-4-PZ(B)											
3Q17	442.38	7/5/2017	NE	36.53	NA	NA	NA	405.85	407.33 - 397.33 (35.05 - 45.05)	0.0	
4Q17		10/2/2017	NE	36.09	NA	NA	NA	406.29		0.7	
1Q18		1/2/2018	NE	37.85	NA	NA	NA	404.53		0.9	
2Q18		4/2/2018	NE	39.30	NA	NA	NA	403.08		0.0	
3Q18		7/2/2018	NE	40.02	NA	NA	NA	402.36		0.0	
4Q18		10/1/2018	NE	39.82	NA	NA	NA	402.56		0.0	
1Q19		1/2/2019	NE	39.86	NA	NA	NA	402.52		0.0	
2Q19		4/1/2019	NE	40.18	NA	NA	NA	402.20		0.0	
3Q19	442.40	7/1/2019	NE	37.26	NA	NA	NA	405.14	407.35 - 397.35 (35.05 - 45.05)	0.0	
4Q19		10/1/2019	NE	35.09	NA	NA	NA	407.31		0.0	
1Q20		1/2/2020	NE	35.91	NA	NA	NA	406.49		0.0	
2Q20		4/1/2020	NE	35.94	NA	NA	NA	406.46		0.0	
ROST-4-PZ(C)											
3Q17	442.66	7/5/2017	NE	37.23	NA	NA	NA	405.43	407.71 - 397.71 (34.95 - 44.95)	0.0	
4Q17		10/2/2017	NE	36.99	NA	NA	NA	405.67		0.2	
1Q18		1/2/2018	NE	38.75	NA	NA	NA	403.91		30.9	
2Q18		4/2/2018	NE	39.98	NA	NA	NA	402.68		0.0	
3Q18		7/2/2018	NE	40.88	NA	NA	NA	401.78		0.0	
4Q18		10/1/2018	NE	40.93	NA	NA	NA	401.73		0.0	
1Q19		1/3/2019	NE	40.78	NA	NA	NA	401.88		0.0	
2Q19		4/1/2019	NE	41.04	NA	NA	NA	401.62		0.0	
3Q19	442.97	7/1/2019	NE	38.14	NA	NA	NA	404.83	408.02 - 398.02 (34.95 - 44.95)	0.0	
4Q19		10/1/2019	NE	35.92	NA	NA	NA	407.05		0.0	
1Q20		1/2/2020	NE	36.77	NA	NA	NA	406.20		0.1	
2Q20		4/1/2020	NE	36.75	NA	NA	NA	406.22		0.0	
ROST-4-PZ(D)											
3Q17	442.98	7/5/2017	NE	37.17	NA	NA	NA	405.81	408.01 - 398.01 (34.97 - 44.97)	0.0	
4Q17		10/2/2017	NE	36.85	NA	NA	NA	406.13		0.1	
1Q18		1/2/2018	NE	38.63	NA	NA	NA	404.35		0.0	
2Q18		4/2/2018	NE	39.82	NA	NA	NA	403.16		0.0	
3Q18		7/2/2018	NE	40.77	NA	NA	NA	402.21		0.0	
4Q18		10/1/2018	NE	40.23	NA	NA	NA	402.75		0.0	
1Q19		1/3/2019	NE	40.65	NA	NA	NA	402.33		0.0	
2Q19		4/1/2019	NE	40.88	NA	NA	NA	402.10		0.0	
3Q19	442.92	7/1/2019	NE	37.98	NA	NA	NA	404.94	407.95 - 397.95 (34.97 - 44.97)	0.0	
4Q19		10/1/2019	NE	35.80	NA	NA	NA	407.12		2.0	
1Q20		1/2/2020	NE	36.66	NA	NA	NA	406.26		3.8	
2Q20		4/1/2020	NE	36.61	NA	NA	NA	406.31		0.1	
ROST-4-PZ(E)											
3Q17	441.96	7/5/2017	NE	36.48	NA	NA	NA	405.48	407.21 - 397.21 (34.75 - 44.75)	0.0	
4Q17		10/2/2017	NE	36.10	NA	NA	NA	405.86		0.3	
1Q18		1/2/2018	NE	37.85	NA	NA	NA	404.11		11.1	
2Q18		4/3/2018	NE	38.78	NA	NA	NA	403.18		0.0	
3Q18		7/2/2018	NE	39.54	NA	NA	NA	402.42		0.0	
4Q18		10/1/2018	NE	39.59	NA	NA	NA	402.37		0.0	
1Q19		1/2/2019	NE	39.48	NA	NA	NA	402.48		0.0	
2Q19		4/1/2019	NE	39.72	NA	NA	NA	402.24		0.0	
3Q19	441.98	7/1/2019	NE	37.18	NA	NA	NA	404.80	407.23 - 397.23 (34.75 - 44.75)	0.0	
4Q19		10/1/2019	NE	35.09	NA	NA	NA	406.89		35.5	
1Q20		1/2/2020	NE	35.88	NA	NA	NA	406.10		0.0	
2Q20		4/1/2020	NE	35.89	NA	NA	NA	406.09		0.0	

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TABLE 1
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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
ROST-4-PZ(F)											
3Q17	442.12	7/5/2017	NE	36.67	NA	NA	NA	405.45	407.59 - 397.59 (34.53 - 44.53)	0.0	
4Q17		10/2/2017	NE	36.25	NA	NA	NA	405.87		0.0	
1Q18		1/2/2018	NE	38.07	NA	NA	NA	404.05		0.7	
2Q18		4/3/2018	NE	38.97	NA	NA	NA	403.15		0.0	
3Q18		7/2/2018	NE	39.57	NA	NA	NA	402.55		0.0	
4Q18		10/1/2018	NE	39.59	NA	NA	NA	402.53		0.0	
1Q19		1/2/2019	NE	39.51	NA	NA	NA	402.61		0.0	
2Q19		4/1/2019	NE	39.75	NA	NA	NA	402.37		0.0	
3Q19		7/1/2019	NE	37.32	NA	NA	NA	404.80		0.0	
4Q19		10/1/2019	NE	35.29	NA	NA	NA	406.83		0.0	
1Q20		1/2/2020	NE	36.22	NA	NA	NA	405.90		4.7	
2Q20		4/1/2020	NE	36.12	NA	NA	NA	406.00		0.0	
ROST-4-PZ(G)											
3Q17	442.13	7/5/2017	NE	36.77	NA	NA	NA	405.36	407.85 - 397.85 (34.28 - 44.28)	9.2	
4Q17		10/2/2017	NE	36.43	NA	NA	NA	405.70		272	
1Q18		1/2/2018	NE	38.97	NA	NA	NA	403.16		77.4	
2Q18		4/2/2018	NE	39.84	NA	NA	NA	402.29		0.2	
3Q18		7/2/2018	NE	40.87	NA	NA	NA	401.26		0.0	
4Q18		10/1/2018	NE	40.94	NA	NA	NA	401.19		0.0	
1Q19		1/3/2019	NE	40.74	NA	NA	NA	401.39		0.0	
2Q19		4/1/2019	NE	40.78	NA	NA	NA	401.35		0.0	
3Q19	442.20	7/1/2019	NE	37.00	NA	NA	NA	405.20	407.92 - 397.92 (34.28 - 44.28)	0.0	
4Q19		10/1/2019	NE	35.57	NA	NA	NA	406.63		0.0	
1Q20		1/2/2020	NE	36.67	NA	NA	NA	405.53		87.2	
2Q20		4/1/2020	NE	36.07	NA	NA	NA	406.13		9.0	
S-1											
3Q17	443.90	7/6/2017	39.02	39.08	404.82	404.88	0.06	404.87	Unknown	602	
4Q17		10/3/2017	39.45	39.61	404.29	404.45	0.16	404.42		163	
1Q18		1/3/2018	40.78	40.85	403.05	403.12	0.07	403.11		185	
2Q18		4/4/2018	42.44	42.50	401.40	401.46	0.06	401.45		191	
3Q18		7/3/2018	42.88	42.95	400.95	401.02	0.07	401.01		168	
4Q18		10/2/2018	42.90	43.02	400.88	401.00	0.12	400.98		176	
1Q19		1/3/2019	43.05	43.08	400.82	400.85	0.03	400.84		212	
2Q19		4/1/2019	42.84	42.85	401.05	401.06	0.01	401.06		572	
3Q19	444.06	7/1/2019	40.03	40.05	404.01	404.03	0.02	404.03		184	
4Q19		10/1/2019	38.32	38.33	405.73	405.74	0.01	405.74		187	
1Q20		1/2/2020	38.96	38.98	405.08	405.10	0.02	405.10		129	
2Q20		4/2/2020	38.57	38.58	405.48	405.49	0.01	405.49		160	
T-1											
3Q17	445.40	7/5/2017	NE	39.11	NA	NA	NA	406.29	398.40 - 388.40 (47.00 - 57.00)	0.0	*
4Q17		10/2/2017	NE	39.30	NA	NA	NA	406.10		2.3	*
1Q18		1/2/2018	NE	41.16	NA	NA	NA	404.24		8.0	*
2Q18		4/2/2018	NE	42.22	NA	NA	NA	403.18		0.0	*
3Q18		7/2/2018	NE	43.16	NA	NA	NA	402.24		0.0	*
4Q18		10/2/2018	NE	43.33	NA	NA	NA	402.07		0.0	*
1Q19		1/2/2019	NE	43.33	NA	NA	NA	402.07		0.0	*
2Q19		4/1/2019	NE	43.44	NA	NA	NA	401.96		0.0	*
3Q19	445.61	7/1/2019	NE	40.38	NA	NA	NA	405.23	398.61 - 388.61 (47.00 - 57.00)	0.0	*
4Q19		10/1/2019	NE	38.74	NA	NA	NA	406.87		0.0	*
1Q20		1/2/2020	NE	39.17	NA	NA	NA	406.44		0.0	*
2Q20		4/1/2020	NE	38.90	NA	NA	NA	406.71		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
T-2											
3Q17	443.21	7/5/2017	NE	37.21	NA	NA	NA	406.00	392.72 - 372.56 (50.49 - 70.64)	0.0	*
4Q17		10/3/2017	NE	37.54	NA	NA	NA	405.67		0.0	*
1Q18		1/2/2018	NE	38.82	NA	NA	NA	404.39		0.0	*
2Q18		4/2/2018	NE	40.07	NA	NA	NA	403.14		0.0	*
3Q18		7/2/2018	NE	41.40	NA	NA	NA	401.81		0.0	*
4Q18		10/1/2018	NE	41.69	NA	NA	NA	401.52		0.0	*
1Q19		1/3/2019	NE	41.83	NA	NA	NA	401.38		0.0	*
2Q19		4/2/2019	NE	41.72	NA	NA	NA	401.49		0.0	*
3Q19	443.40	7/1/2019	NE	39.59	NA	NA	NA	403.81	392.90 - 372.76 (50.49 - 70.64)	0.0	*
4Q19		10/1/2019	NE	37.72	NA	NA	NA	405.68		0.0	*
1Q20		1/2/2020	NE	37.83	NA	NA	NA	405.57		0.0	*
2Q20		4/1/2020	NE	37.30	NA	NA	NA	406.10		0.0	*
T-3											
3Q17	449.03	7/6/2017	NE	44.04	NA	NA	NA	404.99	403.81 - 388.81 (45.22 - 60.22)	0.0	*
4Q17		10/3/2017	NE	44.42	NA	NA	NA	404.61		0.0	*
1Q18		1/2/2018	45.43	45.44	403.59	403.60	0.01	403.60		7.6	
2Q18		4/4/2018	NE	46.94	NA	NA	NA	402.09		0.1	
3Q18		7/2/2018	NE	48.85	NA	NA	NA	400.18		0.0	
4Q18		10/1/2018	NE	49.26	NA	NA	NA	399.77		0.0	
1Q19		1/2/2019	NE	49.53	NA	NA	NA	399.50		4.9	
2Q19		4/2/2019	NE	49.24	NA	NA	NA	399.79		0.0	
3Q19	449.21	7/1/2019	NE	48.00	NA	NA	NA	401.21	403.99 - 388.99 (45.22 - 60.22)	0.0	
4Q19		10/1/2019	NE	45.99	NA	NA	NA	403.22		0.0	
1Q20		1/2/2020	NE	45.34	NA	NA	NA	403.87		0.0	
2Q20		4/1/2020	NE	44.65	NA	NA	NA	404.56		0.0	*
T-4											
3Q17	446.63	7/6/2017	NE	41.92	NA	NA	NA	404.71	398.32 - 383.32 (48.31 - 63.31)	0.0	*
4Q17		10/3/2017	NE	42.65	NA	NA	NA	403.98		0.0	*
1Q18		1/4/2018	NE	43.21	NA	NA	NA	403.42		10.4	*
2Q18		4/4/2018	NE	45.12	NA	NA	NA	401.51		0.0	*
3Q18		7/3/2018	NE	46.96	NA	NA	NA	399.67		0.0	*
4Q18		10/2/2018	NE	47.04	NA	NA	NA	399.59		0.1	*
1Q19		1/2/2019	NE	47.65	NA	NA	NA	398.98		0.0	*
2Q19		4/2/2019	NE	47.14	NA	NA	NA	399.49	396.61 - 381.61 (50.02 - 65.02)	0.0	*
3Q19	446.82	7/1/2019	NE	46.87	NA	NA	NA	399.95	396.80 - 381.80 (50.02 - 65.02)	0.0	*
4Q19		10/2/2019	NE	44.83	NA	NA	NA	401.99		0.0	*
1Q20		1/2/2020	NE	43.47	NA	NA	NA	403.35		0.0	*
2Q20		4/2/2020	NE	42.06	NA	NA	NA	404.76		0.0	*
T-5											
3Q17	443.47	7/6/2017	NE	38.07	NA	NA	NA	405.40	395.14 - 378.59 (48.33 - 64.88)	9.4	*
4Q17		10/3/2017	NE	38.38	NA	NA	NA	405.09		40.9	*
1Q18		1/3/2018	NE	39.45	NA	NA	NA	404.02		3.0	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/3/2018	NE	41.59	NA	NA	NA	401.88		2.2	*
4Q18		10/2/2018	NE	41.87	NA	NA	NA	401.60		5.7	*
1Q19		1/3/2019	NE	42.11	NA	NA	NA	401.36		17.7	*
2Q19		4/1/2019	NE	41.84	NA	NA	NA	401.63		4.2	*
3Q19	443.66	7/1/2019	NE	39.64	NA	NA	NA	404.02	395.33 - 378.78 (48.33 - 64.88)	12.0	*
4Q19		10/1/2019	NE	37.75	NA	NA	NA	405.91		5.8	*
1Q20		1/2/2020	NE	37.99	NA	NA	NA	405.67		7.2	*
2Q20		4/3/2020	NE	37.62	NA	NA	NA	406.04		12.8	*

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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
T-6											
3Q17	446.61	7/5/2017	NE	41.60	NA	NA	NA	405.01	394.85 - 380.60 (51.76 - 66.01)	0.1	*
4Q17		10/2/2017	NE	41.92	NA	NA	NA	404.69		0.2	*
1Q18		1/2/2018	NE	44.30	NA	NA	NA	402.31		2.0	*
2Q18		4/3/2018	NE	44.81	NA	NA	NA	401.80		0.7	*
3Q18		7/2/2018	NE	45.61	NA	NA	NA	401.00		0.1	*
4Q18		10/1/2018	NE	45.58	NA	NA	NA	401.03		0.0	*
1Q19		1/2/2019	NE	45.42	NA	NA	NA	401.19		17.1	*
2Q19		4/1/2019	NE	45.24	NA	NA	NA	401.37	394.1 - 379.85 (52.51 - 66.76)	0.0	*
3Q19	446.78	7/1/2019	NE	41.12	NA	NA	NA	405.66	394.27 - 380.02 (52.51 - 66.76)	1.8	*
4Q19		10/1/2019	NE	39.90	NA	NA	NA	406.88		0.1	*
1Q20		1/2/2020	NE	41.29	NA	NA	NA	405.49		2.5	*
2Q20		4/1/2020	NE	41.10	NA	NA	NA	405.68		3.7	*
T-7											
3Q17	444.04	7/6/2017	NE	37.53	NA	NA	NA	406.51	395.32 - 380.32 (48.72 - 63.72)	0.0	*
4Q17		10/2/2017	NE	38.09	NA	NA	NA	405.95		0.0	*
1Q18		1/4/2018	39.98	39.99	404.05	404.06	0.01	404.06		2.5	*
2Q18		4/4/2018	NE	41.13	NA	NA	NA	402.91		3.5	*
3Q18		7/2/2018	NE	41.17	NA	NA	NA	402.87		0.0	*
4Q18		10/3/2018	NE	41.08	NA	NA	NA	402.96		0.0	*
1Q19		1/4/2019	NE	40.97	NA	NA	NA	403.07		5.8	*
2Q19		4/2/2019	NE	40.78	NA	NA	NA	403.26		59.6	*
3Q19	444.26	7/2/2019	NE	37.14	NA	NA	NA	407.12	395.54 - 380.54 (48.72 - 63.72)	0.6	*
4Q19		10/2/2019	NE	36.23	NA	NA	NA	408.03		0.9	*
1Q20		1/3/2020	NE	37.33	NA	NA	NA	406.93		69.9	*
2Q20		4/3/2020	NE	36.90	NA	NA	NA	407.36		0.9	*
T-12											
3Q17	444.80	7/5/2017	NE	40.06	NA	NA	NA	404.74	397.97 - 371.97 (46.83 - 72.83)	0.7	*
4Q17		10/2/2017	NE	39.15	NA	NA	NA	405.65		0.3	*
1Q18		1/3/2018	NE	42.06	NA	NA	NA	402.74		6.1	*
2Q18		4/2/2018	NE	43.06	NA	NA	NA	401.74		3.8	*
3Q18		7/2/2018	NE	44.21	NA	NA	NA	400.59		0.1	*
4Q18		10/1/2018	NE	44.18	NA	NA	NA	400.62		1.2	*
1Q19		1/2/2019	NE	44.03	NA	NA	NA	400.77		315	*
2Q19		4/1/2019	NE	44.11	NA	NA	NA	400.69		15.1	*
3Q19	444.99	7/1/2019	NE	40.35	NA	NA	NA	404.64	398.16 - 372.16 (46.83 - 72.83)	1.1	*
4Q19		10/1/2019	NE	38.66	NA	NA	NA	406.33		0.8	*
1Q20		1/2/2020	NE	40.04	NA	NA	NA	404.95		2.2	*
2Q20		4/1/2020	NE	39.10	NA	NA	NA	405.89		10.0	*
T-13											
3Q17	443.96	7/5/2017	NE	37.10	NA	NA	NA	406.86	396.46 - 370.46 (47.50 - 73.50)	0.0	*
4Q17		10/3/2017	NE	37.38	NA	NA	NA	406.58		0.0	*
1Q18		1/2/2018	NE	38.96	NA	NA	NA	405.00		3.7	*
2Q18		4/2/2018	NE	39.93	NA	NA	NA	404.03	400.15 - 374.15 (43.81 - 69.81)	0.0	*
3Q18		7/2/2018	NE	40.85	NA	NA	NA	403.11		0.0	*
4Q18		10/1/2018	NE	41.24	NA	NA	NA	402.72		0.1	*
1Q19		1/2/2019	NE	41.25	NA	NA	NA	402.71		0.0	*
2Q19		4/1/2019	NE	41.34	NA	NA	NA	402.62		0.0	*
3Q19	443.76	7/1/2019	NE	38.35	NA	NA	NA	405.41	399.95 - 373.95 (43.81 - 69.81)	0.0	*
4Q19		10/1/2019	NE	36.78	NA	NA	NA	406.98		0.1	*
1Q20		1/2/2020	NE	37.14	NA	NA	NA	406.62		0.0	*
2Q20		4/1/2020	NE	36.87	NA	NA	NA	406.89		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
T-15											
3Q17	445.14	7/6/2017	NE	38.98	NA	NA	NA	406.16	397.10 - 371.10 (48.04 - 74.04)	0.0	*
4Q17		10/3/2017	NE	39.39	NA	NA	NA	405.75		0.0	*
1Q18		1/3/2018	NE	40.36	NA	NA	NA	404.78		0.0	*
2Q18		4/2/2018	41.62	41.71	403.43	403.52	0.09	403.50		0.0	* Gauging result anomalous
		6/8/2018	NE	42.98	NA	NA	NA	402.16		0.0	*
3Q18		7/2/2018	NE	43.32	NA	NA	NA	401.82		0.0	*
4Q18		10/1/2018	NE	43.53	NA	NA	NA	401.61		0.0	*
1Q19		1/4/2019	NE	43.78	NA	NA	NA	401.36		0.0	*
2Q19		4/2/2019	NE	43.76	NA	NA	NA	401.38	396.74 - 370.74 (48.40 - 74.40)	0.0	*
3Q19	445.35	7/1/2019	NE	42.13	NA	NA	NA	403.22	396.95 - 370.95 (48.40 - 74.40)	0.0	*
4Q19		10/1/2019	NE	40.23	NA	NA	NA	405.12		0.0	*
1Q20		1/2/2020	NE	39.97	NA	NA	NA	405.38		0.0	*
2Q20		4/1/2020	NE	39.25	NA	NA	NA	406.10		0.0	*
T-17											
3Q17	446.01	7/6/2017	NE	36.63	NA	NA	NA	409.38	401.91 - 375.91 (44.10 - 70.10)	2.6	*
4Q17		10/3/2017	NE	37.78	NA	NA	NA	408.23		0.0	*
1Q18		1/3/2018	NE	38.74	NA	NA	NA	407.27		0.8	*
2Q18		4/3/2018	NE	40.01	NA	NA	NA	406.00		0.0	*
3Q18		7/2/2018	NE	41.25	NA	NA	NA	404.76		0.0	*
4Q18		10/1/2018	NE	41.70	NA	NA	NA	404.31		0.0	*
1Q19		1/2/2019	NE	42.66	NA	NA	NA	403.35		0.0	*
2Q19		4/2/2019	NE	42.32	NA	NA	NA	403.69	401.54 - 375.54 (44.47 - 70.47)	0.0	*
3Q19	446.19	7/1/2019	NE	41.39	NA	NA	NA	404.80	401.72 - 375.72 (44.47 - 70.47)	0.0	*
4Q19		10/2/2019	NE	39.98	NA	NA	NA	406.21		0.0	*
1Q20		1/2/2020	NE	39.12	NA	NA	NA	407.07		0.0	*
2Q20		4/2/2020	NE	37.70	NA	NA	NA	408.49		1.0	*
T-19											
3Q17	446.79	7/6/2017	NE	42.15	NA	NA	NA	404.64	396.02 - 370.02 (50.77 - 76.77)	92.6	*
4Q17		10/3/2017	NE	42.74	NA	NA	NA	404.05		4.9	*
1Q18		1/4/2018	NE	43.34	NA	NA	NA	403.45		236	*
2Q18		4/4/2018	NE	45.19	NA	NA	NA	401.60		7.6	*
3Q18		7/3/2018	NE	46.77	NA	NA	NA	400.02		11.1	*
4Q18		10/2/2018	NE	46.97	NA	NA	NA	399.82		22.9	*
1Q19		1/2/2019	NE	47.55	NA	NA	NA	399.24		475	*
2Q19		4/2/2019	NE	47.12	NA	NA	NA	399.67		103	*
3Q19	446.99	7/1/2019	NE	46.81	NA	NA	NA	400.18	396.22 - 370.22 (50.77 - 76.77)	0.9	*
4Q19		10/2/2019	NE	44.74	NA	NA	NA	402.25		5.8	*
1Q20		1/2/2020	NE	43.46	NA	NA	NA	403.53		17.7	*
2Q20		4/2/2020	NE	42.14	NA	NA	NA	404.85		13.5	*
T-21											
3Q17	443.99	7/6/2017	NE	28.80	NA	NA	NA	415.19	412.03 - 386.03 (31.96 - 57.96)	0.0	*
4Q17		10/2/2017	NE	29.28	NA	NA	NA	414.71		0.0	*
1Q18		1/4/2018	NE	30.74	NA	NA	NA	413.25		0.0	*
2Q18		4/4/2018	NE	32.13	NA	NA	NA	411.86		0.0	
3Q18		7/2/2018	NE	32.04	NA	NA	NA	411.95		0.0	
4Q18		10/3/2018	NE	32.25	NA	NA	NA	411.74		0.0	
1Q19		1/4/2019	NE	32.96	NA	NA	NA	411.03		0.0	
2Q19		4/2/2019	NE	32.84	NA	NA	NA	411.15		0.0	
3Q19	444.22	7/2/2019	NE	30.50	NA	NA	NA	413.72	412.26 - 386.26 (31.96 - 57.96)	0.0	*
4Q19		10/2/2019	NE	29.31	NA	NA	NA	414.91		0.0	*
1Q20		1/3/2020	NE	29.57	NA	NA	NA	414.65		0.0	*
2Q20		4/3/2020	NE	28.56	NA	NA	NA	415.66		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
T-22											
3Q17	442.19	7/6/2017	NE	30.35	NA	NA	NA	411.84	410.64 - 384.94 (31.55 - 57.25)	0.0	*
4Q17		10/2/2017	NE	31.25	NA	NA	NA	410.94		0.0	*
1Q18		1/4/2018	NE	32.91	NA	NA	NA	409.28		1.0	
2Q18		4/4/2018	NE	33.96	NA	NA	NA	408.23		0.0	
3Q18		7/2/2018	NE	33.76	NA	NA	NA	408.43		0.0	
4Q18		10/3/2018	NE	33.96	NA	NA	NA	408.23		0.0	
1Q19		1/4/2019	NE	34.06	NA	NA	NA	408.13		0.0	
2Q19		4/2/2019	NE	33.83	NA	NA	NA	408.36		0.0	
3Q19	442.37	7/2/2019	NE	30.31	NA	NA	NA	412.06	410.82 - 385.12 (31.55 - 57.25)	0.0	*
4Q19		10/2/2019	NE	29.90	NA	NA	NA	412.47		0.0	*
1Q20		1/3/2020	NE	30.49	NA	NA	NA	411.88		0.0	*
2Q20		4/3/2020	NE	29.72	NA	NA	NA	412.65		0.0	*
T-23											
3Q17	432.69	7/6/2017	NE	23.15	NA	NA	NA	409.54	405.46 - 379.46 (27.23 - 53.23)	0.0	*
4Q17		10/3/2017	NE	24.50	NA	NA	NA	408.19		0.0	*
1Q18		1/3/2018	NE	26.07	NA	NA	NA	406.62		0.0	*
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unable to locate well due to landscaping
3Q18		7/2/2018	NE	26.63	NA	NA	NA	406.06		0.0	*
4Q18		10/3/2018	NE	26.83	NA	NA	NA	405.86		0.0	*
1Q19		1/4/2019	NE	26.65	NA	NA	NA	406.04		0.0	*
2Q19		4/2/2019	NE	26.26	NA	NA	NA	406.43		0.0	*
3Q19	432.90	7/1/2019	NE	22.41	NA	NA	NA	410.49	405.67 - 379.67 (27.23 - 53.23)	0.0	*
4Q19		10/1/2019	NE	22.19	NA	NA	NA	410.71		0.0	*
1Q20		1/2/2020	NE	23.10	NA	NA	NA	409.80		0.0	*
2Q20		4/2/2020	NE	22.54	NA	NA	NA	410.36		0.0	*
T-24											
3Q17	443.81	7/5/2017	38.53	38.65	405.16	405.28	0.12	405.26	402.31 - 376.66 (41.50 - 67.15)	1.6	*
4Q17		10/2/2017	38.40	38.49	405.32	405.41	0.09	405.39		0.0	*
1Q18		1/2/2018	40.49	40.57	403.24	403.32	0.08	403.30		7.2	*
2Q18		4/2/2018	41.53	41.62	402.19	402.28	0.09	402.26		0.6	
3Q18		7/2/2018	42.79	42.87	400.94	401.02	0.08	401.00		0.4	
4Q18		10/2/2018	42.79	43.08	400.73	401.02	0.29	400.96		0.4	
1Q19		1/3/2019	42.71	43.54	400.27	401.10	0.83	400.93		31.0	
2Q19		4/1/2019	42.69	44.05	399.76	401.12	1.36	400.85		16.0	
3Q19	444.00	7/1/2019	39.75	40.27	403.73	404.25	0.52	404.15	402.50 - 376.85 (41.50 - 67.15)	12.6	*
4Q19		10/1/2019	38.01	38.34	405.66	405.99	0.33	405.92		0.7	*
1Q20		1/2/2020	38.81	38.95	405.05	405.19	0.14	405.16		14.7	*
2Q20		4/2/2020	38.17	38.20	405.80	405.83	0.03	405.82		1.1	*
T-28											
3Q17	444.43	7/6/2017	NE	36.85	NA	NA	NA	407.58	Unknown	0.0	
4Q17		10/3/2017	NE	37.73	NA	NA	NA	406.70		0.0	
1Q18		1/3/2018	NE	38.57	NA	NA	NA	405.86		0.0	
2Q18		4/2/2018	NE	39.84	NA	NA	NA	404.59		0.0	
3Q18		7/2/2018	NE	41.39	NA	NA	NA	403.04		0.0	
4Q18		10/1/2018	NE	41.88	NA	NA	NA	402.55		0.0	
1Q19		1/2/2019	NE	42.55	NA	NA	NA	401.88		0.0	
2Q19		4/2/2019	NE	42.26	NA	NA	NA	402.17		0.0	
3Q19	444.56	7/1/2019	NE	41.35	NA	NA	NA	403.21		0.0	
4Q19		10/2/2019	NE	39.72	NA	NA	NA	404.84		0.0	
1Q20		1/2/2020	NE	38.80	NA	NA	NA	405.76		0.0	
2Q20		4/2/2020	NE	37.69	NA	NA	NA	406.87		0.0	

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WELL ID	TOP OF CASING (elev.)	DATE GAUGED	DEPTH TO PRODUCT (ft btoc)	DEPTH TO WATER (ft btoc)	WATER-PRODUCT INTERFACE (elev.)	PRODUCT (elev.)	PRODUCT THICKNESS (ft)	CORRECTED WATER LEVEL (elev.)	SCREENED INTERVAL (elev.) (ft btoc)	WELL HEAD PID (ppm)	Comments
T-37											
3Q17	447.25	7/6/2017	NE	37.34	NA	NA	NA	409.91	398.40 - 378.40 (48.85 - 68.85)	0.0	*
4Q17		10/3/2017	NE	38.02	NA	NA	NA	409.23		0.0	*
1Q18		1/4/2018	NE	39.08	NA	NA	NA	408.17		0.1	*
2Q18		4/3/2018	NE	40.33	NA	NA	NA	406.92		0.0	*
3Q18		7/3/2018	NE	41.26	NA	NA	NA	405.99		0.0	*
4Q18		10/2/2018	NE	41.59	NA	NA	NA	405.66		0.1	*
1Q19		1/3/2019	NE	42.52	NA	NA	NA	404.73		0.0	*
2Q19		4/2/2019	NE	42.25	NA	NA	NA	405.00		0.0	*
3Q19	447.44	7/2/2019	NE	41.46	NA	NA	NA	405.98	398.58 - 378.58 (48.85 - 68.85)	0.0	*
4Q19		10/2/2019	NE	39.97	NA	NA	NA	407.47		0.0	*
1Q20		1/2/2020	NE	39.06	NA	NA	NA	408.38		0.0	*
2Q20		4/3/2020	NE	37.78	NA	NA	NA	409.66		0.0	*
T-38											
3Q17	445.67	7/6/2017	NE	34.15	NA	NA	NA	411.52	396.53 - 376.53 (49.14 - 69.14)	0.0	*
4Q17		10/3/2017	NE	35.02	NA	NA	NA	410.65		0.0	*
1Q18		1/4/2018	NE	36.13	NA	NA	NA	409.54		22.5	*
2Q18		4/3/2018	NE	37.21	NA	NA	NA	408.46		0.0	*
3Q18		7/3/2018	NE	37.95	NA	NA	NA	407.72		0.0	*
4Q18		10/2/2018	NE	38.32	NA	NA	NA	407.35		0.0	*
1Q19		1/3/2019	NE	39.25	NA	NA	NA	406.42		0.0	*
2Q19		4/2/2019	NE	38.99	NA	NA	NA	406.68		0.0	*
3Q19	445.89	7/2/2019	NE	37.60	NA	NA	NA	408.29	396.75 - 376.75 (49.14 - 69.14)	0.0	*
4Q19		10/2/2019	NE	36.31	NA	NA	NA	409.58		0.0	*
1Q20		1/2/2020	NE	35.88	NA	NA	NA	410.01		0.0	*
2Q20		4/3/2020	NE	34.61	NA	NA	NA	411.28		0.0	*
T-62											
3Q17	431.99	7/6/2017	NE	24.51	NA	NA	NA	407.48	412.28 - 382.28 (19.71 - 49.71)	0.5	
4Q17		10/2/2017	NE	26.21	NA	NA	NA	405.78		0.0	
1Q18		1/3/2018	NE	28.34	NA	NA	NA	403.65		0.0	
2Q18		4/4/2018	NE	29.20	NA	NA	NA	402.79		0.0	
3Q18		7/2/2018	NE	28.77	NA	NA	NA	403.22		0.0	
4Q18		10/2/2018	NE	28.78	NA	NA	NA	403.21		0.0	
1Q19		1/3/2019	NE	28.30	NA	NA	NA	403.69		0.1	
2Q19		4/2/2019	NE	27.45	NA	NA	NA	404.54		0.0	
3Q19	432.16	7/30/2019	NE	21.97	NA	NA	NA	410.19	412.45 - 382.45 (19.71 - 49.71)	0.1	
4Q19		10/2/2019	NE	22.97	NA	NA	NA	409.19		0.0	
1Q20		1/3/2020	NE	24.47	NA	NA	NA	407.69		0.2	
2Q20		4/3/2020	NE	23.71	NA	NA	NA	408.45		0.0	
T-63											
3Q17	431.43	7/6/2017	NE	23.88	NA	NA	NA	407.55	411.45 - 381.45 (19.98 - 49.98)	0.0	
4Q17		10/2/2017	NE	25.98	NA	NA	NA	405.45		0.0	
1Q18		1/3/2018	NE	27.82	NA	NA	NA	403.61		0.0	
2Q18		4/4/2018	NE	28.86	NA	NA	NA	402.57		0.0	
3Q18		7/2/2018	NE	28.83	NA	NA	NA	402.60		0.0	
4Q18		10/2/2018	NE	27.93	NA	NA	NA	403.50		0.0	
1Q19		1/3/2019	NE	27.42	NA	NA	NA	404.01		0.0	
2Q19		4/2/2019	NE	26.69	NA	NA	NA	404.74		0.0	
3Q19	431.55	7/30/2019	NE	20.84	NA	NA	NA	410.71	411.57 - 381.57 (19.98 - 49.98)	0.0	
4Q19		10/2/2019	NE	22.20	NA	NA	NA	409.35		0.0	
1Q20		1/3/2020	NE	23.70	NA	NA	NA	407.85		0.0	
2Q20		4/3/2020	NE	23.13	NA	NA	NA	408.42		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
T-64											
3Q17	428.93	7/6/2017	NE	21.57	NA	NA	NA	407.36	409.12 - 379.12 (19.81 - 49.81)	0.0	
4Q17		10/2/2017	NE	24.24	NA	NA	NA	404.69		0.0	
1Q18		1/3/2018	NE	26.04	NA	NA	NA	402.89		0.0	
2Q18		4/4/2018	NM	NM	NA	NA	NA	NA		NM	Unsafe condition at well - Unable to access
3Q18		7/2/2018	NE	25.63	NA	NA	NA	403.30		0.0	
4Q18		10/2/2018	NE	25.47	NA	NA	NA	403.46		0.0	
1Q19		1/4/2019	NE	24.88	NA	NA	NA	404.05		0.0	
2Q19		4/3/2019	NE	23.94	NA	NA	NA	404.99		0.0	
3Q19	429.10	7/30/2019	NE	17.84	NA	NA	NA	411.26	409.29 - 379.29 (19.81 - 49.81)	3.3	*
4Q19		10/2/2019	NE	19.67	NA	NA	NA	409.43		3.4	*
1Q20		1/3/2020	NE	21.50	NA	NA	NA	407.60		0.0	
2Q20		4/3/2020	NE	26.64	NA	NA	NA	402.46		13.9	Gauging result anomalous

NOTES:

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

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

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

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

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

6) Table includes comprehensive groundwater monitoring well gauging data for the last 12 quarters from the combined Village of Roxana Interim Groundwater Monitoring Program and the WRB Refining LP Wood River Refinery Program.

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

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

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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							
3Q17	6.76	20.98	1.472	14.42	0.11	-15.0	
4Q17	6.78	19.33	1.331	6.10	0.10	23.0	
1Q18	6.73	18.20	1.197	0.00	0.45	146.6	
2Q18	6.73	17.20	1.263	22.20	0.05	8.9	
3Q18	6.71	21.60	1.147	6.50	0.14	144.8	
4Q18	6.57	19.40	1.060	2.40	0.69	126.4	
1Q19	6.52	17.40	1.119	3.56	0.29	128.3	
2Q19	6.80	18.40	1.066	20.86	0.13	83.3	
3Q19	6.88	19.30	0.810	22.30	0.37	-0.5	
4Q19	7.02	17.60	0.773	24.65	0.75	9.9	
1Q20	7.11	18.00	0.839	11.20	0.20	124.9	
2Q20	6.78	17.60	0.945	21.14	0.23	129.4	
MW-02							
3Q17	7.03	21.53	1.717	33.97	0.00	-275.0	
4Q17	7.02	19.70	1.220	5.50	0.00	-156.0	
1Q18	7.02	18.80	1.537	14.10	0.22	-207.8	
2Q18	7.08	17.30	1.553	10.40	0.38	-116.1	
3Q18	7.00	21.10	1.910	16.20	2.20	-175.7	
4Q18	7.12	19.10	1.344	3.90	0.63	-114.3	
1Q19	7.32	17.70	1.344	48.55	0.26	-64.3	
2Q19	7.21	19.80	1.159	49.06	0.00	-88.3	
3Q19	6.62	20.90	1.196	22.04	0.19	-125.2	
4Q19	6.94	19.60	1.181	14.70	0.68	120.1	
1Q20	7.06	18.50	1.456	20.40	0.16	86.1	
2Q20	6.81	19.50	1.143	29.62	0.12	-114.9	
MW-03							
3Q17	6.92	21.31	1.295	5.49	0.03	-143.0	
4Q17	7.16	20.00	1.380	28.70	0.02	-140.3	
1Q18	6.76	17.60	1.205	4.20	0.18	-45.0	
2Q18	6.94	17.60	1.601	7.80	0.47	-138.9	
3Q18	6.85	20.10	1.299	6.60	1.30	-125.9	
4Q18	6.63	19.10	1.534	1.20	0.54	-49.0	
1Q19	6.68	17.00	1.128	0.00	0.95	-92.1	
2Q19	6.93	19.00	1.373	5.49	0.17	-103.2	
3Q19	6.77	20.00	1.280	13.93	0.34	-80.3	
4Q19	6.92	19.00	1.095	10.66	0.80	-151.9	
1Q20	6.73	18.30	1.283	3.60	0.17	198.8	
2Q20	6.79	19.30	1.140	4.16	0.23	-129.1	

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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-04							
3Q17	6.88	20.41	1.281	8.49	0.00	-128.0	
4Q17	6.96	19.41	1.291	13.19	0.04	-121.0	
1Q18	6.98	17.50	1.106	8.70	0.23	-161.0	
2Q18	6.78	17.70	1.168	6.50	0.01	-58.4	
3Q18	6.76	20.70	1.192	17.60	0.18	-65.2	
4Q18	6.65	19.10	1.316	8.90	0.60	84.0	
1Q19	6.74	18.10	1.358	42.50	0.81	-71.6	
2Q19	6.77	18.50	1.605	25.52	0.02	-74.4	
3Q19	6.76	19.30	1.472	25.19	0.22	-50.6	
4Q19	6.93	18.50	1.508	8.17	0.68	-115.5	
1Q20	6.71	17.30	1.438	8.90	0.30	203.9	
2Q20	6.66	17.70	1.432	18.79	2.18	-106.5	Equipment malfunction. DO results are suspect.
MW-05							
3Q17	6.78	21.17	1.076	12.94	0.02	-124.0	
4Q17	6.95	18.48	0.760	4.70	0.03	-136.0	
1Q18	6.68	18.60	1.316	8.80	0.26	-152.7	
2Q18	6.85	16.80	1.145	40.30	0.39	-116.0	
3Q18	6.62	20.70	1.247	9.50	3.40	-117.8	
4Q18	6.38	18.00	0.915	0.40	0.69	142.7	
1Q19	6.70	15.40	1.071	3.92	0.25	-95.6	
2Q19	6.76	18.00	1.296	11.80	0.19	-126.3	
3Q19	6.78	18.70	1.209	9.71	0.33	-6.4	
4Q19	6.85	18.10	1.267	15.60	0.90	-146.5	
1Q20	7.04	18.00	1.377	13.28	1.61	-143.6	
2Q20	6.67	16.20	0.950	23.39	0.25	-82.8	
MW-06A							
3Q17	6.72	21.82	1.167	45.38	0.01	-126.0	
4Q17	6.75	20.60	1.117	8.89	0.04	-114.0	
1Q18	6.26	18.10	1.120	5.20	0.15	11.0	
2Q18	6.41	18.10	1.177	45.50	0.49	-16.2	
3Q18	6.57	20.70	1.993	49.70	2.20	-69.0	
4Q18	6.80	20.50	1.050	111.00	0.57	-83.9	
1Q19	6.59	19.00	1.165	17.90	0.92	-94.8	
2Q19	6.54	18.50	1.292	42.99	0.08	-78.5	
3Q19	6.56	20.70	0.826	34.31	0.22	-121.5	
4Q19	6.77	19.90	0.798	37.42	0.69	-121.5	
1Q20	6.64	18.40	1.122	24.20	0.20	153.0	
2Q20	6.52	17.30	1.040	42.50	0.43	-83.1	

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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-06B							
3Q17	7.05	20.84	0.943	5.09	0.09	-120.0	
4Q17	7.07	20.27	0.905	2.95	0.07	-113.0	
1Q18	6.77	18.80	0.877	8.50	0.24	40.0	
2Q18	6.91	18.00	1.033	11.00	0.57	-102.8	
3Q18	7.14	20.60	0.771	1.50	2.20	-117.2	
4Q18	7.06	19.70	0.806	0.00	0.68	-50.7	
1Q19	7.02	19.10	0.897	0.00	0.99	-79.1	
2Q19	7.10	18.90	0.907	5.26	0.03	-85.3	
3Q19	6.86	20.30	0.885	10.14	0.29	-103.1	
4Q19	7.09	19.90	0.786	0.00	0.62	-111.7	
1Q20	6.99	17.00	1.088	1.70	0.25	69.0	
2Q20	6.86	17.80	0.800	3.61	0.40	-56.2	
MW-06C							
3Q17	7.00	20.44	1.076	10.73	0.10	-133.0	
4Q17	7.08	19.78	0.920	3.24	0.00	-139.0	
1Q18	6.65	17.40	0.973	0.60	0.20	45.6	
2Q18	6.74	17.40	1.183	3.20	0.36	-114.8	
3Q18	7.13	20.70	0.841	4.30	3.00	-133.6	
4Q18	6.94	19.70	0.790	5.40	0.67	-63.3	
1Q19	7.10	18.60	0.864	0.00	2.51	-86.9	
2Q19	7.10	18.20	0.910	3.11	0.14	-66.8	
3Q19	6.92	20.10	0.841	1.66	0.31	-164.6	
4Q19	7.18	19.50	0.783	0.00	0.75	-128.4	
1Q20	7.16	18.60	0.948	5.20	0.29	50.1	
2Q20	7.02	18.00	0.640	10.85	0.68	-90.5	
MW-06D							
3Q17	6.92	20.14	1.241	49.06	0.09	-139.0	
4Q17	7.22	20.30	1.392	18.30	0.20	-111.0	
1Q18	6.76	17.50	1.567	3.50	0.18	-16.3	
2Q18	6.92	17.70	1.708	39.10	0.54	-125.4	
3Q18	7.11	20.30	1.179	8.80	2.00	-131.9	
4Q18	7.07	19.10	1.092	26.80	0.69	-74.4	
1Q19	7.07	18.20	1.074	5.10	2.56	-100.1	
2Q19	7.13	17.90	0.998	14.92	0.27	-100.4	
3Q19	6.76	20.20	0.932	8.92	0.41	-124.4	
4Q19	7.13	19.20	0.940	4.45	0.75	-128.9	
1Q20	7.11	18.20	1.209	30.50	0.25	2.8	
2Q20	7.00	16.80	0.900	48.99	0.50	-93.2	

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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							
3Q17	6.59	21.25	1.553	9.56	0.06	-101.0	
4Q17	6.71	20.53	1.490	36.84	0.06	-76.0	
1Q18	6.69	17.10	1.479	27.20	0.38	-100.1	
2Q18	6.57	17.90	1.388	33.90	0.03	-30.4	
3Q18	6.60	21.70	1.622	31.80	0.10	-56.3	
4Q18	6.69	20.90	1.690	14.00	0.69	-28.8	
1Q19	6.72	18.00	1.816	19.40	0.94	-62.5	
2Q19	6.68	19.20	1.668	8.04	0.03	-57.2	
3Q19	6.62	20.10	1.356	34.40	0.25	-34.1	
4Q19	6.66	20.40	1.400	24.55	0.48	-75.4	
1Q20	6.70	18.30	1.623	36.10	1.39	56.0	
2Q20	6.68	18.40	1.560	39.81	1.50	-79.5	Equipment malfunction. DO results are suspect.
MW-08							
3Q17	6.80	22.93	1.375	9.08	0.01	-105.0	
4Q17	6.79	20.62	1.573	7.62	0.03	-100.0	
1Q18	6.74	18.50	1.479	4.80	0.20	-132.2	
2Q18	6.58	18.60	1.509	0.30	0.00	-41.9	
3Q18	6.72	21.80	1.526	3.00	0.14	-71.4	
4Q18	6.78	20.40	1.493	0.50	0.56	-60.7	
1Q19	6.75	19.20	1.444	3.80	0.82	-92.1	
2Q19	6.78	20.10	1.532	6.40	0.09	-100.2	
3Q19	6.78	20.50	1.389	15.20	0.21	-85.4	
4Q19	6.93	19.30	1.637	16.41	0.61	-144.9	
1Q20	6.81	18.00	1.821	7.10	0.25	103.2	
2Q20	6.82	18.50	1.710	3.81	2.08	-139.1	Equipment malfunction. DO results are suspect.
MW-09							
3Q17	6.68	19.35	1.517	20.76	0.02	-76.0	
4Q17	6.80	18.86	1.416	9.92	0.00	-68.0	
1Q18	6.75	17.10	1.311	26.90	0.24	-89.5	
2Q18	6.66	17.10	1.302	9.20	0.08	-34.3	
3Q18	6.79	20.10	1.279	19.80	0.25	19.8	
4Q18	6.78	18.90	1.194	4.10	0.76	22.3	
1Q19	6.53	16.70	1.325	1.60	0.94	31.6	
2Q19	6.82	18.30	1.279	22.36	0.10	-47.4	
3Q19	6.60	23.60	1.334	35.24	0.54	-80.5	
4Q19	6.72	17.50	1.600	10.96	0.79	-77.3	
1Q20	6.82	17.30	2.101	35.70	0.21	146.0	
2Q20	6.73	16.60	1.733	7.69	0.37	-49.2	

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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-10							
3Q17	6.94	21.89	1.994	25.53	0.07	-133.0	
4Q17	7.09	20.16	1.651	5.97	0.00	-137.0	
1Q18	7.03	17.90	1.489	24.70	0.24	-126.2	
2Q18	7.02	18.10	1.932	17.00	0.06	-73.7	
3Q18	6.88	20.40	2.105	31.10	0.12	-36.7	
4Q18	6.92	19.70	1.793	28.20	0.68	17.4	
1Q19	6.92	16.70	1.200	10.20	0.98	-37.8	
2Q19	7.05	19.20	1.400	19.16	0.11	-70.5	
3Q19	7.02	18.90	1.413	31.31	0.28	-84.4	
4Q19	6.93	18.10	1.067	18.33	0.82	-135.6	
1Q20	6.85	17.20	1.331	23.20	0.23	148.6	
2Q20	6.89	17.30	1.139	25.56	0.22	-100.2	
MW-11							
3Q17	6.74	21.17	1.516	14.91	0.15	-116.0	
4Q17	6.77	18.40	1.597	5.91	0.00	-99.0	
1Q18	6.66	16.90	1.652	40.30	0.27	-22.3	
2Q18	6.80	15.30	1.928	31.10	0.56	-40.5	
3Q18	6.68	19.70	2.022	47.70	0.70	-81.3	
4Q18	6.81	17.20	1.446	12.10	0.84	-53.4	
1Q19	6.69	16.20	1.629	0.00	0.97	-25.7	
2Q19	6.80	18.10	1.643	49.82	0.10	-73.7	
3Q19	6.80	20.30	1.330	6.46	0.34	6.9	
4Q19	6.85	17.30	1.288	2.69	0.69	-66.0	
1Q20	6.77	16.20	1.502	3.60	0.19	186.0	
2Q20	6.76	17.10	1.400	6.40	0.25	-66.7	
MW-12							
3Q17	6.88	21.01	1.048	16.55	0.05	-59.0	
4Q17	6.94	19.71	1.123	2.76	0.08	109.0	
1Q18	6.80	18.10	1.050	9.20	0.25	121.6	
2Q18	6.89	18.20	0.914	3.10	0.19	60.9	
3Q18	6.74	20.30	0.940	0.90	0.17	183.5	
4Q18	6.89	19.40	1.022	6.50	0.72	99.3	
1Q19	6.85	16.50	1.100	0.00	0.96	93.2	
2Q19	6.94	18.60	1.206	5.22	0.15	114.5	
3Q19	6.86	20.40	0.872	16.92	0.36	234.2	
4Q19	6.82	19.40	0.972	5.37	0.65	88.6	
1Q20	6.94	16.90	1.030	24.20	0.19	102.2	
2Q20	6.92	18.50	0.846	17.52	0.11	-29.2	

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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-13							
3Q17	6.72	21.14	1.432	3.13	0.11	-146.0	
4Q17	6.62	20.10	1.388	25.92	0.04	-110.0	
1Q18	6.50	18.70	1.493	3.90	0.14	-3.3	
2Q18	6.45	19.30	1.466	13.60	0.09	-81.3	
3Q18	6.60	22.00	1.490	17.60	0.14	-105.4	
4Q18	6.60	19.60	1.389	15.40	0.61	-33.3	
1Q19	6.60	18.70	1.509	11.93	0.19	-87.7	
2Q19	6.56	18.20	1.284	12.49	0.14	-58.6	
3Q19	6.37	22.40	0.997	21.00	0.14	-121.4	
4Q19	6.59	19.60	1.012	15.84	0.70	-122.6	
1Q20	6.65	18.20	1.667	32.86	1.13	-114.7	
2Q20	6.49	19.60	1.000	19.52	0.07	-110.6	
MW-14							
3Q17	6.77	21.68	1.641	9.69	0.05	-73.0	
4Q17	6.84	21.29	0.989	1.97	0.06	-67.0	
1Q18	6.75	17.30	1.457	4.80	0.29	198.2	
2Q18	6.41	17.10	2.016	5.00	0.43	-57.3	
3Q18	6.59	22.20	1.510	1.00	1.98	-66.2	
4Q18	6.95	17.60	1.138	4.90	0.82	100.3	
1Q19	6.78	16.60	1.108	1.67	0.29	-38.7	
2Q19	6.45	18.40	1.235	7.11	0.24	156.2	
3Q19	6.76	20.80	0.927	17.52	0.36	-115.8	
4Q19	6.84	17.40	0.875	2.43	1.01	-88.9	
1Q20	6.83	17.70	1.660	1.19	1.78	-106.4	
2Q20	6.54	18.00	1.218	6.99	0.15	-45.2	
MW-16							
3Q17	6.77	22.58	1.475	86.56	0.27	-89.0	
4Q17	6.86	19.63	1.196	19.13	0.19	-54.0	
1Q18	6.85	17.90	1.078	31.30	0.49	-51.8	
2Q18	6.51	17.90	1.289	35.40	0.64	-33.6	
3Q18	6.89	20.50	1.060	11.10	0.60	-135.4	
4Q18	6.76	19.50	1.171	10.10	0.58	-50.3	
1Q19	6.53	16.50	1.201	9.20	0.95	-18.7	
2Q19	6.87	17.60	1.312	32.00	0.32	-39.2	
3Q19	6.53	20.60	1.314	25.80	0.37	14.2	
4Q19	6.78	19.10	1.246	46.41	0.82	90.7	
1Q20	6.68	17.40	1.602	21.40	1.00	222.5	
2Q20	6.53	14.60	1.245	6.10	0.52	163.5	

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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-22							
3Q17	6.84	23.10	1.192	6.36	0.01	-83.0	
4Q17	6.91	20.20	1.218	12.49	0.11	-83.0	
1Q18	6.73	19.60	1.219	6.60	0.25	-125.1	
2Q18	6.64	18.90	1.462	9.90	0.43	-85.4	
3Q18	6.60	21.80	1.398	16.20	1.40	-103.5	
4Q18	6.72	18.60	1.044	1.10	0.86	110.2	
1Q19	6.87	15.10	1.134	5.02	0.47	-87.4	
2Q19	6.66	19.00	1.097	16.18	0.18	117.2	
3Q19	NM	NM	NM	NM	NM	NM	Well inaccessible due to parked vehicle. No sample collected.
4Q19	7.10	19.20	1.374	22.53	0.97	-111.6	
1Q20	7.14	18.80	1.599	12.21	1.84	-92.7	
2Q20	6.67	17.60	1.173	22.73	0.25	53.4	
MW-23							
3Q17	7.31	20.08	1.062	63.73	0.00	-156.0	
4Q17	6.64	19.00	1.332	35.90	0.01	-66.6	
1Q18	6.28	16.40	1.272	39.50	0.15	61.3	
2Q18	6.27	16.90	1.064	49.60	0.00	-13.6	
3Q18	6.69	21.30	1.004	62.00	0.18	-89.1	
4Q18	6.66	19.10	0.958	37.00	0.57	-47.0	
1Q19	6.61	16.10	1.062	49.70	0.83	-78.1	
2Q19	6.75	19.70	1.124	88.40	0.00	-98.8	
3Q19	6.66	21.00	0.982	12.69	0.31	-57.2	
4Q19	6.78	19.70	0.787	70.83	0.58	-118.2	
1Q20	6.79	17.00	1.064	38.80	0.22	7.7	
2Q20	6.67	19.30	0.910	30.31	0.10	-88.1	
MW-24							
3Q17	6.83	21.41	1.491	88.10	0.05	-121.0	Field parameters are suspect.
4Q17	7.07	20.21	1.811	3.91	0.25	85.0	
1Q18	7.05	17.60	1.687	5.80	0.83	134.9	
2Q18	6.80	16.80	2.026	22.80	0.63	45.1	
3Q18	6.69	20.10	1.809	49.80	2.90	126.7	
4Q18	6.61	19.60	2.020	51.60	0.70	79.3	
1Q19	6.69	17.40	1.760	22.80	1.30	178.8	
2Q19	6.93	17.80	1.615	37.50	0.68	-2.1	
3Q19	6.83	19.10	1.278	17.12	0.32	296.1	
4Q19	6.98	18.20	1.857	19.02	1.07	189.1	
1Q20	6.88	16.60	1.345	11.30	0.51	231.0	
2Q20	6.87	17.60	0.971	10.55	0.31	125.6	

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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-25							
3Q17	6.95	23.17	1.248	7.70	0.13	-134.0	
4Q17	6.92	21.23	1.267	14.05	0.02	-127.0	
1Q18	6.94	17.90	1.287	20.40	0.24	-170.4	
2Q18	6.88	18.00	0.919	16.70	0.00	-27.9	
3Q18	7.09	20.40	0.495	19.00	0.14	-64.4	
4Q18	7.27	18.20	0.555	4.40	0.57	-107.0	
1Q19	7.22	16.40	0.970	14.90	0.76	-205.8	
2Q19	7.09	18.70	1.391	41.25	0.00	-105.8	
3Q19	6.87	20.80	1.059	16.74	0.30	-73.4	
4Q19	6.91	19.00	1.034	3.91	0.69	-137.5	
1Q20	6.85	17.40	1.028	9.70	0.24	167.1	
2Q20	6.88	18.20	1.014	17.18	2.02	-128.9	Equipment malfunction. DO results are suspect.
MW-26							
3Q17	6.76	20.73	1.594	8.43	0.09	-41.0	
4Q17	6.87	20.40	1.814	3.12	0.20	53.8	
1Q18	6.77	18.40	1.630	18.80	0.43	165.4	
2Q18	6.72	18.80	1.832	14.10	0.09	90.4	
3Q18	6.71	22.10	1.592	4.00	0.40	146.7	
4Q18	6.81	21.00	1.431	3.80	0.73	62.3	
1Q19	6.75	17.40	1.298	7.90	1.04	80.0	
2Q19	6.86	18.90	1.324	9.49	0.10	11.2	
3Q19	6.84	19.80	1.044	9.24	0.29	206.0	
4Q19	6.82	18.90	0.965	36.00	0.81	162.6	
1Q20	6.85	18.40	1.430	15.80	0.38	181.4	
2Q20	6.64	17.60	1.514	8.33	0.70	170.1	
MW-27							
3Q17	6.93	21.63	0.912	45.15	1.88	12.0	
4Q17	6.94	19.93	1.026	13.21	1.35	4.0	
1Q18	6.91	16.80	0.931	49.30	0.50	-43.8	
2Q18	6.90	15.80	1.436	30.70	0.72	-24.1	
3Q18	6.79	21.40	1.204	49.80	13.90	-30.4	Equipment malfunction. DO results are suspect.
4Q18	6.79	19.60	1.021	30.90	1.84	35.7	
1Q19	6.78	16.40	1.033	3.70	1.76	46.2	
2Q19	6.82	17.10	1.031	36.28	1.71	-9.4	
3Q19	6.95	19.10	0.891	5.86	3.36	289.0	
4Q19	6.97	19.40	0.835	41.54	4.62	227.4	
1Q20	6.95	16.50	0.884	10.60	2.75	108.7	
2Q20	7.00	16.00	0.818	24.41	3.88	28.4	

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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-28							
3Q17	6.65	21.61	1.783	41.11	0.05	-75.0	
4Q17	6.72	19.67	1.594	23.12	0.04	-17.0	
1Q18	6.70	17.90	1.343	22.10	0.26	-38.7	
2Q18	6.57	17.30	1.598	14.60	0.13	40.2	
3Q18	6.56	20.80	2.077	0.80	4.00	-11.4	
4Q18	6.71	19.30	1.619	8.10	0.83	-27.8	
1Q19	6.71	17.70	1.730	9.77	0.37	9.0	
2Q19	6.76	18.40	1.779	15.83	0.27	70.9	
3Q19	6.57	23.00	1.475	22.76	0.37	15.4	
4Q19	6.71	18.90	1.647	5.49	0.50	-19.2	
1Q20	6.57	18.20	2.134	30.20	0.19	107.8	
2Q20	6.42	17.00	1.511	27.55	0.26	82.5	
P-54							
3Q17	6.71	21.77	1.359	21.24	0.68	35.0	
4Q17	6.85	19.45	1.283	21.53	0.96	126.0	
1Q18	6.75	17.40	1.441	13.40	1.64	161.0	
2Q18	6.90	15.90	1.999	26.20	1.72	90.0	
3Q18	6.77	20.60	1.258	13.60	19.70	199.1	Equipment malfunction. DO results are suspect.
4Q18	6.76	19.40	1.253	12.50	1.63	98.2	
1Q19	6.94	16.30	1.137	4.40	3.85	72.3	
2Q19	6.82	18.90	1.292	13.59	1.17	44.7	
3Q19	6.69	20.20	1.188	3.60	1.06	262.7	
4Q19	6.79	17.30	1.181	2.52	3.36	210.4	
1Q20	6.77	15.70	1.126	2.00	1.88	253.3	
2Q20	6.83	18.00	1.155	8.12	2.30	116.1	
P-55R							
3Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-56							
3Q17	7.12	29.55	1.228	35.04	0.00	-165.0	
4Q17	7.09	20.82	1.512	14.63	0.00	-157.0	
1Q18	6.91	19.90	1.466	19.50	0.13	-22.5	
2Q18	6.98	22.30	2.042	48.70	0.24	-131.4	
3Q18	6.92	22.80	1.579	49.90	0.00	-140.9	
4Q18	7.19	20.20	1.198	11.00	0.29	-88.6	
1Q19	6.96	18.40	1.070	33.63	0.25	-64.8	
2Q19	6.81	21.80	1.200	32.03	0.12	-98.6	
3Q19	6.89	25.80	1.540	62.10	0.06	-183.1	
4Q19	7.15	20.20	1.247	24.17	0.86	-140.0	
1Q20	7.04	18.10	1.343	9.87	1.56	-137.6	
2Q20	7.19	18.50	1.025	8.27	0.78	-166.1	
P-57							
3Q17	6.81	24.96	1.077	6.33	0.00	-137.0	
4Q17	6.88	23.41	1.439	2.36	0.00	-119.0	
1Q18	6.73	21.30	1.537	6.73	0.33	-151.2	
2Q18	6.69	20.80	1.689	9.40	0.37	-116.0	
3Q18	6.70	24.70	1.799	1.00	0.70	-131.3	
4Q18	6.57	21.70	1.307	3.80	0.75	60.3	
1Q19	6.66	20.40	1.053	2.63	0.37	-43.7	
2Q19	6.61	22.30	1.017	2.36	0.20	-44.1	
3Q19	6.64	21.90	1.083	6.70	0.30	-146.4	
4Q19	6.89	21.20	0.995	0.00	0.71	-132.0	
1Q20	6.92	20.00	1.335	0.00	1.44	-120.0	
2Q20	6.69	18.40	0.848	4.58	0.32	-16.0	
P-58							
3Q17	6.79	24.77	2.202	10.11	0.00	-123.0	
4Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q18	6.57	22.70	3.147	14.70	0.32	-93.2	
3Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q18	7.00	25.80	2.600	40.60	0.49	-39.4	
1Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q19	6.84	25.30	2.530	43.77	0.00	-80.6	
3Q19	6.65	22.90	3.083	26.95	0.23	-122.0	
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-59							
3Q17	6.59	28.96	1.588	10.14	0.00	-127.0	
4Q17	6.64	27.54	1.824	10.54	0.00	-133.0	
1Q18	6.46	24.40	1.784	10.60	0.20	10.0	
2Q18	7.36	27.70	1.344	11.30	0.38	-106.9	
3Q18	6.56	31.40	1.790	8.00	2.00	-113.7	
4Q18	6.61	27.10	1.648	49.20	0.20	-90.1	
1Q19	6.54	20.60	1.321	1.63	0.40	-45.8	
2Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q19	6.79	24.50	1.168	0.00	0.75	-139.0	
1Q20	6.76	21.10	1.481	0.00	1.51	-98.9	
2Q20	6.72	26.60	1.342	14.72	0.75	-133.4	
P-66							
3Q17	6.55	25.65	1.269	24.34	0.07	-109.0	
4Q17	6.62	21.99	1.587	5.96	0.04	-111.0	
1Q18	6.46	18.90	1.580	7.20	0.33	162.5	
2Q18	6.50	18.80	1.965	5.60	0.35	-103.6	
3Q18	6.49	27.10	1.861	16.50	0.37	-85.4	
4Q18	6.79	18.30	1.501	3.80	0.81	90.4	
1Q19	6.64	18.10	1.546	8.34	0.31	-61.8	
2Q19	6.56	20.70	1.453	8.80	0.14	64.4	
3Q19	6.49	22.80	1.446	6.09	0.25	-135.9	
4Q19	6.63	19.70	0.998	0.00	0.77	-112.4	
1Q20	6.75	18.30	2.269	12.52	2.31	-121.2	
2Q20	6.50	18.00	1.279	11.19	0.24	-59.5	
P-68							
3Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q17	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q18	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
3Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
4Q19	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
1Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.
2Q20	NM	NM	NM	NM	NM	NM	LNAPL encountered in well. No sample collected.

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-74							
3Q17	7.15	25.12	0.142	3.38	0.10	-107.0	
4Q17	6.56	20.98	0.384	6.95	0.00	-55.0	
1Q18	6.42	19.50	0.776	6.30	0.26	166.5	
2Q18	7.85	13.00	0.255	6.30	9.75	28.4	
3Q18	7.09	27.50	0.225	11.90	0.57	31.2	
4Q18	6.29	18.10	0.323	3.30	0.86	62.0	
1Q19	7.55	18.30	0.149	4.62	0.39	-73.5	
2Q19	7.24	19.90	0.165	4.39	0.81	55.6	
3Q19	6.74	22.30	0.221	9.88	0.31	-106.9	
4Q19	6.91	21.80	0.239	3.60	0.80	-84.0	
1Q20	7.03	18.00	0.257	6.48	1.76	-92.8	
2Q20	6.56	17.70	0.168	3.28	0.76	93.5	
P-93A							
3Q17	7.02	25.19	1.049	15.32	0.12	-14.0	
4Q17	6.88	22.07	1.047	1.97	0.40	117.0	
1Q18	6.99	22.40	1.173	6.10	0.36	142.1	
2Q18	6.83	24.00	1.514	12.60	0.51	-3.2	Initial sample
	6.72	23.60	0.965	6.20	0.34	-206.0	Confirmation sample
3Q18	6.78	30.00	1.007	5.20	0.85	-81.2	
4Q18	6.83	22.90	1.158	2.60	0.30	-137.9	
1Q19	6.73	20.70	0.999	1.27	0.46	-49.7	
2Q19	6.62	20.90	0.883	32.66	0.82	-85.2	
3Q19	6.64	22.90	1.079	5.63	0.36	-112.7	
4Q19	6.62	23.40	0.977	21.33	0.87	-79.3	
1Q20	7.07	22.00	1.497	0.00	1.57	-72.7	
2Q20	7.06	21.90	0.877	5.05	0.65	-99.0	
P-93B							
3Q17	6.77	22.27	1.323	0.05	0.00	-125.0	
4Q17	6.68	19.00	1.669	12.80	1.20	-100.3	
1Q18	6.78	17.30	1.455	44.20	0.35	-125.7	
2Q18	7.07	18.20	1.364	8.80	0.76	-113.2	
3Q18	6.68	23.90	1.448	50.30	0.50	-95.0	
4Q18	6.59	18.50	1.561	28.20	0.44	-63.6	
1Q19	6.37	17.30	1.491	0.69	0.44	-45.9	
2Q19	6.58	16.90	1.155	33.90	0.87	-60.2	
3Q19	6.57	21.20	1.101	4.07	1.08	-115.3	
4Q19	6.70	19.70	1.073	13.56	1.52	-104.9	
1Q20	6.66	17.40	1.557	2.23	2.06	-91.0	
2Q20	6.81	19.70	1.368	30.80	0.93	-115.3	

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TABLE 2
SUMMARY OF GROUNDWATER MONITORING WELL FIELD PARAMETERS

WELL ID & EVENT	pH	Temp (C)	Specific Cond (mS/cm)	Turbidity (NTUs)	DO (mg/L)	ORP (mV)	General Notes
P-93C							
3Q17	6.97	22.42	0.948	15.98	0.16	-87.0	
4Q17	6.90	19.44	1.165	41.17	0.00	-106.0	
1Q18	6.92	19.40	1.256	14.90	0.38	137.8	
2Q18	7.00	19.00	1.563	42.70	0.46	-81.6	
3Q18	6.74	23.40	1.222	3.30	0.29	-49.3	
4Q18	6.95	19.00	1.362	8.30	0.40	-48.7	
1Q19	6.95	17.60	1.125	2.21	0.29	-80.7	
2Q19	6.36	18.00	1.067	2.36	0.44	-26.8	
3Q19	6.77	21.70	1.175	48.20	0.34	-108.0	
4Q19	6.96	21.90	1.099	4.82	0.81	-118.4	
1Q20	6.89	18.20	1.574	0.00	1.80	-90.2	
2Q20	7.03	18.70	1.025	4.18	0.72	-147.4	
P-93D							
3Q17	7.12	19.92	1.278	1.49	0.00	-166.0	
4Q17	6.98	17.80	1.598	1.12	0.15	-140.1	
1Q18	6.96	17.80	1.513	12.30	0.26	-157.9	
2Q18	7.42	19.00	1.367	10.30	0.83	-106.5	
3Q18	7.37	28.90	1.447	4.50	3.10	-101.1	
4Q18	7.05	17.50	1.441	7.00	0.21	-107.9	
1Q19	6.51	16.60	1.338	0.72	0.47	-42.6	
2Q19	7.16	15.00	1.320	14.01	1.57	29.0	
3Q19	6.73	19.70	1.349	4.14	0.80	-170.8	
4Q19	7.07	19.10	1.157	24.54	0.88	-121.9	
1Q20	7.04	17.00	1.751	0.00	1.90	-99.2	
2Q20	7.12	18.90	1.265	3.18	1.02	-231.3	
P-114R							
3Q17	6.48	22.74	0.651	38.57	0.00	-94.0	
4Q17	6.46	21.45	0.721	49.42	0.05	-84.0	
1Q18	6.64	20.60	0.990	45.60	0.16	-49.8	
2Q18	6.30	19.60	0.879	33.40	0.12	-60.0	
3Q18	6.67	22.00	0.903	29.60	0.12	-132.6	
4Q18	6.74	20.50	0.784	38.00	0.49	41.0	
1Q19	6.72	19.90	1.105	79.32	0.00	-112.9	
2Q19	6.76	19.80	1.162	44.78	0.00	-76.0	
3Q19	6.36	20.60	1.054	65.60	0.10	-136.2	
4Q19	6.73	22.60	0.863	32.44	0.49	-147.9	
1Q20	7.07	20.40	1.785	41.91	1.12	-107.5	
2Q20	6.62	21.80	1.131	27.18	0.42	-125.9	

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
ROST-3-MW							
3Q17	6.89	19.81	1.614	16.13	0.04	-123.0	
4Q17	6.53	17.64	1.660	12.28	0.05	-108.0	Initial sample
	6.45	17.44	1.534	36.05	0.09	-192.0	Confirmation sample
1Q18	6.15	15.20	1.776	15.00	0.37	239.6	Initial sample
	6.48	18.40	1.631	14.00	0.29	-10.9	Confirmation sample
2Q18	6.56	17.10	1.704	25.10	0.02	-36.0	
3Q18	6.64	21.00	1.562	23.10	0.22	-78.8	
4Q18	6.49	19.10	1.585	12.90	0.61	21.4	
1Q19	6.56	16.50	1.669	0.00	0.98	-34.5	
2Q19	6.87	17.20	1.584	34.01	0.42	24.9	
3Q19	6.70	19.30	1.261	6.69	0.40	-122.2	
4Q19	6.47	17.70	1.627	1.15	0.80	-80.4	
1Q20	6.46	17.40	2.042	10.40	0.23	213.3	
2Q20	6.47	16.80	1.219	8.15	0.13	-68.8	
ROST-4-PZ(C)							
3Q17	7.24	20.56	1.460	23.29	0.01	-178.0	
4Q17	7.16	18.31	1.466	5.75	0.00	-142.0	
1Q18	6.71	16.20	2.188	44.00	0.27	-107.6	
2Q18	6.66	16.90	2.033	15.20	0.39	-84.2	
3Q18	6.75	19.80	2.149	5.20	0.70	-120.8	
4Q18	6.98	17.70	1.121	12.80	0.69	65.2	
1Q19	6.85	14.60	1.390	15.01	0.37	-82.3	
2Q19	7.07	19.10	1.310	18.60	0.16	-28.6	
3Q19	7.17	19.50	1.439	12.94	0.25	-169.4	
4Q19	7.00	18.30	1.681	5.87	0.63	-184.6	
1Q20	6.97	17.90	2.062	0.00	1.70	-108.1	
2Q20	7.11	17.30	1.214	23.58	0.20	-80.0	
ROST-4-PZ(E)							
4Q17	7.02	19.45	1.753	18.10	0.02	-147.0	Added to Interim GW Monitoring Program 4Q17
1Q18	6.99	16.60	2.311	19.70	0.39	-32.4	
2Q18	6.91	18.00	2.416	15.20	0.58	16.8	
3Q18	6.65	23.40	2.660	42.60	2.90	-4.0	
4Q18	6.45	18.70	1.518	11.80	0.89	145.0	
1Q19	6.99	18.40	2.258	35.54	0.41	73.9	
2Q19	6.90	19.10	2.064	26.93	0.42	22.0	
3Q19	6.94	21.10	1.820	24.15	0.28	-80.8	
4Q19	7.00	19.00	2.000	2.33	0.73	-137.2	
1Q20	7.01	19.10	2.451	31.42	1.42	-122.6	
2Q20	6.93	18.20	1.892	25.87	0.18	-10.2	

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
ROST-4-PZ(G)							
4Q17	6.82	18.77	1.525	11.54	0.00	-138.0	Added to Interim GW Monitoring Program 4Q17
1Q18	6.70	18.50	1.416	7.80	0.24	-119.1	
2Q18	6.38	17.90	2.255	10.40	0.37	-88.8	
3Q18	6.76	21.40	2.357	4.90	1.00	-109.7	
4Q18	6.92	18.70	1.832	9.00	0.69	52.1	
1Q19	6.89	17.90	2.222	4.70	0.31	-67.1	
2Q19	7.03	18.70	1.766	5.68	0.13	-42.2	
3Q19	6.60	19.10	1.749	13.86	0.28	-72.8	
4Q19	6.83	20.90	1.721	50.01	0.47	-238.9	
1Q20	6.77	17.70	1.661	20.60	0.26	212.5	
2Q20	6.47	17.90	1.252	9.14	0.10	-38.5	
T-12							
3Q17	6.86	25.07	1.243	6.64	0.00	-151.0	
4Q17	6.98	23.48	1.165	5.31	0.00	-157.0	
1Q18	6.72	22.40	1.372	6.40	0.18	-37.9	
2Q18	7.95	21.80	1.335	20.60	0.34	-115.8	
3Q18	6.70	22.70	1.977	0.00	0.90	-117.1	
4Q18	6.54	23.00	1.716	3.00	0.32	-70.3	
1Q19	6.82	22.20	1.657	4.93	0.30	-96.1	
2Q19	6.62	23.60	1.693	3.73	0.22	-131.1	
3Q19	6.76	23.30	1.789	5.46	0.24	-161.2	
4Q19	6.94	22.60	1.427	14.65	0.86	-149.9	
1Q20	6.88	19.10	1.905	0.00	1.53	-115.9	
2Q20	7.07	19.50	1.306	12.44	0.84	-153.9	

NOTES:

1) Beginning in 1Q18, field parameters were collected using a YSI ProDSS. Prior results were reported using an In-Situ Troll 9500.

2) NM = Not Measured

3) * = Equipment malfunction. Results are suspect.

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

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																							
MW-01	MW1-ROX-071117	7/11/2017	48.80 - 58.80	37.24	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-010518	1/5/2018		40.06	NE	0.066 F1 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-040618	4/6/2018		40.82	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-070618	7/6/2018		41.40	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.025	0.0018	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW1-ROX-010819	1/8/2019		40.96	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.025 UJ	0.00045 J	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.025	0.00044 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-101119	10/11/2019		35.72	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-010920	1/9/2020		37.09	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW1-ROX-040920	4/9/2020	48.80 - 58.80	36.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-02	MW2-ROX-071217	7/12/2017	49.87 - 59.87	38.66	NE	<0.025	0.0092	<0.001	0.0093 J	0.0062	0.0055	<0.001	<0.001	<0.001	<0.001	<0.001	0.0062	<0.00003	<0.00002	0.00085 J	<0.001	<0.001	0.15	<0.001	0.06	<0.025	<0.001	0.014	0.079
	MW2-ROX-101217	10/12/2017		39.03	NE	<0.13	0.006	<0.005	0.016 J	0.01	0.006	<0.005	<0.005	<0.005	<0.005	<0.005	0.0065	0.00012	<0.00002	<0.005	<0.005	<0.005	0.51	<0.005	0.07	<0.13	<0.005	0.035	0.099
	MW2-ROX-011118	1/11/2018		41.24	NE	<0.025	0.011	<0.001	0.0083 J	<0.001	0.0054	<0.001	<0.001	<0.001	<0.001	<0.001	0.0057	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.087	<0.001	0.049	<0.025	<0.001	0.01	0.069
	MW2-ROX-040918	4/9/2018		42.10	NE	0.029	0.0016	<0.001	0.019 J	0.0029	0.0017	<0.001	<0.001	<0.001	0.0021	<0.001	0.0018	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.22	<0.001	0.026	<0.025	<0.001	0.036	0.033
	MW2-ROX-071018	7/10/2018		42.59	NE	<0.025	0.007	<0.001	0.0095 J	0.0058	0.0054	0.00074 J	0.00093 J	<0.001	<0.001	<0.001	0.0052	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.077	<0.001	0.052	<0.025	<0.001	0.01	0.073
	MW2-ROX-101218	10/12/2018		42.71	NE	0.021 J	0.0044	<0.001	0.0099 J	0.0022	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	0.0036	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.11	<0.001	0.035	<0.025	<0.001	0.011	0.049
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	0.017 J	0.0045	<0.001	0.0095 J	0.0022	0.0041	<0.001	<0.001	<0.001	<0.001	<0.001	0.0037	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.13	<0.001	0.035	<0.025	<0.001	0.013	0.05
	MW2-ROX-010819	1/8/2019		42.43	NE	<0.05	0.0032	<0.002	0.02 J	0.0063	0.0053	<0.002	<0.002	<0.002	<0.002	<0.002	0.0054	<0.000031	<0.000021	<0.002	<0.002	<0.002	0.22	<0.002	0.061	<0.05	<0.002	0.023	0.083
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<0.05	0.0032	<0.002	0.026 J	0.0067	0.0054	<0.002	<0.002	<0.002	<0.002	<0.002	0.0055	<0.000031	<0.000021	<0.002	<0.002	<0.002	0.21	<0.002	0.061	<0.05	<0.002	0.023	0.085
	MW2-ROX-041619	4/16/2019		41.80	NE	<0.13	<0.005	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.64	<0.005	0.042	<0.13	<0.005	0.041	0.05
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.13	<0.005	<0.005	<0.13	0.011	0.0066	<0.005	<0.005	<0.005	<0.005	<0.005	0.0068	<0.000031	<0.000021	<0.005	<0.005	<0.005	1.2	<0.005	0.074	<0.13	<0.005	0.064	0.11
	MW2-ROX-101019	10/10/2019		36.99	NE	<0.13	<0.005	<0.005	<0.13	0.0073	0.0045 J	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.63	<0.005	0.06	<0.13	<0.005	0.065	0.081
	MW2-ROX-010920	1/9/2020		38.52	NE	<0.05	<0.002	<0.002	<0.05	<0.002	0.0036	<0.002	<0.002	<0.002	<0.002	<0.002	0.0031	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.21	<0.002	0.034	<0.05	<0.002	0.02	0.049
	MW2-ROX-040820	4/8/2020	49.87 - 59.87	37.69	NE	<0.13	0.0032 J	<0.005	<0.13	0.0044 J	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000029	<0.000019	<0.005	<0.005	<0.005	0.77	<0.005	0.043	<0.13	<0.005	0.06	0.053
MW-03	MW3-ROX-071217	7/12/2017	34.67 - 44.67	24.25	NE	<0.025	0.0004 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0026	<0.025	0.0028	<0.001	0.0078
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00063 J	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.00087 J	<0.025	0.0026	<0.001	0.002
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0046	<0.025	0.0026	<0.001	0.0091
	MW3-ROX-040518	4/5/2018		27.98	NE	0.01 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0028	<0.025	0.0027	<0.001	0.0082
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.025	<0.001	<0.001	0.0087
	MW3-ROX-100518	10/5/2018		28.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0022	<0.025	0.0019	<0.001	0.0066
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.025 UJ	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0023	<0.025	<0.001	<0.001	0.0058
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.025	0.0011	<0.001	<0.025	<0.001	0.001	0.00095 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.0037	<0.001	0.013	<0.025	<0.001	<0.001	0.036
	MW3-ROX-101419	10/14/2019		22.66	NE	<0.025	0.00039 J	<0.001	<0.025	0.0029	<0.001	<0.001	0.00088 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0029	<0.001	0.005	<0.025	<0.001	<0.001	0.01
	MW3-ROX-011020	1/10/2020		24.02	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	0.00064 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.006	<0.025	<0.001	<0.001	0.011
	MW3-ROX-040820	4/8/2020	34.67 - 44.67	23.42	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.0033	<0.025	<0.001	<0.001	0.0066
MW-04	MW4-ROX-071017	7/10/2017	45.06 - 55.06	35.68	NE	0.014 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0078	<0.001	<0.001
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0037	<0.001	<0.001
	MW4-ROX-010918	1/9/2018		38.65	NE	0.031	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001
	MW4-ROX-040918	4/9/2018		39.32	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0036	<0.001	<0.001
	MW4-ROX-071018	7/10/2018		39.60	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0039	<0.001	<0.001
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0032	<0.001	<0.001
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0031	<0.001	<0.001
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<0.001
	MW4-ROX-100819	10/8/2019		34.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW4-ROX-010620	1/6/2020		35.54	NE	<0.025	<0.001	<0.001 UJ	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW4-ROX-010620-PCP	1/6/2020		35.54	NE																								
	MW4-ROX-040620	4/6/2020	45.06 - 55.06	34.92	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000037	<0.000025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-05	MW5-ROX-071217	7/12/2017	33.97 - 43.97	23.96	NE	<0.025	0.0038	<0.001	<0.025	<0.001	<0.001	0.0024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0026	<0.001	<0.001
	MW5-ROX-101217	10/12/2017		25.04	NE	<0.025	0.0069	<0.001	<0.025	<0.001	<0.001	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.025	0.0014	<0.001	<0.001
	MW5-ROX-011118	1/11/2018		26.98	NE	0.011 J	0.0021	<0.001	<0.025	<0.001	<0.001	0.0025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001
	MW5-ROX-040918	4/9/2018		27.78	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0011	<0.001	<0.001
	MW5-ROX-071018	7/10/2018		27.87	NE	<0.025	0.00091 J	<0.001	<0.025	<0.001	<0.001	0.0029	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001
	MW5-ROX-101218	10/12/2018		27.95	NE	<0.025	0.0019	<0.001	<0.025	<0.001	<0.001	0.0022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW5-ROX-010819	1/8/2019		27.65	NE	<0.025	0.0022	<0.001	<0.025	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW5-ROX-041519	4/15/2019		26.96	NE	<0.025	0.0033	<0.001	<0.025	<0.001	<0.001	0.0019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001
	MW5-ROX-071219	7/12/2019		22.37	NE	0.074	0.01	<0.001	<0.025	<0.001	<0.001	0.0023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0068	<0.001	0.0027	<0.025	0.0028	<0.001	0.0027
	MW5-ROX-101519	10/15/2019		22.23	NE	<0.025	0.0044	<0.001	<0.025	<0.001	<0.001	0.0026	0.00059 J	<0.001	0.0017	<0.001	<0.001	<0.000029	<0.000019	<0.001	0.00052 J	<0.001	<0.001	<0.001	0.0023	<0.025	0.0032	<0.001	0.0011
	MW5-ROX-010620	1/6/2020		23.68	NE	<0.025	<0.001	<0.001 UJ	<0.025	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.00071 J	<0.025	<0.001	<0.001	<0.001
	MW5-ROX-041320	4/13/2020	33.97 - 43.97	23.11	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	0.0024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																							
MW-06A	MW6A-ROX-071117	7/11/2017	34.83 - 44.83	26.16	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6A-ROX-070518	7/5/2018		30.10	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0012	<0.001	<0.001
	MW6A-ROX-100418	10/4/2018		30.10	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001
	MW6A-ROX-010819	1/8/2019		29.77	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001
	MW6A-ROX-040519	4/5/2019		29.34	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00093 J	<0.001	<0.001
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6A-ROX-101019	10/10/2019		24.39	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6A-ROX-010820	1/8/2020		26.03	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00086 J	<0.001	<0.001
	MW6A-ROX-041320	4/13/2020	33.85 - 43.85	25.14	NE	<0.025	0.00043 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-06B	MW6B-ROX-071117	7/11/2017	64.05 - 69.05	26.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-040518	4/5/2018		29.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-070518	7/5/2018		30.15	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-100418	10/4/2018		30.13	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-010819	1/8/2019		29.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-040519	4/5/2019		29.40	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.025	0.00044 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-101019	10/10/2019		24.43	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-010820	1/8/2020		26.09	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6B-ROX-010820-PCP	1/8/2020		26.09	NE																								
	MW6B-ROX-041320	4/13/2020	64.05 - 69.05	25.19	NE	<0.025	0.0012	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-06C	MW6C-ROX-071117	7/11/2017	84.95 - 89.95	25.99	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-040518	4/5/2018		29.74	NE	<0.025	0.0018	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-070518	7/5/2018		29.93	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-100418	10/4/2018		29.93	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-040519	4/5/2019		29.20	NE	<0.025	0.0013	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.025	0.00075 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-101019	10/10/2019		24.23	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-010820	1/8/2020		25.86	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6C-ROX-041320	4/13/2020	84.95 - 89.95	24.88	NE	<0.025	0.0048	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-06D	MW6D-ROX-071117	7/11/2017	104.72 - 109.72	25.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-100517	10/5/2017		26.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-040518	4/5/2018		29.52	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-070518	7/5/2018		29.76	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-100418	10/4/2018		29.76	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-010819	1/8/2019		29.45	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-040519	4/5/2019		29.02	NE	<0.025 UJ	0.00059 J	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.025	0.0056	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-101019	10/10/2019		24.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-010820	1/8/2020		25.68	NE	<0.025	0.00079 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-041320	4/13/2020	104.72 - 109.72	24.85	NE	<0.025	0.058	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW6D-ROX-041320-DUP	4/13/2020		24.85	NE	<0.025	0.052	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																									
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																									
MW-07	MW7 ROX-071117	7/11/2017	42.92 - 52.92	37.79	NE	<130	810	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<130	870	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-100517	10/5/2017		38.45	NE	<130	1400	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-010918	1/9/2018		40.67	NE	<130	1500	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-040918	4/9/2018		41.38	NE	<25	780	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	0.000049	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<25	770	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	0.000056	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW7-ROX-071018	7/10/2018		41.64	NE	<250	1900	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.000029	<0.000019	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<250	1700	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.000031	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW7-ROX-100818	10/8/2018		41.69	NE	<63	650	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.000032	<0.000021	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5
	MW7-ROX-010719	1/7/2019		41.25	NE	<130	650	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000031	<0.000021	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-040819	4/8/2019		40.94	NE	<250	1000	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<250	1000	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW7-ROX-070819	7/8/2019		36.58	NE	<25	1300	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000031	<0.00002	<1	<1	<1	0.52 J	<1	<1	<25	<1	<1	<1
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<25	1400	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW7-ROX-100819	10/8/2019		36.10	NE	<130	1700	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<130	1600	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-010620	1/6/2020		37.60	NE	<130	800	<5 UJ	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000032	<0.000021	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-010620-DUP	1/6/2020		37.60	NE	<130	750	<5 UJ	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000034	<0.000023	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW7-ROX-010620-DUP-PCP	1/6/2020		37.60	NE																										
	MW7-ROX-010620-PCP	1/6/2020		37.60	NE																										
	MW7-ROX-040620	4/6/2020	42.92 - 52.92	36.84	NE	<25 UJ	700	<1 UJ	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<0.000033 UJ	<0.000022 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<25 UJ	<1 UJ	<1 UJ	<1 UJ
	MW7-ROX-040620-DUP	4/6/2020		36.84	NE	<25 UJ	700	<1 UJ	<25 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<0.000036 UJ	<0.000024 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<25 UJ	<1 UJ	<1 UJ	<1 UJ
MW-08	MW8-ROX-071017	7/10/2017	33.60 - 43.60	28.48	NE	<25	870	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW8-ROX-100517	10/5/2017		29.28	NE	<250	970	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.00003	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<250	990	<10	<250	<10	<10	<10	<10	<10	<10	<10	<10	<0.000031	<0.00002	<10	<10	<10	<10	<10	<10	<250	<10	<10	<10
	MW8-ROX-010918	1/9/2018		31.60	NE	<130	720	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW8-ROX-040918	4/9/2018		32.27	NE	<25	510	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	MW8-ROX-071018	7/10/2018		32.42	NE	<130	840	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	MW8-ROX-100818	10/8/2018		32.45	NE	<63	550	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.00003	<0.00002	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<63	560	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.000031	<0.000021	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5
	MW8-ROX-010719	1/7/2019		32.04	NE	<50	420	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<0.00003	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<50	450	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<0.000029	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2
	MW8-ROX-040819	4/8/2019		31.70	NE	<63	550	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.00003	<0.00002	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5
	MW8-ROX-070819	7/8/2019		27.15	NE	<13	280	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.00003	<0.00002	<0.5	<0.5	<0.5	0.54	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	MW8-ROX-100819	10/8/2019		26.91	NE	<13	110	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000029	<0.000019	<0.5	<0.5	<0.5	0.4 J	<0.5	<0.5	<13	<0.5	1.2	<0.5
	MW8-ROX-010620	1/6/2020		28.35	NE	<5	42	<0.2 UJ	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000034	<0.000022	<0.2	<0.2	<0.2	0.19 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	MW8-ROX-010620-PCP	1/6/2020		28.35	NE																										
	MW8-ROX-040620	4/6/2020	33.60 - 43.60	27.70	NE	<5	49	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000041	<0.000028	<0.2	<0.2	<0.2	0.31	<0.2	<0.2	<5	<0.2	<0.2	<0.2
MW-09	MW9-ROX-071217	7/12/2017	46.45 - 56.45	38.86	NE	<0.025	0.00076 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.025	0.00064 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.025	<0.001	<0.001	0.0028 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-070918	7/9/2018		42.82	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-101018	10/10/2018		42.88	NE	<0.025	0.00024 J	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000099	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW9-ROX-011419	1/14/2019		42.97	NE	<0.025	0.00063 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<0.025	0.00053 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.025	0.00091 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.025	0.0027 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.025	0.00065 J J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-101419	10/14/2019		38.08	NE	<0.025	0.00082 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-011320	1/13/2020		38.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-011320-DUP	1/13/2020		38.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW9-ROX-041020	4/10/2020	46.04 - 56.04	38.51	NE	<0.025	0.0049	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																							
MW-10	MW10-ROX-071117	7/11/2017	44.43 - 54.43	38.86	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.025	0.00057 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.025	0.00045 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-040518	4/5/2018		41.94	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-070918	7/9/2018		42.88	NE	0.033	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-101018	10/10/2018		42.87	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.025 UJ	0.0012	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.025	0.00065 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-101419	10/14/2019		38.40	NE	<0.025 UJ	0.00046 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-011020	1/10/2020		39.05	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW10-ROX-041020	4/10/2020	44.43 - 54.43	38.59	NE	<0.025	0.0036	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-11	MW11-ROX-071017	7/10/2017	41.66 - 51.66	36.39	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-040618	4/6/2018		39.98	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-070918	7/9/2018		40.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-101118	10/11/2018		40.65	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.025	0.00044 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-070919	7/9/2019		35.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-100419	10/4/2019		35.36	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-010720	1/7/2020		36.45	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW11-ROX-040920	4/9/2020	41.66 - 51.66	36.02	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-12	MW-12-ROX-07072017	7/7/2017	41.92 - 51.92	36.84	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.025	0.00099 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-011118	1/11/2018		39.62	NE	0.028 F1 J	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-040518	4/5/2018		40.50	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-070618	7/6/2018		41.03	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-101018	10/10/2018		40.84	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW12-ROX-010919	1/9/2019		40.78	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-010919-RE	1/9/2019		40.78	NE																								
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-100419	10/4/2019		35.49	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-010720	1/7/2020		36.78	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000036	<0.000024	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW12-ROX-040820	4/8/2020	41.92 - 51.92	36.20	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-13	MW13-ROX-070717	7/7/2017	25.57 - 35.57	23.64	NE	0.01 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0067	<0.001	<0.001
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0035	<0.001	<0.001
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.004	<0.001	<0.001
	MW13-ROX-070918	7/9/2018		27.6	NE	0.017 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0044	<0.001	<0.001
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0033	<0.001	<0.001
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001 UJ	<0.001	<0.025 UJ	0.0045	<0.001	<0.001
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0046	<0.001	<0.001
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001
	MW13-ROX-100919	10/9/2019		21.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001
	MW13-ROX-010620	1/6/2020		23.41	NE	<0.025	<0.001	<0.001 UJ	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001
	MW13-ROX-040820	4/8/2020	24.80 - 34.80	22.75	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																							
MW-14	MW14-ROX-070717	7/7/2017	33.42 - 43.42	28.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-010918	1/9/2018		31.34	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-041018	4/10/2018		31.96	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-101518	10/15/2018		32.32	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-010919	1/9/2019		32.04	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	0.00085 J	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-041619	4/16/2019		31.06	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.00057 J	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-101119	10/11/2019		26.73	NE	<0.025 UJ	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-010720	1/7/2020		28.03	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW14-ROX-010720-PCP	1/7/2020		28.03	NE																								
	MW14-ROX-041420	4/14/2020	33.42 - 43.42	27.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-16	MW16-ROX-071017	7/10/2017	37.06 - 47.06	38.16	NE	<0.025	0.00039 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.025 UJ	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-070618	7/6/2018		42.35	NE	0.01 J F2	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-100518	10/5/2018		42.24	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.025	0.00078 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.025	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-100719	10/7/2019		36.86	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-010920	1/9/2020		38.16	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW16-ROX-041320	4/13/2020	37.50 - 47.50	37.64	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-22	MW22-ROX-071217	7/12/2017	37.88 - 47.88	36.83	NE	<0.05	0.0079	<0.002	<0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.17	<0.002	0.0092	<0.05	<0.002	0.031	0.012
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<0.05	0.0068	<0.002	<0.05	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.00003	<0.00002	<0.002	<0.002	<0.002	0.15	<0.002	0.0088	<0.05	<0.002	0.029	0.011
	MW22-ROX-101317	10/13/2017		36.94	NE	0.02 J	0.0089	<0.001	0.006 J	<0.001	<0.001	0.00091 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.04	<0.001	0.0021	<0.025	<0.001	0.015	0.004
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	0.016 J	0.0086	<0.001	0.0053 J	<0.001	<0.001	0.00068 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.033	<0.001	0.0018	<0.025	<0.001	0.014	0.0035
	MW22-ROX-011118	1/11/2018		39.25	NE	<0.63	0.32	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	1.5	<0.025	0.05	<0.63	<0.025	0.19	0.1
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<0.63	0.32	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	1.6	<0.025	0.059	<0.63	<0.025	0.24	0.11
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	<0.5	0.43	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	1.8	<0.02	0.052	<0.5	<0.02	0.16	0.078
	MW22-ROX-071018	7/10/2018		40.88	NE	<0.63	0.79	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.000029	<0.000019	<0.025	<0.025	<0.025	2	<0.025	0.057	<0.63	<0.025	0.2	0.094
	MW22-ROX-101518	10/15/2018		41.11	NE	<0.25	0.056	<0.01	<0.25	<0.01	0.0077 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	1.5	<0.01	0.066	<0.25	<0.01	0.21	0.12
	MW22-ROX-010919	1/9/2019		40.91	NE	<0.63	0.1	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	0.000022 p,J	<0.025	<0.025	<0.025	1.3	<0.025	0.056	<0.63	<0.025	0.14	0.1
	MW22-ROX-041719	4/17/2019		40.31	NE	<0.63	0.22	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	2	<0.025	0.081	<0.63	<0.025	0.2	0.13
	MW22-ROX-101519	10/15/2019		35.38	NE	0.013 J	0.0035	<0.001	0.0046 J	<0.001	0.0014	0.0012	<0.001	<0.001	<0.001	<0.001	0.00083 J	<0.000029	<0.00002	<0.001	<0.001	<0.001	0.25	<0.001	0.011	<0.025	<0.001	0.028	0.021 J
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	0.012 J	0.0039	<0.001	0.0042 J	<0.001	0.0011	0.0009 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.3	<0.001	0.01	<0.025	<0.001	0.032	0.016 J
	MW22-ROX-010620	1/6/2020		36.83	NE	<0.025	<0.001	<0.001 UJ	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	0.016	<0.001	0.00064 J	<0.025	<0.001	0.0018	0.00096 J
	MW22-ROX-010620-PCP	1/6/2020		36.83	NE																								
	MW22-ROX-041520	4/15/2020	38.43 - 48.43	36.30	NE	<0.025	0.00092 J	<0.001	<0.025	<0.001	<0.001	0.00076 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.053	<0.001	0.0044	<0.025	<0.001	0.012	0.0073
MW-23	MW23-ROX-071017	7/10/2017	29.02 - 39.02	25.13	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-100517	10/5/2017		26.42	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-010518	1/5/2018		28.52	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-040918	4/9/2018		29.24	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-070918	7/9/2018		29.1	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	0.0011	<0.005	<0.001
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00088 J	<0.001	<0.001
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.025	<0.001	0.0022 J	0.0086 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001
	MW23-ROX-100919	10/9/2019		23.39	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW23-ROX-010820	1/8/2020		24.92	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0011	<0.001	<0.001
	MW23-ROX-010820-PCP	1/8/2020		24.92	NE																								
	MW23-ROX-040820	4/8/2020	29.02 - 39.02	24.30	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00096 J	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																								
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																								
MW-24	MW24-ROX-070717	7/7/2017	38.89 - 48.89	37.68	NE	0.012 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-010818	1/8/2018		40.36	NE	0.19	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-040618	4/6/2018	39.61 - 49.61	41.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-070618	7/6/2018		41.87	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-100518	10/5/2018		41.81	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.025	0.00088 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-041219	4/12/2019		41.33	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-100719	10/7/2019		36.56	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-010720	1/7/2020		37.67	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW24-ROX-010720-PCP	1/7/2020		37.67	NE																									
	MW24-ROX-040920	4/9/2020	39.61 - 49.61	37.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-25	MW25-ROX-071017	7/10/2017	35.59 - 45.59	32.75	NE	0.014 J	0.056	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.02	<0.001	<0.001
	MW25-ROX-100517	10/5/2017		33.52	NE	<0.025	0.065	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.016	<0.001	<0.001
	MW25-ROX-010918	1/9/2018		35.80	NE	<0.025	0.028	<0.001	<0.025	<0.001	<0.001	<0.001	0.00088 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0068	<0.001	<0.001
	MW25-ROX-040918	4/9/2018		36.49	NE	<0.025	0.02	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001
	MW25-ROX-071018	7/10/2018		36.71	NE	<0.025	0.005	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.025	0.0071	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.025	0.0023	<0.001	<0.025	<0.001	<0.001	<0.001	0.00068 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00099 J	<0.001	<0.001
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.025	0.017	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.025	0.016	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001
	MW25-ROX-100819	10/8/2019		31.18	NE	<0.025	0.044	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001
	MW25-ROX-010620	1/6/2020		32.63	NE	<0.025	0.028	<0.001 UJ	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000035	<0.000023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW25-ROX-040620	4/6/2020		32.00	NE	<0.025	0.019	<0.001	<0.025	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.000041	<0.000027	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0012	<0.001	<0.001
MW-26	MW26-ROX-070717	7/7/2017	38.15 - 48.15	35.61	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-010818	1/8/2018		38.41	NE	0.01 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-040518	4/5/2018		39.22	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-100918	10/9/2018		39.53	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	<0.005	<0.001
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-100919	10/9/2019		33.99	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-010920	1/9/2020		35.45	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW26-ROX-041020	4/10/2020	38.15 - 48.15	34.83	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-27	MW27-ROX-071017	7/10/2017	39.79 - 49.79	37.23	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-011018	1/10/2018		38.98	NE	0.24	<0.001	<0.001	0.0028 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-040618	4/6/2018		40.34	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-070918	7/9/2018		41.16	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-100918	10/9/2018		41.06	NE	<0.025	<0.001	<0.001	<0.05	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	0.00052 J	<0.001
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.025	0.0014	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-100319	10/3/2019		36.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-010720	1/7/2020		36.96	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	MW27-ROX-041020	4/10/2020	39.79 - 49.79	36.82	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
MW-28	MW28-ROX-071217	7/12/2017	33.61 - 43.61	36.48	NE	<0.025	0.00067 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	0.00063 J	<0.001	0.0025	<0.025	0.003	<0.001	<0.001
	MW28-ROX-100917	10/9/2017		36.44	NE	<0.025	0.00093 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018	<0.025	0.0031	<0.001	<0.001
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.025	0.00044 J	<0.001	0.0029 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0044	<0.001	<0.001
	MW28-ROX-040618	4/6/2018		39.25	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001
	MW28-ROX-070918	7/9/2018		40.08	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0016	<0.001	<0.001
	MW28-ROX-101118	10/11/2018		40.25	NE	<0.025	0.0026	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.005	<0.001	<0.001
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0084	<0.001	<0.001
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.025	0.00083 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0096	<0.001	<0.001
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001
	MW28-ROX-100419	10/4/2019		35.90	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.035	<0.001	<0.001
	MW28-ROX-011020	1/10/2020		36.55	NE	0.014 J	0.0067	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	0.0015	<0.001	<0.001	<0.001	0.0023	<0.025	0.079	<0.001	<0.001
	MW28-ROX-041620	4/16/2020	33.61 - 43.61	36.25	NE	<0.025	0.012	<0.001	<0.025	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	0.0013	<0.001	<0.001	<0.001	0.00095 J	<0.025	0.05	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																							
P-54	P54-ROX-071017	7/10/2017	38.00 - 63.00	36.35	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-100617	10/6/2017		36.79	NE	<0.025	0.0025	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-011118	1/11/2018		39.10	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-040618	4/6/2018		40.05	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-070618	7/6/2018		40.51	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-100518	10/5/2018		40.46	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-011019	1/10/2019		40.37	NE	<0.025	0.00065 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-041119	4/11/2019		39.91	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-070919	7/9/2019		35.60	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-100419	10/4/2019		35.22	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-010720	1/7/2020		36.29	NE	<0.025	<0.001	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P54-ROX-010720-PCP	1/7/2020		36.29	NE																								
	P54-ROX-040920	4/9/2020	38.00 - 63.00	35.94	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
P-56	P56-ROX-071217	7/12/2017	40.82 - 65.82	41.11	NE	<0.025	0.0049	<0.001	0.019 J	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0089	0.0028	0.013	<0.025	<0.001	0.0054	0.015
	P56-ROX-101117	10/11/2017		41.08	NE	<0.025	0.0097	<0.001	<0.025	0.0013	0.0017	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.034	<0.001	0.022	<0.025	<0.001	0.017	0.025
	P56-ROX-011018	1/10/2018		43.63	NE	<0.13 UJ	0.015	<0.005	0.021 J F1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.00003	<0.00002	<0.005	<0.005	<0.005	0.072	<0.005	0.028	<0.13	<0.005	0.018	0.03
	P56-ROX-041118	4/11/2018		44.40	NE	0.099	0.0057	<0.001	0.018 J	0.00092 J	0.0016	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0014	<0.001	0.02	<0.025	<0.001	0.0019	0.023
	P56-ROX-071118	7/11/2018		45.25	NE	0.038	0.0044	<0.001	<0.0069 U	0.0014	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	0.0015	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.015	<0.001	0.026	<0.025	<0.001	0.0067	0.027
	P56-ROX-101518	10/15/2018		45.37	NE	<0.025	0.002	<0.001	<0.025	<0.001	0.0011	<0.001	<0.001	<0.001	<0.001	<0.001	0.00082 J	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0012	<0.001	0.014	<0.025	<0.001	<0.001	0.016
	P56-ROX-011019	1/10/2019		45.16	NE	<0.023 U	0.0028	<0.001	0.019 J	<0.001	0.0013	<0.001	0.0011	<0.001	<0.001	<0.001	0.0009 J	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0021	<0.001	0.016	<0.025	<0.001	0.0022	0.018
	P56-ROX-041719	4/17/2019		44.38	NE	<0.025	0.005	<0.001	<0.025	<0.001	0.0018	<0.001	0.0012	<0.001	<0.001	<0.001	0.0015	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.014	<0.001	0.026	<0.025	<0.001	0.0043	0.027
	P56-ROX-071219	7/12/2019		40.50	NE	0.099	0.0064	<0.001	0.11	0.0024	0.0026	<0.001	0.0009 J	<0.001	<0.001	<0.001	0.0019	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.18	0.004	0.029	0.018 J	<0.001	0.027	0.039
	P56-ROX-101519	10/15/2019		39.60	NE	0.021 J	0.0021	<0.001	0.0069 J	0.0036	0.0022	<0.001	0.00095 J	<0.001	0.0029	<0.001	0.0011	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.021	<0.001	0.019	<0.025	<0.001	0.013	0.024
	P56-ROX-010820	1/8/2020		41.31	NE	<0.025	0.0014	<0.001	0.0094 J	0.00094 J	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	0.0011	<0.000031	<0.000021	<0.001	<0.001	<0.001	0.0017	<0.001	0.02	<0.025	<0.001	0.0018	0.021
	P56-ROX-041620	4/16/2020	40.82 - 65.82	40.49	NE	0.074	0.0038	<0.001	0.015 J	0.0018	0.0029	<0.001	<0.001	<0.001	0.0021	<0.001	0.0016	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.069	<0.001	0.028	<0.025	<0.001	0.018	0.031
P-57	P57-ROX-071317	7/13/2017	44.19 - 54.19	41.95	NE	<5	43	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.00003	<0.00002	<0.2	<0.2	<0.2	0.18 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-101617	10/16/2017		42.64	NE	<6.3	42	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.000029	<0.000019	<0.25	<0.25	<0.25	0.21 J	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25
	P57-ROX-011818	1/18/2018		44.86	NE	<2.5	15 J	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000029	<0.000019	<0.1	<0.1	<0.1	0.053 J	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<2.5	20 J	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000029	<0.000019	<0.1	<0.1	<0.1	0.071 J	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-041018	4/10/2018		45.45	NE	<1.3	8.8	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
	P57-ROX-071118	7/11/2018		45.76	NE	<1.3	5 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.032 J	<0.05	0.028 J	<1.3	<0.05	0.076	0.036 J
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<1.3	8.8 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.036 J	<0.05	<0.05	<1.3	<0.05	0.071	0.038 J
	P57-ROX-101618	10/16/2018		45.86	NE	<5	34	<0.2	<5	<0.2	<0.2	<0.2	0.1 J	<0.2	<0.2	<0.2	<0.2	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.15 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<5	34	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000029	<0.000019	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P57-ROX-011419	1/14/2019		45.63	NE	<2.5	28	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.18	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<2.5	23	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.000031	<0.00002	<0.1	<0.1	<0.1	0.14	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P57-ROX-041719	4/17/2019		44.89	NE	<1.3	9.8 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	0.034 J	<0.05	0.031 J	<1.3	<0.05	<0.05	<0.05
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<1.3	7.4 J	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
	P57-ROX-071519	7/15/2019		40.82	NE	<0.63	15	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.035	<0.025	0.023 J	<0.63	<0.025	0.066	0.038
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.63	16	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.00003	<0.00002	<0.025	<0.025	<0.025	0.036	<0.025	0.024 J	<0.63	<0.025	0.068	0.04
	P57-ROX-101519	10/15/2019		40.18	NE	<0.5	2.3	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000028	<0.000019	<0.02	<0.02	<0.02	0.012 J	<0.02	0.022	<0.5	<0.02	0.075	0.025
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.5	2.3	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	0.033	<0.5	<0.02	0.067	0.02
	P57-ROX-010920	1/9/2020		41.77	NE	<0.13	1.3	<0.005	<0.13	<0.005	<0.005	0.0044 J	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000032	<0.000022	<0.005	<0.005	<0.005	0.0054	<0.005	0.014	<0.13	<0.005	0.049	0.015
	P57-ROX-041720	4/17/2020	44.19 - 54.19	40.70	NE	<0.25	2.5	<0.01	<0.25	<0.01	<0.01	0.0072 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	0.0062 J	<0.01	0.019	<0.25	<0.01	0.069	0.022
	P57-ROX-041720-DUP	4/17/2020		40.70	NE	<0.25	2.8	<0.01	<0.25	<0.01	<0.01	0.008 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.000019	<0.01	<0.01	<0.01	0.0069 J	<0.01	0.021	<0.25	<0.01	0.077	0.026
P-58	P58-ROX-071317	7/13/2017	40.21 - 65.21	39.88	NE	<25	130	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P58-ROX-041118	4/11/2018		43.19	NE	<50	220	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	<0.00003 UJ	<0.00002	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<50	240	<2	<50	<2	<2	<2	<2	<2	<2	<2	<2	0.00013 * J	<0.000021	<2	<2	<2	<2	<2	<2	<50	<2	<2	<2
	P58-ROX-101618	10/16/2018		43.66	NE	<25	190	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P58-ROX-041719	4/17/2019		42.49	NE	<25	140	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P58-ROX-071519	7/15/2019		38.43	NE	<5	87	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.00003	<0.00002	<0.2	<0.2	<0.2	0.14 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<5	86	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000031	<0.000021	<0.2	<0.2	<0.2	0.13 J	<0.2	<0.2	<5	<0.2	<0.2	<0.2
P-59	P59-ROX-071317	7/13/2017	47.91 - 72.91	42.16	NE	<1.3	7.7	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.000032	<0.000021	<0.05	<0.05	<0.05	1.9	<0.05	0.051	<1.3	<0.05	0.18	0.1
	P59-ROX-101317	10/13/2017		41.87	NE	<0.5	2.7	<0.02	0.054 J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	0.92	<0.02	0.046	<0.5	<0.02	0.19	0.085
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<0.5	2.6	<0.02	0.055 J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.00003	<0.00002	<0.02	<0.02	<0.02	0.81	<0.02	0.043	<0.5	<0.02	0.17	0.078
	P59-ROX-011118	1/11/2018		44.44	NE	<0.5	4.7	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000031	<0.000021	<0.02	<0.02	<0.02	1.2	<0.02	0.052	<0.5	<0.02	0.22	0.092
	P59-ROX-041218	4/12/2018		45.13	NE	<0.5	3.2	0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.000032 p *	<0.000018	<0.02	<0.02	<0.02	0.77	<0.02	0.029	<0.5	<0.02	0.15	0.052
	P59-ROX-071118	7/11/2018		46.16	NE	<0.63	3.7	<0.025	<0.63	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.000031	<0.000021	<0.025	<0.025	<0.025	0.77	<0.025	0.038	<0.63	<0.025	0.14	0.068
	P59-ROX-101618	10/16/2018		45.99	NE	0.52	2.3	<0.01	0.11 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	1.1	<0.01	0.042	<0.25	<0.01	0.16	0.086
	P59-ROX-011419	1/14/2019		46.10	NE	<0.25	3	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	1.3	<0.01	0.061	<0.25	<0.01	0.12	0.1
	P59-ROX-101519	10/15/2019		40.46	NE	<0.25	2.1	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	0.86	<0.01	0.041	<0.25	<0.01	0.15	0.066
	P59-ROX-010920	1/9/2020		42.14	NE	<0.25	1.6	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.25	<0.01	0.029	<0.25	<0.01	0.14	0.048
	P59-ROX-042120	4/21/2020	47.91 - 72.91	41.45	NE	<0.5	2.3	<0.02	<0.5	0.016 J	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	1.6	<0.02	0.074	<0.5	<0.02	0.15	0.13

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																				
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
P-66	P66-ROX-071217	7/12/2017	34.72 - 59.72	31.38	NE	<0.025	0.0052	<0.001	<0.025	0.0042	0.0081	0.0039	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0061	<0.001	0.081	<0.025	0.0086	0.14	0.12
	P66-ROX-101017	10/10/2017		32.27	NE	<0.025	0.0038	<0.001	<0.025	0.005	0.0098	0.0053	<0.001	0.00061 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0045	<0.001	0.074	<0.025	0.0079	0.12	0.12
	P66-ROX-011118	1/11/2018		34.09	NE	<0.025	0.0037	<0.001	<0.025	0.0059	0.01	0.0051	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	0.00082 J	<0.001	0.07	<0.025	0.0097	0.034	0.087
	P66-ROX-041018	4/10/2018		34.93	NE	0.013 J	0.015	<0.001	<0.025	0.0045	0.0082	0.0037	<0.001	0.0006 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.00056 J	<0.001	0.065	<0.025	0.0064	<0.001	0.071
	P66-ROX-071118	7/11/2018		35.10	NE	0.025	0.015	<0.001	0.0032 J	0.0011	0.0025	0.0016	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.025	<0.025	0.0055	<0.001	0.023
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	0.023 J	0.017	<0.001	0.0027 J	0.0013	0.0028	0.0018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.026	<0.025	0.0053	<0.001	0.025
	P66-ROX-101518	10/15/2018		35.31	NE	<0.025 UJ	0.052	<0.001 UJ	<0.025 UJ	0.0036	0.008 J	0.0023	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.000031 UJ	<0.000021 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.00072 J	<0.001 UJ	0.054	<0.025 UJ	<0.001 UJ	<0.001 UJ	0.057 J
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<0.025 UJ	0.057	<0.001 UJ	<0.025 UJ	0.005	0.011 J	0.0028	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.000031 UJ	<0.000021 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.00082 J	<0.001 UJ	0.068	<0.025 UJ	<0.001 UJ	<0.001 UJ	0.076 J
	P66-ROX-010919	1/9/2019		34.99	NE	<0.025	0.048	<0.001	<0.025	0.0037	0.0082	0.0024	<0.001	0.00052 J	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0008 J	<0.001	0.074	<0.025	0.0028	0.0021	0.082
	P66-ROX-041619	4/16/2019		34.08	NE	0.029	0.00084 J	<0.001	0.01 J	0.0017	0.0029	0.002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.015	<0.025	0.0087	0.0068	0.017
	P66-ROX-071019	7/10/2019		30.00	NE	<0.025	0.0017	<0.001	<0.025	0.0018	0.0046	0.0038	<0.001	0.00054 J	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0011	<0.001	0.048	<0.025	<0.001	0.12	0.078
	P66-ROX-101119	10/11/2019		29.52	NE	<0.025	0.00064 J	<0.001	<0.025	0.003	0.0061	0.0041	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.00069 J	<0.001	0.048	<0.025	<0.001	0.087	0.07
	P66-ROX-010720	1/7/2020		31.09	NE	<0.025	0.00059 J	<0.001 UJ	<0.025 UJ	0.0018	0.0029	0.0021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	0.028	<0.025	<0.001	0.047	0.034
	P66-ROX-041420	4/14/2020	34.72 - 59.72	30.12	NE	<0.025	0.13	<0.001	<0.025	0.0024	0.005	0.0022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	0.04	<0.025	<0.001	0.01	0.047
P-74	P74-ROX-071217	7/12/2017	44.43 - 69.43	38.08	NE	<0.025	0.022	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0017	<0.001	<0.001	<0.025	<0.001	0.0012	<0.001
	P74-ROX-101617	10/16/2017		38.57	NE	<0.025	0.21	<0.001	0.0026 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000038	<0.00002	<0.001	<0.001	<0.001	0.0051	<0.001	0.00053 J	<0.025	0.079	0.0021	0.00088 J
	P74-ROX-011018	1/10/2018		40.25	NE	<0.13	1.1	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000029	<0.00002	<0.005	<0.005	<0.005	0.011	<0.005	<0.005	<0.13	0.64	<0.005	<0.005
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-071118	7/11/2018		42.22	NE	<0.025	0.015	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001
	P74-ROX-101618	10/16/2018		42.18	NE	<0.025	0.3	<0.001	<0.025	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0019	<0.001	<0.001	<0.025	0.022	0.0014	<0.001
	P74-ROX-011019	1/10/2019		42.14	NE	<0.025	0.14	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001
	P74-ROX-041719	4/17/2019		41.57	NE	<0.025 UJ	<0.001	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-071219	7/12/2019		37.95	NE	<0.025	0.0045	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-101419	10/14/2019		36.74	NE	<0.025	0.033	<0.001	<0.025	<0.001	<0.001	<0.001	0.00067 J	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-010820	1/8/2020		38.40	NE	<0.025	0.014	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P74-ROX-041720	4/17/2020	43.83 - 68.83	37.40	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
P-93A	P93A-ROX-071317	7/13/2017	43.07 - 53.07	40.11	NE	<0.025	0.083	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P93A-ROX-101117	10/11/2017		40.87	NE	<0.13	0.77	<0.005	<0.13	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.000033	<0.000022	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.13	<0.005	<0.005	<0.005
	P93A-ROX-011118	1/11/2018		42.71	NE	<0.5	2.3 J	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.00003	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<0.5	3.4 J	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.00003	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02
	P93A-ROX-041118	4/11/2018		NM	NE	<6.3	57	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.000032	<0.000021	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25
	P93A-ROX-052218	5/22/2018		NM	NE	<5	43	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P93A-ROX-071218	7/12/2018		44.03	NE	<5	28	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000031	<0.000021	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P93A-ROX-101618	10/16/2018		44.05	NE	<5	30	<0.2	<5	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.000029	<0.00002	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5	<0.2	<0.2	<0.2
	P93A-ROX-011419	1/14/2019		43.78	NE	<1.3	14	<0.05	<1.3	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.000029	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
	P93A-ROX-041819	4/18/2019		42.98	NE	<2.5	17	<0.1	<2.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.00003	<0.00002	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<2.5	<0.1	<0.1	<0.1
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.5 UJ	10	<0.02 UJ	<0.5 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.00003 UJ	<0.00002 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.5 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ
	P93A-ROX-101519	10/15/2019		38.31	NE	<1.3	220	<0.05	<1.3	<0.05	<0.05	<0.05	0.025 J	<0.05	<0.05	<0.05	<0.05	<0.00003	<0.00002	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<1.3	<0.05	<0.05	<0.05
	P93A-ROX-010920	1/9/2020		39.89	NE	<13	56	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000032	<0.000021	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P93A-ROX-010920-DUP	1/9/2020		39.89	NE	<13	57	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000031	<0.000021	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P93A-ROX-041720	4/17/2020	43.07 - 53.07	38.79	NE	<6.3	58	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.00003	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																							
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																							
P-93B	P93B-ROX-071117	7/11/2017	74.60 - 76.60	41.59	NE	<25	180	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<25	180	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000033	<0.000022	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-101117	10/11/2017		42.21	NE	<25	250	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<25	210	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-011518	1/15/2018		44.42	NE	<63	280	<2.5	<63	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<0.000028	<0.000019	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<63	<2.5	<2.5	<2.5
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<25	120	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000028	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<25	130	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000028	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-071218	7/12/2018		45.36	NE	<25	110 J	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000031	<0.000021	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<25	160 J	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000033	<0.000022	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-101518	10/15/2018		45.64	NE	<50 UJ	1100	<2 UJ	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<0.000029 UJ	<0.00002 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<50 UJ	<2 UJ	<2 UJ	<2 UJ
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<50 UJ	1200	<2 UJ	<50 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<0.00003 UJ	<0.00002 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<50 UJ	<2 UJ	<2 UJ	<2 UJ
	P93B-ROX-011119	1/11/2019		45.15	NE	<130	1300	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000029	<0.000019	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<130	1400	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<130	780	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.000031	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<130	860	<5	<130	<5	<5	<5	<5	<5	<5	<5	<5	<0.00003	<0.00002	<5	<5	<5	<5	<5	<5	<130	<5	<5	<5
	P93B-ROX-071219	7/12/2019		40.35	NE	<6.3	170 J	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.00003	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<6.3	220 J	<0.25	<6.3	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.000031	<0.00002	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<6.3	<0.25	<0.25	<0.25
	P93B-ROX-101519	10/15/2019		39.62	NE	<25	170	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<25	150	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000029	<0.000019	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-010820	1/8/2020		41.48	NE	<13	94	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.000038	<0.000025	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P93B-ROX-010820-DUP	1/8/2020		41.48	NE	<13	100	<0.5	<13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.00003	<0.00002	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<13	<0.5	<0.5	<0.5
	P93B-ROX-042020	4/20/2020	74.78 - 76.78	40.23	NE	<25	160 J	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.000032	<0.000021	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
	P93B-ROX-042020-DUP	4/20/2020		40.23	NE	<25	120 J	<1	<25	<1	<1	<1	<1	<1	<1	<1	<1	<0.00003	<0.00002	<1	<1	<1	<1	<1	<1	<25	<1	<1	<1
P-93C	P93C-ROX-071217	7/12/2017	92.47 - 97.47	41.30	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.025	0.00069 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	0.011 J	0.055	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0035	<0.001	<0.001
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.25	1.9	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.25	0.0086 J	<0.01	<0.01
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.5	5.8	<0.02	<0.5	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.000029	<0.00002	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0013	<0.001	<0.001
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0022	<0.001	<0.001
	P93C-ROX-101419	10/14/2019		39.65	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0008 J	<0.001	<0.001
	P93C-ROX-010820	1/8/2020		41.30	NE	<0.025	0.00039 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000022	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0029	<0.001	<0.001
	P93C-ROX-041620	4/16/2020	92.88 - 97.88	40.17	NE	<0.025	0.0004 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.003	<0.001	<0.001
P-93D	P93D-ROX-071117	7/11/2017	125.75 - 127.75	41.64	NE	<0.025	0.012	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0041	<0.001	<0.001
	P93D-ROX-101117	10/11/2017		42.42	NE	<0.025	0.011	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0034	<0.001	<0.001
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.025 UJ	0.066	<0.001	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0023	<0.001	<0.001
	P93D-ROX-041218	4/12/2018		45.95	NE	<0.025	0.038	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000027	<0.000018	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001
	P93D-ROX-071218	7/12/2018		45.57	NE	<0.025	0.15	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	0.0038	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001
	P93D-ROX-101518	10/15/2018		45.70	NE	<0.025	0.0044	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0031	<0.001	<0.001
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.025	0.035	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	0.0007 J	<0.001	<0.001	<0.001	<0.025	0.0042	<0.001	<0.001
	P93D-ROX-041819	4/18/2019		44.50	NE	<0.025	0.03	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	0.0015	<0.001	0.0025	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.025	0.0012	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.002	<0.001	<0.001
	P93D-ROX-101519	10/15/2019		39.88	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00062 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0028	<0.001	<0.001
	P93D-ROX-010820	1/8/2020		41.68	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0031	<0.001	<0.001
	P93D-ROX-042020	4/20/2020	125.66 - 127.66	40.41	NE	<0.025	0.00085 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000034	<0.00023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0017	<0.001	<0.001
P-114R	P114R-ROX-071117	7/11/2017	23.01 - 33.01	22.45	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00082 J	<0.001	<0.001
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00096 J	<0.001	<0.001
	P114R-ROX-010918	1/9/2018		26.37	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0015	<0.001	<0.001
	P114R-ROX-040618	4/6/2018		26.76	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0021	<0.001	<0.001
	P114R-ROX-070918	7/9/2018		26.38	NE	0.013 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.00021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0024	<0.001	<0.001
	P114R-ROX-101118	10/11/2018		26.27	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.00082 J	<0.001	<0.001
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0009 J	<0.001	<0.001
	P114R-ROX-010719	1/7/2019		25.88	NE	<0.025	0.0082	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P114R-ROX-041519	4/15/2019		24.70	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	0.00063 J	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0045	<0.001	<0.001
	P114R-ROX-100919	10/9/2019		20.46	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	P114R-ROX-010620	1/6/2020		22.15	NE	<0.025	<0.001	<0.001 UJ	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000034	<0.00023	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0019	<0.001	<0.001
	P114R-ROX-010620-PCP	1/6/2020		22.15	NE																								
	P114R-ROX-040720	4/7/2020	23.01 - 33.01	21.49	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	0.0048	<0.001	<0.001
	P114R-ROX-040720-RE	4/7/2020		21.49	NE																								

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																								
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																								
ROST-3-MW	ROST3MW-ROX-071117	7/11/2017	37.81 - 47.81	36.61	NE	<0.025	0.00048 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.025	<0.001	0.0023	0.0079 J	<0.001	0.0059	0.0035
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<0.025 UJ	0.021	<0.001	<0.025	<0.001	<0.001	<0.001	0.00052 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE	<0.025	<0.001	<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	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-011518	1/15/2018		40.00	NE													<0.000029	<0.00002										
	ROST3MW-ROX-022618	2/26/2018		40.00	NE	0.028	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00055 J	<0.001	<0.001	<0.001	<0.001			<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.000021	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<0.025	<0.001	<0.001	<0.05	<0.001	0.00047 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.0001	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.01	<0.001	<0.01	<0.001	0.00093 J	<0.001
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<0.025	0.0007 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<0.025	0.00047 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0031	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.025	0.0081	<0.001	0.0034 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.015	<0.001	0.0021	<0.025	<0.001	0.0045	0.0044
	ROST3MW-ROX-101419	10/14/2019		35.57	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00062 J	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-010920	1/9/2020		36.56	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST3MW-ROX-041020	4/10/2020	37.81 - 47.81	36.33	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
ROST-4-PZ(C)	ROST4PZC-ROX-071217	7/12/2017	34.95 - 44.95	37.20	NE	<0.025	0.017	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	0.00084 J	<0.001	<0.001	0.13	<0.001	0.0064	<0.025	<0.001	0.098	0.0097
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	0.023 J	0.01	<0.001	0.02 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00028	<0.00002	<0.001	<0.001	<0.001	0.086	<0.001	0.0044	<0.025	<0.001	0.092	0.0061
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<0.025	0.00054 J	<0.001	<0.025	<0.001	<0.001	<0.001	0.00054 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.00062 J	<0.001	0.0017	<0.025	<0.001	0.014	0.0035
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	0.0008 J
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<0.025	0.0018	<0.001	<0.025	<0.001	<0.001	<0.001	0.00069 J	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0011	<0.001	<0.001	<0.025	<0.001	<0.001	0.00084 J
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	0.027	0.0085	<0.001	0.0083 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.061	<0.001	0.0016	<0.025	<0.001	0.031	0.0021
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<0.025	0.006	<0.001	<0.025	<0.001	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	0.034	<0.001	0.0029	<0.025	<0.001	0.044	0.0042
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<0.025	0.006	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.033	<0.001	0.0033	<0.025	<0.001	0.037	0.0049
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	0.38	0.0077	<0.001	<0.025	0.0008 J	<0.001	<0.001	0.00059 J	<0.001	<0.001	<0.001	0.0008 J	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.12	<0.001	0.0064	<0.025	<0.001	0.092	0.012
	ROST4PZC-ROX-101419	10/14/2019		35.97	NE	<0.025	0.0047	<0.001	0.014 J	<0.001	0.0012	<0.001	0.00051 J	<0.001	<0.001	<0.001	0.0011	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.038	<0.001	0.0089	<0.025	<0.001	0.064	0.018
	ROST4PZC-ROX-010720	1/7/2020		36.95	NE	<0.025	0.0014	<0.001 UJ	<0.025 UJ	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000032	<0.000021	<0.001	<0.001	<0.001	0.017	<0.001	0.0021	<0.025	<0.001	0.022	0.0031
	ROST4PZC-ROX-041520	4/15/2020	34.95 - 44.95	36.71	NE	<0.025	0.0047	<0.001	0.003 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00071 J	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.047	<0.001	0.006	<0.025	<0.001	0.055	0.01
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	<0.13 UJ	0.2	<0.005	<0.13 UJ	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.000098	<0.00002	<0.005	<0.005	<0.005	0.27	<0.005	0.0084	<0.13	<0.005	0.091	0.017
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.05	0.079	<0.002	0.023 J	0.0017 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.00029	<0.00019	<0.002	<0.002	<0.002	0.043	<0.002	0.0096	<0.05	<0.002	0.098	0.009
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	0.053	0.014	<0.001	0.039	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000041 p	<0.00002	<0.001	<0.001	<0.001	0.0025	<0.001	0.0018	<0.025	<0.001	0.023	0.001
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<0.025	0.011	<0.001	0.036	0.0013	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	0.0069	<0.001	0.0023	<0.025	<0.001	0.015	0.0022
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.025 UJ	0.0011	<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	<0.000031 UJ	<0.000021 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.025 UJ	<0.001 UJ	0.0015	<0.001 UJ
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<0.025	0.0011	<0.001	0.0065 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.00051 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<0.025	0.0038	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0028	<0.001	<0.001	<0.025	<0.001	0.0027	<0.001
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<0.025	0.0035	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.025	<0.001	0.0026	<0.001
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	0.38	0.11	<0.001	0.0099 J	<0.001	0.00098 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000033	<0.000022	<0.001	<0.001	<0.001	0.13	<0.001	0.0076	<0.025	<0.001	0.094	0.0091
	ROST4PZE-ROX-101519	10/15/2019		35.01	NE	<0.025	0.19	<0.001	<0.025	<0.001	0.0019	<0.001	0.00065 J	0.00057 J	<0.001	<0.001	0.0011	<0.000027	<0.000018	<0.001	<0.001	<0.001	0.52	<0.001	0.017	<0.025	<0.001	0.16	0.025
	ROST4PZE-ROX-010720	1/7/2020		36.10	NE	0.047 J	0.037	<0.002 UJ	0.034 J * J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0086	<0.002	<0.000038	<0.000025	<0.002	<0.002	<0.002	0.19	<0.002	0.0054	<0.05	<0.002	0.12	0.0064
	ROST4PZE-ROX-041620	4/16/2020	34.75 - 44.75	35.90	NE	<0.13	0.088	<0.005	<0.13	<0.005	<0.005	<0.005	0.0025 J	<0.005	<0.005	<0.005	<0.005	<0.000031	<0.000021	<0.005	0.0039 J	<0.005	0.43	<0.005	0.016	<0.13	<0.005	0.14	0.025
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	0.044	0.0015	<0.001	0.01 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	0.0024	<0.001	0.0014	0.0064 J	<0.001	<0.001	0.0013
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<0.025	0.00082 J	<0.001	0.0027 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	0.00053 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<0.025	0.0037	<0.001	<0.025	<0.001	<0.001	<0.001	0.00054 J	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.025	0.0011	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.025	0.00041 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000031	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<0.025	0.00048 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.025	<0.001	<0.001	0.005 J	<0.001	<0.001	<0.001	0.0021	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-100719	10/7/2019		35.69	NE	<0.025	0.0006 J	<0.001	<0.025	<0.001	<0.001	<0.001	0.0037	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-011320	1/13/2020		37.07	NE	<0.025	0.00055 J	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.00003	<0.00002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-041520	4/15/2020	34.28 - 44.28	36.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000028	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001
	ROST4PZG-ROX-041520-DUP	4/15/2020		36.28	NE	<0.025	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.000029	<0.000019	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.025	<0.001	<0.001	<0.001

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs																								
						Acetone	Benzene	Bromomethane	2-Butanone	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Carbon disulfide	Chlorobenzene	Chloroform	2-Chlorotoluene	Cymene (p-Isopropyltoluene)	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dibromoethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	1,2-Dichloropropane	Ethylbenzene	Ethyl methacrylate	Isopropylbenzene (Cumene)	4-Methyl-2-pentanone (Methyl Isobutyl Ketone)	Methyl tert-Butyl Ether (MTBE)	Naphthalene	n-Propylbenzene
Screening Values (mg/L)						6.3 [1]	0.005 [1]	0.0098 [2]	4.2 [1]	0.35 [3]	0.7 [3]	0.7 [3]	0.7 [1]	0.100 [2]	0.07 [1]	0.14 [3]		0.0002 [1]	0.00005 [1]	0.005 [2]	0.07 [1]	0.005 [2]	0.7 [1]		0.7 [1]	0.56 [3]	0.07 [1]	0.14 [1]	0.7 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																								
T-12	T12-ROX-071317	7/13/2017	46.83 - 72.83	40.10	NE	<0.25	1.2	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.053	<0.01	0.0064 J	<0.25	0.024	0.061	0.0091 J
	T12-ROX-101317	10/13/2017		39.48	NE	<0.25	1.4	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.025	<0.01	0.012	<0.25	0.023	0.05	0.023
	T12-ROX-011018	1/10/2018		42.14	NE	<0.25	2	<0.01	0.029 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.054	<0.01	0.012	<0.25	0.029	0.084	0.012
	T12-ROX-041218	4/12/2018		43.03	NE	<0.25	1.7	0.012	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000028	<0.000019	<0.01	<0.01	<0.01	0.095	<0.01	0.018	<0.25	0.016	0.087	0.022
	T12-ROX-071118	7/11/2018		44.12	NE	<0.25	2.1	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.12	<0.01	0.03	<0.25	0.012	0.082	0.055
	T12-ROX-101618	10/16/2018		43.90	NE	<0.25	2.2	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.000019	<0.01	<0.01	<0.01	0.1	<0.01	0.034	<0.25	0.0086 J	0.11	0.056
	T12-ROX-011019	1/10/2019		44.00	NE	<0.25	2	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.039	<0.01	0.0099 J	<0.25	<0.01	0.07	0.016
	T12-ROX-041719	4/17/2019		43.38	NE	<0.25	1.8	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.00002	<0.01	<0.01	<0.01	0.048	<0.01	0.014	<0.25	<0.01	0.061	0.017
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																								
	T12-ROX-071519	7/15/2019		39.74	NE	<0.25	1.7	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00003	<0.00002	<0.01	<0.01	<0.01	0.028	<0.01	0.0095 J	<0.25	<0.01	0.033	0.018
	T12-ROX-101519	10/15/2019		38.40	NE	<0.25	2.6	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.025	<0.01	0.014	<0.25	<0.01	0.043	0.018
	T12-ROX-010920	1/9/2020		40.17	NE	<0.25	1.7	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000034	<0.000023	<0.01	<0.01	<0.01	0.034	<0.01	0.0054 J	<0.25	<0.01	0.053	0.0096 J
	T12-ROX-010920-DUP	1/9/2020		40.17	NE	<0.25	1.8	<0.01	<0.25	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.000031	<0.00002	<0.01	<0.01	<0.01	0.037	<0.01	0.0056 J	<0.25	<0.01	0.057	0.0097 J
	T12-ROX-041720	4/17/2020	46.83 - 72.83	39.44	NE	0.14 J	1.6	<0.01	<0.25	<0.01	<0.01	<0.01	0.0058 J	<0.01	<0.01	<0.01	<0.01	<0.000029	<0.000019	<0.01	<0.01	<0.01	0.022	<0.01	0.0056 J	<0.25	<0.01	0.037	0.0078 J

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs											
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
MW-01	MW1-ROX-071117	7/11/2017	48.80 - 58.80	37.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW1-ROX-010518	1/5/2018		40.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW1-ROX-040618	4/6/2018		40.82	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW1-ROX-070618	7/6/2018		41.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095
	MW1-ROX-010819	1/8/2019		40.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	0.015	<0.01	<0.01	<0.01	<0.0002
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW1-ROX-101119	10/11/2019		35.72	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW1-ROX-010920	1/9/2020		37.09	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096 H UJ	<0.0096	<0.0096	<0.00019
	MW1-ROX-040920	4/9/2020	48.80 - 58.80	36.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019
MW-02	MW2-ROX-071217	7/12/2017	49.87 - 59.87	38.66	NE	<0.001	<0.001	0.008	0.04	0.07	<0.001	0.086	0.0073	0.093	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00039
	MW2-ROX-101217	10/12/2017		39.03	NE	<0.005	<0.005	0.012	0.16	0.11	<0.005	0.35	0.026	0.38	<0.00019	<0.00019	<0.00019	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095 UJ
	MW2-ROX-011118	1/11/2018		41.24	NE	<0.001	<0.001	0.0082	0.015	0.05	<0.001	0.033	0.0037 J	0.036	<0.00019	<0.00019	<0.00019	<0.00019	<0.000044 U	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	MW2-ROX-040918	4/9/2018		42.10	NE	<0.001	<0.001	0.006	0.046	0.038	<0.001	0.12	0.0094	0.13	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW2-ROX-071018	7/10/2018		42.59	NE	<0.001	<0.001	0.008	0.013	0.052	<0.001	0.028	0.0031 J	0.031	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.034	<0.011	<0.0083 U	<0.011	<0.011	<0.00022
	MW2-ROX-101218	10/12/2018		42.71	NE	<0.001	<0.001	0.0049	0.0091 J	0.014	<0.001	0.045 J	0.0053	0.05	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0002
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	<0.001	<0.001	0.0054	0.012 J	0.014	<0.001	0.058 J	0.0067	0.065	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097 UJ	<0.0097	<0.0097	<0.0097	<0.00019
	MW2-ROX-010819	1/8/2019		42.43	NE	<0.002	<0.002	0.0089	0.031	0.06	<0.002	0.1	0.0096 J	0.11	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	0.0072 J	<0.0099	<0.0099	<0.0099	<0.0002
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<0.002	<0.002	0.0085	0.029	0.059	<0.002	0.092	0.0091 J	0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW2-ROX-041619	4/16/2019		41.80	NE	<0.005	<0.005	0.0068	0.16	0.052	<0.005	0.38	0.032	0.41	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.005	<0.005	0.0092	0.36	0.11	<0.005	0.78	0.063	0.84	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW2-ROX-101019	10/10/2019		36.99	NE	<0.005	<0.005	0.0084	0.15	0.068	<0.005	0.38	0.035	0.42	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013	<0.00025
	MW2-ROX-010920	1/9/2020		38.52	NE	<0.002	<0.002	0.0063	0.033	0.032	<0.002	0.11	0.013	0.13	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW2-ROX-040820	4/8/2020	49.87 - 59.87	37.69	NE	<0.005	<0.005	0.014	0.18	0.052	<0.005	0.47	0.042	0.51	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.01 H UJ	<0.0096	<0.00019
MW-03	MW3-ROX-071217	7/12/2017	34.67 - 44.67	24.25	NE	<0.001	<0.001	0.0045	<0.001	<0.001	<0.001	0.02	0.0014 J	0.022	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0004
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	0.0031 J	<0.005	0.0034 J	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.001	<0.001	0.0061	<0.001	<0.001	<0.001	0.028	0.0021 J	0.03	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW3-ROX-040518	4/5/2018		27.98	NE	<0.001	<0.001	0.00095 J	<0.001	<0.001	<0.001	0.005	0.00081 J	0.0058 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.001	<0.001	0.0019	<0.001	<0.001	<0.001	0.011	0.0016 J	0.012	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	MW3-ROX-100518	10/5/2018		28.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.001	<0.001	0.0027	<0.001	<0.001	<0.001	0.01	0.0011 J	0.011	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.001	<0.001	0.00056 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.001	<0.001	0.014	<0.001	<0.001	<0.001	0.024	0.0022 J	0.026	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0075 U	<0.01	<0.01	<0.0002
	MW3-ROX-101419	10/14/2019		22.66	NE	<0.001	<0.001	0.0038	<0.001	<0.001	<0.001	0.0069	<0.005	0.0073 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019
	MW3-ROX-011020	1/10/2020		24.02	NE	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.0019 J	<0.005	0.0019 J	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0095 H UJ	<0.0095	<0.0095	<0.00019 UJ
	MW3-ROX-040820	4/8/2020	34.67 - 44.67	23.42	NE	<0.001	<0.001	0.0012	<0.001	<0.001	<0.001	0.0023 J	<0.005	0.0026 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.01 H UJ	<0.0096	<0.00019
MW-04	MW4-ROX-071017	7/10/2017	45.06 - 55.06	35.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000039 J	0.000051 J	<0.00024 U	<0.00019	<0.029	<0.0096	0.039 J	<0.0096	<0.0096	<0.00019
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW4-ROX-010918	1/9/2018		38.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000048 J	<0.00019	<0.00019	<0.00019	<0.029 H	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW4-ROX-040918	4/9/2018		39.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW4-ROX-071018	7/10/2018		39.60	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0036 U	<0.0098	<0.0098	<0.0002
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	0.0069 J	<0.0095	<0.0095	<0.00019
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW4-ROX-100819	10/8/2019		34.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW4-ROX-010620	1/6/2020		35.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW4-ROX-010620-PCP	1/6/2020		35.54	NE																							
	MW4-ROX-040620	4/6/2020	45.06 - 55.06	34.92	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
MW-05	MW5-ROX-071217	7/12/2017	33.97 - 43.97	23.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0004
	MW5-ROX-101217	10/12/2017		25.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00096
	MW5-ROX-011118	1/11/2018		26.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	MW5-ROX-040918	4/9/2018		27.78	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW5-ROX-071018	7/10/2018		27.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.0029 U	<0.011	<0.011	<0.00022
	MW5-ROX-101218	10/12/2018		27.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032 UJ	<0.011 UJ	<0.011	<0.011	<0.011	<0.00022
	MW5-ROX-010819	1/8/2019		27.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW5-ROX-041519	4/15/2019		26.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	0.00075 J	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW5-ROX-071219	7/12/2019		22.37	NE	<0.001	<0.001	0.0066	<0.001	<0.001	<0.001	0.012	0.002 J	0.014	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.00019 H UJ
	MW5-ROX-101519	10/15/2019		22.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW5-ROX-010620	1/6/2020		23.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW5-ROX-041320	4/13/2020	33.97 - 43.97	23.11	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-06A	MW6A-ROX-071117	7/11/2017	34.83 - 44.83	26.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0034 U	<0.01	<0.01	<0.0002
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6A-ROX-070518	7/5/2018		30.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.001	<0.001	<0.001	<0.001	<0.031	<0.01	<0.0075 U	<0.01	<0.01	<0.000045 U
	MW6A-ROX-100418	10/4/2018		30.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000045 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0028 U	<0.0099	<0.0099	0.000072 J
	MW6A-ROX-010819	1/8/2019		29.77	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6A-ROX-040519	4/5/2019		29.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01 UJ	<0.01 UJ	<0.01	<0.00021
	MW6A-ROX-101019	10/10/2019		24.39	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013	<0.00025
	MW6A-ROX-010820	1/8/2020		26.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	0.00018 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.00019
	MW6A-ROX-041320	4/13/2020	33.85 - 43.85	25.14	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
MW-06B	MW6B-ROX-071117	7/11/2017	64.05 - 69.05	26.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.01 U	<0.0099	<0.0099	<0.0002
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW6B-ROX-040518	4/5/2018		29.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6B-ROX-070518	7/5/2018		30.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.0044 U	<0.011	<0.011	<0.00022
	MW6B-ROX-100418	10/4/2018		30.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0099	<0.01	<0.01	<0.0002
	MW6B-ROX-010819	1/8/2019		29.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6B-ROX-040519	4/5/2019		29.40	NE	<0.001	<0.001	0.00047 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01 UJ	<0.01	<0.00021
	MW6B-ROX-101019	10/10/2019		24.43	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013	<0.00025
	MW6B-ROX-010820	1/8/2020		26.09	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW6B-ROX-010820-PCP	1/8/2020		26.09	NE																							
	MW6B-ROX-041320	4/13/2020	64.05 - 69.05	25.19	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
MW-06C	MW6C-ROX-071117	7/11/2017	84.95 - 89.95	25.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0029 U	<0.0096	<0.0096	<0.00019
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0068 U	<0.0095	<0.0095	<0.00019
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW6C-ROX-040518	4/5/2018		29.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6C-ROX-070518	7/5/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0034 U	<0.01	<0.01	<0.00021
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6C-ROX-100418	10/4/2018		29.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW6C-ROX-040519	4/5/2019		29.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0054 U	<0.01	<0.01	<0.0002
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	0.0053 J	<0.0099 UJ	<0.0099	<0.0002
	MW6C-ROX-101019	10/10/2019		24.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	0.015	<0.013	<0.013	<0.00025
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013	<0.00025
	MW6C-ROX-010820	1/8/2020		25.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW6C-ROX-041320	4/13/2020	84.95 - 89.95	24.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
MW-06D	MW6D-ROX-071117	7/11/2017	104.72 - 109.72	25.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00016 J	<0.0002	<0.0002	<0.03	<0.0099	<0.0022 U	<0.0099	<0.0099	<0.0002
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6D-ROX-100517	10/5/2017		26.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	0.0029 J	<0.0095	<0.0095	<0.00019
	MW6D-ROX-040518	4/5/2018		29.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6D-ROX-070518	7/5/2018		29.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6D-ROX-100418	10/4/2018		29.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6D-ROX-010819	1/8/2019		29.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW6D-ROX-040519	4/5/2019		29.02	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.00003 J	<0.0002	<0.0002	0.000043 J	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01 UJ	<0.01	<0.0002
	MW6D-ROX-101019	10/10/2019		24.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.038	<0.013	<0.013	<0.013	<0.013	<0.00025
	MW6D-ROX-010820	1/8/2020		25.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW6D-ROX-041320	4/13/2020	104.72 - 109.72	24.85	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW6D-ROX-041320-DUP	4/13/2020		24.85	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
MW-07	MW7 ROX-071117	7/11/2017	42.92 - 52.92	37.79	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0077 U	<0.0097	<0.0097	<0.00019
	MW7-ROX-100517	10/5/2017		38.45	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.0067 J	<0.0096	<0.0096	<0.00019
	MW7-ROX-010918	1/9/2018		40.67	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	0.00023	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 H UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW7-ROX-040918	4/9/2018		41.38	NE	<1	<1	0.8 J	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<1	<1	0.96 J	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW7-ROX-071018	7/10/2018		41.64	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0087 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW7-ROX-100818	10/8/2018		41.69	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	0.00025	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW7-ROX-010719	1/7/2019		41.25	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW7-ROX-040819	4/8/2019		40.94	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	<0.00095 UJ	0.011 J *	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW7-ROX-070819	7/8/2019		36.58	NE	<1	<1	1.5	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.013 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<1	<1	1.5	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.015 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW7-ROX-100819	10/8/2019		36.10	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0093 J J	<0.0096	0.0049 J J	<0.0096	<0.0096	<0.00019
	MW7-ROX-010620	1/6/2020		37.60	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.023 J * J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW7-ROX-010620-DUP	1/6/2020		37.60	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.022 J * J	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW7-ROX-010620-DUP-PCP	1/6/2020		37.60	NE																						
	MW7-ROX-010620-PCP	1/6/2020		37.60	NE																						
	MW7-ROX-040620	4/6/2020	42.92 - 52.92	36.84	NE	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ	<0.0002	<0.0002	<0.0004 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.012 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW7-ROX-040620-DUP	4/6/2020		36.84	NE	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<1 UJ	<5 UJ	<5 UJ	<10 UJ	<0.0002	<0.0002	<0.0004 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.012 J	<0.0099	<0.02 UJ	<0.02 UJ	<0.0099	<0.0002
MW-08	MW8-ROX-071017	7/10/2017	33.60 - 43.60	28.48	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW8-ROX-100517	10/5/2017		29.28	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<10	<10	<10	<10	<10	<10	<50	<50	<100	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.012	<0.0096	<0.0096	<0.00019
	MW8-ROX-010918	1/9/2018		31.60	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000046 J	<0.00019	0.000046 J	<0.029 H UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW8-ROX-040918	4/9/2018		32.27	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW8-ROX-071018	7/10/2018		32.42	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.0034 U	<0.011	<0.011	<0.00021
	MW8-ROX-100818	10/8/2018		32.45	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000061 J	0.000046 J	0.000054 J	<0.029	<0.0098	0.0062 J	<0.0098	<0.0098	<0.0002
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	0.00013 J	<0.0002	<0.0002	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098
	MW8-ROX-010719	1/7/2019		32.04	NE	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00017 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<2	<2	<2	<2	<2	<2	<10	<10	<20	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW8-ROX-040819	4/8/2019		31.70	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.011 J *	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW8-ROX-070819	7/8/2019		27.15	NE	<0.5	<0.5	0.48 J	<0.5	<0.5	<0.5	<2.5	<2.5	0.89 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW8-ROX-100819	10/8/2019		26.91	NE	<0.5	<0.5	0.29 J	<0.5	<0.5	<0.5	<2.5	0.38 J	1 J	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019 H UJ
	MW8-ROX-010620	1/6/2020		28.35	NE	<0.2	<0.2	0.1 J	<0.2	<0.2	<0.2	<1	0.13 J	0.44 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW8-ROX-010620-PCP	1/6/2020		28.35	NE																						
	MW8-ROX-040620	4/6/2020	33.60 - 43.60	27.70	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	0.18 J	0.49 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
MW-09	MW9-ROX-071217	7/12/2017	46.45 - 56.45	38.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.00038	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00038
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW9-ROX-070918	7/9/2018		42.82	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW9-ROX-101018	10/10/2018		42.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095
	MW9-ROX-011419	1/14/2019		42.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0063 U	<0.01	<0.01	<0.0002
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW9-ROX-101419	10/14/2019		38.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW9-ROX-011320	1/13/2020		38.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW9-ROX-011320-DUP	1/13/2020		38.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW9-ROX-041020	4/10/2020		38.51	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs											
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
MW-10	MW10-ROX-071117	7/11/2017	44.43 - 54.43	38.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-040518	4/5/2018		41.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW10-ROX-070918	7/9/2018		42.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW10-ROX-101018	10/10/2018		42.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.047 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.0002 H UJ
	MW10-ROX-101419	10/14/2019		38.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW10-ROX-011020	1/10/2020		39.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0095 H UJ	<0.0097	<0.0097	<0.00019
	MW10-ROX-041020	4/10/2020	44.43 - 54.43	38.59	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
MW-11	MW11-ROX-071017	7/10/2017	41.66 - 51.66	36.39	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	0.003 J J	<0.01	<0.01	<0.0002
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW11-ROX-040618	4/6/2018		39.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW11-ROX-070918	7/9/2018		40.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	MW11-ROX-101118	10/11/2018		40.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	0.0086 J	<0.0098	<0.0098	<0.0002
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000038 J	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.028	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019
	MW11-ROX-070919	7/9/2019		35.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	0.000054 J	0.000062 J	0.000068 J	0.000051 J	0.00006 J	<0.031	<0.01	<0.01	<0.01	<0.01	0.000042 J
	MW11-ROX-100419	10/4/2019		35.36	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW11-ROX-010720	1/7/2020		36.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW11-ROX-040920	4/9/2020		36.02	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019 UJ
MW-12	MW-12-ROX-07072017	7/7/2017	41.92 - 51.92	36.84	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW12-ROX-011118	1/11/2018		39.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.000048 U	<0.00019	<0.00019	<0.00019	<0.028	<0.0094 UJ	<0.0094	<0.0094	<0.0094	<0.00019
	MW12-ROX-040518	4/5/2018		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW12-ROX-070618	7/6/2018		41.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021 UJ	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011 UJ	<0.011	<0.011	<0.00021
	MW12-ROX-101018	10/10/2018		40.84	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	<0.000095	<0.000095	<0.000095	0.000031 J	0.000061 J J	0.00011	0.000064 J	0.000039 J	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	0.000059 J
	MW12-ROX-010919	1/9/2019		40.78	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000022 J	0.00024	0.00033	0.00034	0.00037	0.00032	<0.03	<0.01	<0.01	<0.01	<0.01	0.00025
	MW12-ROX-010919-RE	1/9/2019		40.78	NE										<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ						<0.0002 H UJ
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00005 J	<0.0002	0.000041 J	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW12-ROX-100419	10/4/2019		35.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0073 U	<0.0096	<0.0096	<0.00019
	MW12-ROX-010720	1/7/2020		36.78	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW12-ROX-040820	4/8/2020		36.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097	<0.0097	<0.01 H UJ	<0.0097	<0.00019
MW-13	MW13-ROX-070717	7/7/2017	25.57 - 35.57	23.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0076 U	<0.0096	<0.0096	<0.00019
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 H UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW13-ROX-070918	7/9/2018		27.6	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0073 U	<0.0098	<0.0098	<0.0002
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097 UJ	<0.0097	<0.0097	<0.0097	<0.00019
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00028	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.00098
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.001	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW13-ROX-100919	10/9/2019		21.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00064	<0.00019	0.00014 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW13-ROX-010620	1/6/2020		23.41	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.0011	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW13-ROX-040820	4/8/2020		22.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00062	<0.00019	0.00018 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.01 H UJ	<0.0096	<0.00019

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
MW-14	MW14-ROX-070717	7/7/2017	33.42 - 43.42	28.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW14-ROX-010918	1/9/2018		31.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.000014	<0.029 H UJ	<0.00071	<0.00071	<0.00071	<0.00071	<0.000014
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 H UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW14-ROX-041018	4/10/2018		31.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.00005 U	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.003 U	<0.0096	<0.0096	<0.00019
	MW14-ROX-101518	10/15/2018		32.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW14-ROX-010919	1/9/2019		32.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW14-ROX-041619	4/16/2019		31.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000048 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0099 H UJ	<0.01	<0.01	<0.0002
	MW14-ROX-101119	10/11/2019		26.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.0056 J	<0.0096	<0.0096	<0.00019
	MW14-ROX-010720	1/7/2020		28.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW14-ROX-010720-PCP	1/7/2020		28.03	NE																							
	MW14-ROX-041420	4/14/2020	33.42 - 43.42	27.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
MW-16	MW16-ROX-071017	7/10/2017	37.06 - 47.06	38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000044 J	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW16-ROX-070618	7/6/2018		42.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW16-ROX-100518	10/5/2018		42.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.000036 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW16-ROX-100719	10/7/2019		36.86	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW16-ROX-010920	1/9/2020		38.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW16-ROX-041320	4/13/2020	37.50 - 47.50	37.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
MW-22	MW22-ROX-071217	7/12/2017	37.88 - 47.88	36.83	NE	<0.002	<0.002	0.017	0.063	0.018	<0.002	0.27	0.13	0.4	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.03	<0.01	<0.01	<0.01	<0.01	<0.00041
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<0.002	<0.002	0.015	0.052	0.015	<0.002	0.23	0.11	0.34	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.01	<0.01 UJ	<0.01 UJ	<0.01	<0.0004
	MW22-ROX-101317	10/13/2017		36.94	NE	<0.001	<0.001	<0.001	0.0042	0.065	0.021	<0.001	0.059	0.033	0.091	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	<0.001	<0.001	<0.001	0.0037	0.055	0.018	<0.001	0.048	0.026	0.075	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW22-ROX-011118	1/11/2018		39.25	NE	<0.025	<0.025	0.19	0.6	0.16	<0.025	3.1	1.3	4.5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00019
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<0.025	<0.025	0.21	0.68	0.18	<0.025	3.3	1.4	4.8	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	<0.02	<0.02	0.28	0.59	0.15	<0.02	3.3	1	4.3	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.0002 UJ	<0.03 UJ	<0.0099 UJ	<0.0099 UJ	<0.0099 UJ	<0.0099 UJ	<0.0002 UJ
	MW22-ROX-071018	7/10/2018		40.88	NE	<0.025	<0.025	0.41	0.6	0.15	<0.025	3.9	0.85	4.8	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW22-ROX-101518	10/15/2018		41.11	NE	<0.01	<0.01	0.13	0.8	0.19	<0.01	2.9	0.3	3.2	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.16	<0.053	<0.053	<0.053	<0.053	<0.00021
	MW22-ROX-010919	1/9/2019		40.91	NE	<0.025	<0.025	0.071	0.6	0.15	<0.025	2.6	0.17	2.8	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW22-ROX-041719	4/17/2019		40.31	NE	<0.025	<0.025	0.15	0.8	0.21	<0.025	3.7	0.3	4	0.00011 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW22-ROX-101519	10/15/2019		35.38	NE	<0.001	<0.001	0.0089	0.055 J	0.02	<0.001	0.16 J	0.014	0.18 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	<0.001	<0.001	0.0096	0.071 J	0.017	<0.001	0.29 J	0.02	0.31 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW22-ROX-010620	1/6/2020		36.83	NE	<0.001	<0.001	0.00043 J	0.005	0.0006 J	<0.001	0.0089	0.00099 J	0.0099 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW22-ROX-010620-PCP	1/6/2020		36.83	NE																							
	MW22-ROX-041520	4/15/2020	38.43 - 48.43	36.30	NE	<0.001	<0.001	0.0019	0.04	0.0085	<0.001	0.062	0.0037 J	0.066	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
MW-23	MW23-ROX-071017	7/10/2017	29.02 - 39.02	25.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	0.003 J	<0.0095	<0.0095	<0.00019
	MW23-ROX-100517	10/5/2017		26.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019 UJ
	MW23-ROX-010518	1/5/2018		28.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	0.000025 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW23-ROX-040918	4/9/2018		29.24	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW23-ROX-070918	7/9/2018		29.1	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.033	<0.011	<0.011	<0.011	<0.011	<0.0011
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000082 J	0.00004 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000096
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0082 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0095 U	<0.01	<0.01	<0.00021
	MW23-ROX-100919	10/9/2019		23.39	NE	<0.001	<0.001	<0.0014 U	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0095	<0.00019
	MW23-ROX-010820	1/8/2020		24.92	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0095 H UJ	<0.0096	<0.0096	<0.00019
	MW23-ROX-010820-PCP	1/8/2020		24.92	NE																							
	MW23-ROX-040820	4/8/2020	29.02 - 39.02	24.30	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0098 H UJ	<0.0099	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs											
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
MW-24	MW24-ROX-070717	7/7/2017	38.89 - 48.89	37.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0099	<0.0098	<0.0098	<0.0002
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW24-ROX-010818	1/8/2018		40.36	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW24-ROX-040618	4/6/2018	39.61 - 49.61	41.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW24-ROX-070618	7/6/2018		41.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW24-ROX-100518	10/5/2018		41.81	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW24-ROX-041219	4/12/2019		41.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	MW24-ROX-100719	10/7/2019		36.56	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW24-ROX-010720	1/7/2020		37.67	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096 H UJ	<0.0096	<0.0096	<0.00019
	MW24-ROX-010720-PCP	1/7/2020		37.67	NE																							
	MW24-ROX-040920	4/9/2020	39.61 - 49.61	37.28	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
MW-25	MW25-ROX-071017	7/10/2017	35.59 - 45.59	32.75	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.00019
	MW25-ROX-100517	10/5/2017		33.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	0.012	<0.0095	<0.0095	<0.00019
	MW25-ROX-010918	1/9/2018		35.80	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	0.000059 J	0.000041 J	<0.0002	<0.0002	<0.029 H UJ	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW25-ROX-040918	4/9/2018		36.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW25-ROX-071018	7/10/2018		36.71	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	MW25-ROX-100819	10/8/2019		31.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW25-ROX-010620	1/6/2020		32.63	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW25-ROX-040620	4/6/2020	35.59 - 45.59	32.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
MW-26	MW26-ROX-070717	7/7/2017	38.15 - 48.15	35.61	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.004 U	<0.0097	<0.0097	<0.00019
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 H	<0.0095 H	<0.003 H UJ	<0.0095 H	<0.0095 H	<0.00019
	MW26-ROX-010818	1/8/2018		38.41	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW26-ROX-040518	4/5/2018		39.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW26-ROX-100918	10/9/2018		39.53	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000023 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.047 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000096
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	0.000043 J	0.00004 J	<0.0002	<0.0002	<0.03	<0.0099	<0.0099 UJ	<0.0099 UJ	<0.0099	<0.0002
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW26-ROX-100919	10/9/2019		33.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0068 U	<0.0096	<0.0096	<0.00019
	MW26-ROX-010920	1/9/2020		35.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW26-ROX-041020	4/10/2020	38.15 - 48.15	34.83	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0079 J	<0.01	<0.01	<0.01	<0.01	<0.0002
MW-27	MW27-ROX-071017	7/10/2017	39.79 - 49.79	37.23	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW27-ROX-011018	1/10/2018		38.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW27-ROX-040618	4/6/2018		40.34	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	MW27-ROX-070918	7/9/2018		41.16	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000029 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00022
	MW27-ROX-100918	10/9/2018		41.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.002	<0.001	<0.003	0.000028 J	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.000096	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000096
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	MW27-ROX-100319	10/3/2019		36.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW27-ROX-010720	1/7/2020		36.96	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	MW27-ROX-041020	4/10/2020	39.79 - 49.79	36.82	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
MW-28	MW28-ROX-071217	7/12/2017	33.61 - 43.61	36.48	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.00092 J	0.0017 J	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0004
	MW28-ROX-100917	10/9/2017		36.44	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0007 J	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW28-ROX-040618	4/6/2018		39.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW28-ROX-070918	7/9/2018		40.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.0079 U	<0.011	<0.011	<0.00021
	MW28-ROX-101118	10/11/2018		40.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	0.01 F1 J	<0.0098	<0.0098	<0.0002
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002 UJ	<0.0002 UJ	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	MW28-ROX-100419	10/4/2019		35.90	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	MW28-ROX-011020	1/10/2020		36.55	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0048 J	0.0048 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	0.0051 J H J	<0.0096	<0.0096	<0.00019
	MW28-ROX-041620	4/16/2020	33.61 - 43.61	36.25	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
P-54	P54-ROX-071017	7/10/2017	38.00 - 63.00	36.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P54-ROX-100617	10/6/2017		36.79	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	P54-ROX-011118	1/11/2018		39.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.000047 U	<0.000039 U	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00019
	P54-ROX-040618	4/6/2018		40.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.00004 J	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P54-ROX-070618	7/6/2018		40.51	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	P54-ROX-100518	10/5/2018		40.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P54-ROX-011019	1/10/2019		40.37	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P54-ROX-041119	4/11/2019		39.91	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P54-ROX-070919	7/9/2019		35.60	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0085 U	<0.01	<0.01	<0.0002
	P54-ROX-100419	10/4/2019		35.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P54-ROX-010720	1/7/2020		36.29	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P54-ROX-010720-PCP	1/7/2020		36.29	NE																						
	P54-ROX-040920	4/9/2020	38.00 - 63.00	35.94	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019
P-56	P56-ROX-071217	7/12/2017	40.82 - 65.82	41.11	NE	<0.001	<0.001	0.0018	0.0091	0.0025	<0.001	0.026	0.00088 J	0.027	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.00041	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00041
	P56-ROX-101117	10/11/2017		41.08	NE	<0.001	<0.001	0.0071	0.038	0.0094	<0.001	0.098	0.0027 J	0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P56-ROX-011018	1/10/2018		43.63	NE	<0.005	<0.005	0.0076	0.041	0.0097	<0.005	0.11	0.0035 J	0.12	0.00044	0.000077 J	0.000078 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P56-ROX-041118	4/11/2018		44.40	NE	<0.001	<0.001	<0.001	0.0047	0.0017	<0.001	0.016	<0.005	0.017	0.00015 J	<0.0002	0.000061 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P56-ROX-071118	7/11/2018		45.25	NE	<0.001	<0.001	0.0022	0.013	0.0041	<0.001	0.046	0.0019 J	0.048	0.00037	0.00005 J	0.000059 J	0.000068 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	<0.00022
	P56-ROX-101518	10/15/2018		45.37	NE	<0.001	<0.001	0.00076 J	0.0013	<0.001	<0.001	0.0059	<0.005	0.0062 J	0.00037	<0.0002	0.000069 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P56-ROX-011019	1/10/2019		45.16	NE	<0.001	<0.001	0.00086 J	0.008	0.0027	<0.001	0.023	0.00098 J	0.024	0.00045	<0.00019	0.000099 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P56-ROX-041719	4/17/2019		44.38	NE	<0.001	<0.001	0.0026	0.041	0.011	<0.001	0.11	0.0041 J	0.11	0.00069	<0.0002	0.00018 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P56-ROX-071219	7/12/2019		40.50	NE	<0.001	<0.001	0.0079	0.083	0.021	<0.001	0.21	0.0064	0.22	0.00058 J H J	<0.00099 H UJ	0.00021 J H J	<0.00099 H UJ	<0.00099 H UJ	<0.00099 H UJ	<0.00099 H UJ	<0.00099 H UJ	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00099 H UJ
	P56-ROX-101519	10/15/2019		39.60	NE	<0.001	<0.001	0.0025	0.029	0.0072	<0.001	0.075	0.0029 J	0.078	0.00041	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P56-ROX-010820	1/8/2020		41.31	NE	<0.001	<0.001	0.00061 J	0.0015	0.00065 J	<0.001	0.0062	<0.005	0.0065 J	0.00052	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P56-ROX-041620	4/16/2020	40.82 - 65.82	40.49	NE	<0.001	<0.001	0.0073	0.059	0.014	<0.001	0.15	0.0055	0.16	0.00039	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
P-57	P57-ROX-071317	7/13/2017	44.19 - 54.19	41.95	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00056	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.0099	<0.0041 U	<0.0099	<0.0099	<0.0002
	P57-ROX-101617	10/16/2017		42.64	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	0.0005	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P57-ROX-011818	1/18/2018		44.86	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00031	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.000052 J	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.0005	0.00016 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P57-ROX-041018	4/10/2018		45.45	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00015 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P57-ROX-071118	7/11/2018		45.76	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00022	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.0002 J	<0.00022	0.000029 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00022
	P57-ROX-101618	10/16/2018		45.86	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00023	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.00021	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P57-ROX-011419	1/14/2019		45.63	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00031 J	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	0.00038 J	<0.0004	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P57-ROX-041719	4/17/2019		44.89	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00046 J	<0.00098	<0.0002	<0.0002	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	0.0077 J *	<0.0098	<0.0098	<0.0002
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.00041 J	<0.00099	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	0.0066 J *	<0.0099	<0.0099	<0.00099
	P57-ROX-071519	7/15/2019		40.82	NE	<0.025	<0.025	0.013 J	<0.025	<0.025	<0.025	<0.13	<0.13	<0.25	0.00048 J J	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	<0.0068 U	<0.0097	<0.0097	<0.00097
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.025	<0.025	0.015 J	<0.025	<0.025	<0.025	<0.13	<0.13	<0.25	0.00028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P57-ROX-101519	10/15/2019		40.18	NE	<0.02	<0.02	0.014 J	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	0.00022	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	0.016	<0.00019
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	0.00013 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P57-ROX-010920	1/9/2020		41.77	NE	<0.005	<0.005	0.0062	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0095 H UJ	<0.0096	<0.0096	<0.00019
	P57-ROX-041720	4/17/2020	44.19 - 54.19	40.70	NE	<0.01	<0.01	0.0078 J	<0.01	<0.01	<0.01	<0.05	<0.05	<0.1	0.00042	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P57-ROX-041720-DUP	4/17/2020		40.70	NE	<0.01	<0.01	0.0086 J	<0.01	<0.01	<0.01	<0.05	<0.05	<0.1	0.00037	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
P-58	P58-ROX-071317	7/13/2017	40.21 - 65.21	39.88	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	0.00058 H J	<0.00039 H UJ	<0.00039 H UJ	<0.00039 H UJ	0.000083 J H J	<0.00039 H UJ	<0.00039 H UJ	<0.00039 H UJ	<0.03 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00039 H UJ
	P58-ROX-041118	4/11/2018		43.19	NE	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00059	0.00027	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<2	<2	<2	<2	<2	<2	<10	<10	<20	0.00057	0.00032	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P58-ROX-101618	10/16/2018		43.66	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	0.0006	<0.00019	<0.00019	<0.00019	0.00018 J	0.0001 J	<0.00019	0.000057 J	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	0.00032
	P58-ROX-041719	4/17/2019		42.49	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.00099	0.00055 J	0.00049 J	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.00099
	P58-ROX-071519	7/15/2019		38.43	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.001 UJ	<0.001 UJ	<0.0002 UJ	0.00079 J	0.00073 J	0.0008	<0.0002	<0.0002	<0.031	<0.01	<0.01	<0.01	<0.01	0.0014 J
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.00019	0.00052	0.0013 J	0.0015 J	0.0014 J	0.0011	0.00084 J J	0.00021	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	0.003 J
P-59	P59-ROX-071317	7/13/2017	47.91 - 72.91	42.16	NE	<0.05	<0.05	2.1	0.63	0.15	<0.05	3.5	0.13 J	3.6	0.00042	<0.0002	<0.0002	<0.0002	0.000051 J	0.000051 J	<0.0002	<0.0002	<0.03 UJ	<0.01	<0.014 U	<0.01	<0.01	0.000056 J
	P59-ROX-101317	10/13/2017		41.87	NE	<0.02	<0.02	0.4	0.46	0.12	<0.02	1.3	0.044 J	1.3	<0.00039 UJ	<0.00039 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<0.02	<0.02	0.39	0.42	0.1	<0.02	1.1	0.037 J	1.2	<0.0002	<0.0002	<0.0002	<0.0002	<0.00039 UJ	<0.00039 UJ	<0.00039 UJ	<0.00039 UJ	<0.029 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P59-ROX-011118	1/11/2018		44.44	NE	<0.02	<0.02	0.28	0.56	0.14	<0.02	1.8	0.032 J	1.8	<0.00096	<0.00096	<0.00096	<0.00096	<0.00096	<0.0002 U	0.00026 J B	<0.00096	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00096
	P59-ROX-041218	4/12/2018		45.13	NE	<0.02	<0.02	0.46	0.32	0.045	<0.02	1.1	0.082 J	1.2	0.00014 J	<0.0002	0.000093 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P59-ROX-071118	7/11/2018		46.16	NE	<0.025	<0.025	0.52	0.4	0.082	<0.025	1	0.04 J	1	<0.00022	<0.00022	0.00046	0.00012 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	0.00021 J
	P59-ROX-101618	10/16/2018		45.99	NE	<0.01	<0.01	1.2	0.48	0.12	<0.01	1.8	0.23	2	0.000098 J	<0.00019	0.0018	0.00031	0.000093 J	<0.00019	0.000067 J	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	0.00063
	P59-ROX-011419	1/14/2019		46.10	NE	<0.01	<0.01	0.33	0.6	0.13	<0.01	1.5	0.063	1.5	<0.0002	<0.0002	0.0011	<0.001	0.000054 J	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.001
	P59-ROX-101519	10/15/2019		40.46	NE	<0.01	<0.01	0.74	0.38	0.09	<0.01	1.3	0.17	1.5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P59-ROX-010920	1/9/2020		42.14	NE	<0.01	<0.01	0.28	0.19	0.055	<0.01	0.33	0.055	0.39	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0095 H UJ	<0.0096	<0.0096	<0.00019
	P59-ROX-042120	4/21/2020	47.91 - 72.91	41.45	NE	<0.02	<0.02	0.56	0.71	0.17	<0.02	3.5	0.14	3.6	0.0005 J B	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.00098	<0.029	<0.0098	<0.0098	<0.0098	0.027	<0.00098

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																					
P-66	P66-ROX-071217	7/12/2017	34.72 - 59.72	31.38	NE	0.0018	<0.001	0.00092 J	0.041	0.00087 J	<0.001	0.0047 J	0.0013 J	0.006 J	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.03	<0.01	0.0045 J	<0.01	<0.01	<0.0004
	P66-ROX-101017	10/10/2017		32.27	NE	<0.001	<0.001	<0.001	0.036	0.00066 J	<0.001	0.0027 J	0.0011 J	0.0038 J	0.00036	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P66-ROX-011118	1/11/2018		34.09	NE	<0.001	<0.001	0.00075 J	0.0022	<0.001	<0.001	<0.005	0.00087 J	0.0024 J	0.00056	0.00019	0.0004	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00019
	P66-ROX-041018	4/10/2018		34.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	0.0006 J	<0.01	0.00047	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P66-ROX-071118	7/11/2018		35.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00072 J	<0.0019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.0003 J	<0.002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0067 U	<0.0099	<0.0099	<0.00099
	P66-ROX-101518	10/15/2018		35.31	NE	<0.001 UJ	<0.001 UJ	0.00098 J	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.005 UJ	<0.005 UJ	<0.01 UJ	0.00066 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.15	<0.049	<0.049	<0.049	<0.049	<0.00019
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<0.001 UJ	<0.001 UJ	0.00099 J	<0.001 UJ	<0.001 UJ	<0.001 UJ	<0.005 UJ	0.00086 J	<0.01 UJ	<0.0002 UJ	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.15	<0.049	<0.049	<0.049	<0.049	<0.0002
	P66-ROX-010919	1/9/2019		34.99	NE	<0.001	<0.001	0.0011	<0.001	<0.001	<0.001	<0.005	0.00077 J	<0.01	0.00042	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P66-ROX-041619	4/16/2019		34.08	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00099	<0.00099	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.00099
	P66-ROX-071019	7/10/2019		30.00	NE	<0.001	<0.001	0.00061 J	0.0029	<0.001	<0.001	<0.005	<0.005	<0.01	0.00081 J J	<0.001	<0.0002	<0.001	0.000042 J	0.000045 J	0.000041 J	<0.0002	<0.03	<0.01	<0.0055 U	<0.01	<0.01	<0.001
	P66-ROX-101119	10/11/2019		29.52	NE	<0.001	<0.001	0.0005 J	<0.001	<0.001	<0.001	<0.005	0.00078 J	<0.01	0.00026 J	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0096	<0.0096	<0.0096	0.017	<0.00019 UJ
	P66-ROX-010720	1/7/2020		31.09	NE	<0.001	<0.001	0.00064 J	<0.001	<0.001	<0.001	<0.005	0.00065 J	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.15 UJ	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.00019
	P66-ROX-041420	4/14/2020		30.12	NE	<0.001	<0.001	0.00098 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00045 J	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
P-74	P74-ROX-071217	7/12/2017	44.43 - 69.43	38.08	NE	<0.001	<0.001	0.0018	0.011	0.0053	<0.001	0.0048 J	0.00066 J	0.0055 J	0.000038 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P74-ROX-101617	10/16/2017		38.57	NE	<0.001	<0.001	0.0033	0.018	0.009	<0.001	0.014	0.0014 J	0.015	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0067 U	<0.0096	<0.0096	<0.00019
	P74-ROX-011018	1/10/2018		40.25	NE	<0.005	<0.005	0.0081	0.013	0.0061	<0.005	0.025	<0.025	0.027 J	0.000066 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.000042 U	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.000039 U	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P74-ROX-071118	7/11/2018		42.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P74-ROX-101618	10/16/2018		42.18	NE	<0.001	<0.001	0.0023	0.0053	0.0014	<0.001	0.0025 J	<0.005	0.003 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P74-ROX-011019	1/10/2019		42.14	NE	<0.001	<0.001	0.00072 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P74-ROX-041719	4/17/2019		41.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P74-ROX-071219	7/12/2019		37.95	NE	<0.001	<0.001	0.0011	0.002	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0002 H UJ
	P74-ROX-101419	10/14/2019		36.74	NE	<0.001	<0.001	0.0019	0.0022	<0.001	<0.001	<0.005	<0.005	0.0019 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P74-ROX-041720	4/17/2020		37.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
P-93A	P93A-ROX-071317	7/13/2017	43.07 - 53.07	40.11	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.00037	<0.056 UJ	<0.019	<0.0094 U	<0.019	<0.019	<0.00037
	P93A-ROX-101117	10/11/2017		40.87	NE	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.025	<0.025	<0.05	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0095	<0.0043 U	<0.0095	<0.0095	<0.00019 UJ
	P93A-ROX-011118	1/11/2018		42.71	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00019
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096	<0.0096	<0.0096	<0.00019
	P93A-ROX-041118	4/11/2018		NM	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P93A-ROX-052218	5/22/2018		NM	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2														
	P93A-ROX-071218	7/12/2018		44.03	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93A-ROX-101618	10/16/2018		44.05	NE	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<1	<1	<2	0.000086 J	<0.00019	0.000045 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P93A-ROX-011419	1/14/2019		43.78	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	0.000043 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P93A-ROX-041819	4/18/2019		42.98	NE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.5	<0.5	<1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.02 UJ	<0.1 UJ	<0.1 UJ	<0.2 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	0.00067 J	<0.0096	<0.00019
	P93A-ROX-101519	10/15/2019		38.31	NE	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.25	<0.25	<0.5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.000078 U	<0.000041 U	<0.000039 U	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93A-ROX-010920	1/9/2020		39.89	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0061 U	<0.0096	<0.0096	<0.00019
	P93A-ROX-010920-DUP	1/9/2020		39.89	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93A-ROX-041720	4/17/2020		38.79	NE	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs											
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
P-93B	P93B-ROX-071117	7/11/2017	74.60 - 76.60	41.59	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0052 U	<0.0096	<0.0096	<0.00019
	P93B-ROX-101117	10/11/2017		42.21	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-011518	1/15/2018		44.42	NE	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<13	<13	<25	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93B-ROX-071218	7/12/2018		45.36	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	0.0026 J	<0.0097	<0.0097	<0.00019
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.00097	<0.029	<0.0097	0.0027 J	<0.0097	<0.0097	<0.00097
	P93B-ROX-101518	10/15/2018		45.64	NE	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<2 UJ	<10 UJ	<10 UJ	<20 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93B-ROX-011119	1/11/2019		45.15	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	0.0036 J	<0.00019
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<5	<5	<5	<5	<5	<5	<25	<25	<50	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P93B-ROX-071219	7/12/2019		40.35	NE	<0.25	<0.25	0.32	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.029 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0002 H UJ
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<0.25	<0.25	0.36	<0.25	<0.25	<0.25	<1.3	<1.3	<2.5	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0002 H UJ
	P93B-ROX-101519	10/15/2019		39.62	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-010820	1/8/2020		41.48	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P93B-ROX-010820-DUP	1/8/2020		41.48	NE	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.5	<2.5	<5	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.00019
	P93B-ROX-042020	4/20/2020	74.78 - 76.78	40.23	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.0004 UJ	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0004 UJ
	P93B-ROX-042020-DUP	4/20/2020		40.23	NE	<1	<1	<1	<1	<1	<1	<5	<5	<10	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.00099 UJ	<0.15	<0.05	<0.05	<0.05	<0.05	<0.00099 UJ
P-93C	P93C-ROX-071217	7/12/2017	92.47 - 97.47	41.30	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.00039	<0.03	<0.0098	0.0042 J	<0.0098	<0.0098	<0.00039
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0033 U	<0.0096	<0.0096	<0.00019
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.01	<0.01	<0.01	<0.00021
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05	<0.1	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1	<0.1	<0.2	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.03 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.0002 H UJ
	P93C-ROX-101419	10/14/2019		39.65	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93C-ROX-010820	1/8/2020		41.30	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93C-ROX-041620	4/16/2020	92.88 - 97.88	40.17	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
P-93D	P93D-ROX-071117	7/11/2017	125.75 - 127.75	41.64	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0087 U	<0.0096	<0.0096	<0.00019
	P93D-ROX-101117	10/11/2017		42.42	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.00019 UJ	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019 UJ
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<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	<0.00019 H UJ	<0.00019 H UJ	<0.029 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019 H UJ
	P93D-ROX-041218	4/12/2018		45.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000046 J	<0.0002	<0.0002	0.00023	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	P93D-ROX-071218	7/12/2018		45.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.032	<0.011	<0.011	<0.011	<0.011	<0.0011
	P93D-ROX-101518	10/15/2018		45.70	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000051 J	<0.00019	0.000043 J	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P93D-ROX-041819	4/18/2019		44.50	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.001	<0.001	0.00048 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	P93D-ROX-101519	10/15/2019		39.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93D-ROX-010820	1/8/2020		41.68	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	P93D-ROX-042020	4/20/2020	125.66 - 127.66	40.41	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	0.011	<0.0099	<0.0099	<0.0002
P-114R	P114R-ROX-071117	7/11/2017	23.01 - 33.01	22.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0034 U	<0.0096	<0.0096	<0.00019
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0082 U	<0.0096	<0.0096	<0.00019
	P114R-ROX-010918	1/9/2018		26.37	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00014 J	<0.00095	0.00025 J	<0.00095	<0.00095	<0.00095	<0.00095	<0.00095	<0.029 H UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095
	P114R-ROX-040618	4/6/2018		26.76	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P114R-ROX-070918	7/9/2018		26.38	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0054 U	<0.0097	<0.0097	<0.00019
	P114R-ROX-101118	10/11/2018		26.27	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0002
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	0.000055 J	<0.00039	<0.0002	<0.0002	<0.0002	<0.029	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.00039
	P114R-ROX-010719	1/7/2019		25.88	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.0001 J	<0.00019	0.000045 J	<0.00019 UJ	<0.00019 UJ	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P114R-ROX-041519	4/15/2019		24.70	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.001	<0.001	<0.001	<0.001	<0.001	<0.03	<0.01	<0.01	<0.01	<0.01	<0.001
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<0.0002	<0.0002	<0.00099	<0.00099	<0.00099	<0.00099	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.001	<0.001	0.00099 J	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.14	<0.048	<0.048	<0.048	<0.048	<0.00096 UJ
	P114R-ROX-100919	10/9/2019		20.46	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	0.000062 J	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	P114R-ROX-010620	1/6/2020		22.15	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	P114R-ROX-010620-PCP	1/6/2020		22.15	NE																							
	P114R-ROX-040720	4/7/2020	23.01 - 33.01	21.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	<0.00092	0.00049 J J	<0.14	<0.046	<0.046	<0.046	<0.046	0.00036 J J
	P114R-ROX-040720-RE	4/7/2020		21.49	NE										<0.00024	<0.00024	<0.00024	<0.0012 UJ	<0.0012 UJ	<0.0012 UJ	<0.0012 UJ	<0.0012 UJ	<0.072	<0.024	<0.024	<0.019 H UJ	<0.024	<0.0012 UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
ROST-3-MW	ROST3MW-ROX-071117	7/11/2017	37.81 - 47.81	36.61	NE	<0.001	<0.001	0.0012	0.018	0.0021	<0.001	0.022	0.0042 J	0.026	0.00016 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.0024 U	<0.01	<0.01	<0.0002
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00027	0.000056 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0096	0.0031 J	<0.0096	<0.0096	<0.00019
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01														
	ROST3MW-ROX-011518	1/15/2018		40.00	NE										0.00024	<0.00019	0.000022 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	ROST3MW-ROX-022618	2/26/2018		40.00	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01														
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00028	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00013 J	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.031	<0.01	<0.0044 U	<0.01	<0.01	<0.00021
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<0.001	<0.001	<0.001	0.00036 J	<0.001	<0.001	<0.002	<0.001	<0.003	0.00041 J	0.000076 J	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.000095	<0.048 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00025	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.003 J	0.00073 J	0.0037 J	0.00023	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.0073 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.001	<0.001	0.0021	0.012	0.0026	<0.001	0.04	0.0057	0.046	0.00026	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096 UJ	<0.0096	<0.00019
	ROST3MW-ROX-101419	10/14/2019		35.57	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000059 J	<0.00019	0.000028 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST3MW-ROX-010920	1/9/2020		36.56	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	ROST3MW-ROX-041020	4/10/2020	37.81 - 47.81	36.33	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000064 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
ROST-4-PZ(C)	ROST4PZC-ROX-071217	7/12/2017	34.95 - 44.95	37.20	NE	<0.001	<0.001	0.017	0.044	0.014	<0.001	0.24	0.0035 J	0.24	0.00024	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	<0.001	<0.001	0.013	0.041	0.012	<0.001	0.16	0.0029 J	0.16	0.0017	<0.00019	0.00038	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.00096 UJ	<0.029 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.00096 UJ
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<0.001	<0.001	<0.001	0.014	<0.001	<0.001	<0.005	<0.005	<0.01	0.00089	0.00016 J	0.0003	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00024	<0.0002	0.0001 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.00028	<0.00022	0.000094 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	0.013 B	<0.011	<0.011	<0.00022
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	<0.001	<0.001	0.011	0.0069	<0.001	<0.001	0.055	0.00099 J	0.056	0.00044	<0.0002	0.00014 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0002
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<0.001	<0.001	0.0045	0.015	<0.001	<0.001	0.058	0.0011 J	0.059	0.00087	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<0.001	<0.001	0.0087	0.015	<0.001	<0.001	0.073	0.0015 J	0.074	0.00089	<0.0002	0.00014 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	<0.001	<0.001	0.014	0.028	0.01	<0.001	0.19	<0.005	0.19	0.0024 H J	<0.00097 H UJ	0.0005 J H J	<0.00097 H UJ	<0.00097 H UJ	<0.00097 H UJ	<0.00097 H UJ	<0.00097 H UJ	<0.029 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.00097 H UJ
	ROST4PZC-ROX-101419	10/14/2019		35.97	NE	<0.001	<0.001	0.0071	0.037	0.0024	<0.001	0.065	0.0041 J	0.069	0.0018	<0.00019	0.00046	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZC-ROX-010720	1/7/2020		36.95	NE	<0.001	<0.001	0.0023	0.0077	0.00073 J	<0.001	0.023	0.00093 J	0.024	0.0014	<0.0002	0.00038	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	ROST4PZC-ROX-041520	4/15/2020	34.95 - 44.95	36.71	NE	<0.001	<0.001	0.0088	0.023	0.0049	<0.001	0.086	0.0016 J	0.088	0.002	<0.0002	0.00042	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	<0.005	<0.005	0.041	0.1	0.022	<0.005	0.41	0.067	0.47	0.0017	<0.0002	0.00061	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.002	<0.002	0.022	0.12	0.027	<0.002	0.29	0.063	0.35	0.0016	<0.00019	0.00041	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	<0.001	<0.001	0.0027	0.032	0.0087	<0.001	0.041	0.015	0.056	<0.0002	<0.0002	0.00066	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.01	<0.01	<0.01	<0.01	<0.0002
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<0.001	<0.001	0.0027	0.032	0.0081	<0.001	0.03	0.013	0.044	0.0017	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.011	<0.011	<0.011	0.00018 J
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.001 UJ	<0.001 UJ	<0.001 UJ	0.0059	0.0018	<0.001 UJ	0.0028 J	0.0014 J	0.0042 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.15	<0.049	<0.049	<0.049	<0.049	<0.0002
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<0.001	<0.001	<0.001	0.0013	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00038	<0.00038	0.0082	<0.00038	0.00011 J	<0.00038 UJ	<0.00038 UJ	<0.00038	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	0.00038
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<0.001	<0.001	0.0011	0.0033	<0.001	<0.001	0.006	0.0014 J	0.0074 J	<0.0002	<0.0002	0.00054 J	<0.00098	<0.0002	<0.0002	<0.0002	<0.0002	0.0071 J	<0.0098	0.024 * J	<0.0098	<0.0098	<0.00098
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<0.001	<0.001	0.00097 J	0.0025	<0.001	<0.001	0.0045 J	0.0011 J	0.0056 J	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097 UJ	<0.0097	<0.0097	<0.00019
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	<0.001	<0.001	0.029	0.1	0.019	<0.001	0.21	<0.005	0.21	0.0027 H J	<0.00098 H UJ	0.002 H J	<0.00098 H UJ	<0.00098 H UJ	<0.00098 H UJ	<0.00098 H UJ	<0.00098 H UJ	<0.029 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	0.00028 J H J
	ROST4PZE-ROX-101519	10/15/2019		35.01	NE	<0.001	<0.001	0.058	0.22	0.039	<0.001	0.64	0.13	0.77	0.002	<0.00019	0.0011	0.000041 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.028 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZE-ROX-010720	1/7/2020		36.10	NE	<0.002	<0.002	0.022	0.14	0.024	<0.002	0.29	0.033	0.32	0.0037	<0.0002	<0.0002	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	<0.0098	0.0081 J	<0.0098	<0.0098	0.00029
	ROST4PZE-ROX-041620	4/16/2020	34.75 - 44.75	35.90	NE	<0.005	<0.005	0.04	0.18	0.028	<0.005	0.47	0.074	0.55	0.0022	<0.00019	0.001	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.0018 J	<0.005	0.0021 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	0.000019 J	0.000027 J	0.000038 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095 UJ	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	0.000057 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098 UJ	<0.0098	<0.0002
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.032	<0.011	<0.011	<0.011	<0.011	<0.00021
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0097 UJ	<0.0097	<0.0097	<0.0097	<0.00019
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	0.000023 J	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.028	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.001	<0.001	0.0014	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0072 UJ	<0.0096	<0.0096	<0.00019
	ROST4PZG-ROX-100719	10/7/2019		35.69	NE	<0.001	<0.001	0.0049	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZG-ROX-011320	1/13/2020		37.07	NE	<0.001	<0.001	0.0041	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019 UJ	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	ROST4PZG-ROX-041520	4/15/2020	34.28 - 44.28	36.28	NE	<0.001	<0.001	0.0025	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	ROST4PZG-ROX-041520-DUP	4/15/2020		36.28	NE	<0.001	<0.001	0.0018	<0.001	<0.001	<0.001	<0.005	<0.005	<0.01	<0.0002	<0.0002	<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	<0.0002

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						VOCs									SVOCs												
						1,1,2,2-Tetrachloroethane	Tetrachloroethene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl chloride	m,p-Xylenes	o-Xylenes	Xylenes (total)	Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Benzoic Acid	bis(2-Chloroethoxy)methane	bis(2-Ethylhexyl)phthalate	Butyl benzyl phthalate	p-Chloroaniline	Chrysene (1,2-Benzphenanthracene)
Screening Values (mg/L)						0.00043 [3]	0.005 [1]	1.0 [1]	0.07 [3]	0.07 [3]	0.002 [1]	10 [1]		10 [1]	0.42 [1]	0.21 [3]	2.1 [1]	0.00013 [1]	0.0002 [1]	0.00018 [1]	0.21 [3]	0.00017 [1]	28 [1]		0.006 [2]	1.4 [2]	0.028 [2]	0.012 [1]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
T-12	T12-ROX-071317	7/13/2017	46.83 - 72.83	40.10	NE	<0.01	<0.01	0.08	0.033	<0.01	<0.01	0.2	<0.05	0.21	0.00046	<0.00019	0.00014 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	T12-ROX-101317	10/13/2017		39.48	NE	<0.01	<0.01	0.055	0.012	0.01	<0.01	0.099	0.0089 J	0.11	0.0005	0.000067 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002
	T12-ROX-011018	1/10/2018		42.14	NE	<0.01	<0.01	0.085	0.041	0.011	<0.01	0.34	0.008 J	0.35	0.00035	<0.00019	0.000092 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019
	T12-ROX-041218	4/12/2018		43.03	NE	<0.01	<0.01	0.085	0.047	0.0074 J	<0.01	0.34	0.011 J	0.35	0.00026	<0.0002	0.00015 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	T12-ROX-071118	7/11/2018		44.12	NE	<0.01	<0.01	0.097	0.061	0.012	<0.01	0.39	0.013 J	0.4	0.00027	<0.00022	0.000081 J	<0.00022	<0.00022	<0.00022	<0.00022	<0.00022	<0.033	<0.011	<0.0044 U	<0.011	<0.011	<0.00022
	T12-ROX-101618	10/16/2018		43.90	NE	<0.01	<0.01	0.085	0.06	0.016	<0.01	0.33	0.014 J	0.35	0.00039	<0.00019	0.00016 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	T12-ROX-011019	1/10/2019		44.00	NE	<0.01	<0.01	0.051	0.023	<0.01	<0.01	0.12	<0.05	0.13	0.00042	<0.00019	0.00022	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	0.0071 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	T12-ROX-041719	4/17/2019		43.38	NE	<0.01	0.013	0.071	0.033	0.0069 J	<0.01	0.16	0.0063 J	0.17	0.00033	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.03	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002
	T12-ROX-041719-PCE	4/17/2019		43.38	NE		<0.005 H UJ																					
	T12-ROX-071519	7/15/2019		39.74	NE	<0.01	<0.01	0.1	0.015	<0.01	<0.01	0.097	<0.05	0.1	0.00023	<0.00019	0.000073 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019
	T12-ROX-101519	10/15/2019		38.40	NE	<0.01	<0.01	0.065	0.016	0.008 J	<0.01	0.15	0.01 J	0.16	0.00022	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019
	T12-ROX-010920	1/9/2020		40.17	NE	<0.01	<0.01	0.038	0.02	0.0083 J	<0.01	0.13	<0.05	0.14	0.00044 J	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0095 H UJ	<0.0096	<0.0096	<0.00019
	T12-ROX-010920-DUP	1/9/2020		40.17	NE	<0.01	<0.01	0.043	0.023	0.0087 J	<0.01	0.15	<0.05	0.16	<0.00019 UJ	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.00019	<0.029	<0.0096	<0.0095 H	<0.0096	<0.0096	<0.00019
	T12-ROX-041720	4/17/2020	46.83 - 72.83	39.44	NE	<0.01	<0.01	0.039	0.014	0.006 J	<0.01	0.077	<0.05	0.081 J	0.00024 B	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.029	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
MW-01	MW1-ROX-071117	7/11/2017	48.80 - 58.80	37.24	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000041 J	0.000063 J	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW1-ROX-100617	10/6/2017		37.63	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000024 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW1-ROX-010518	1/5/2018		40.06	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW1-ROX-040618	4/6/2018		40.82	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	0.000021 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW1-ROX-070618	7/6/2018		41.40	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW1-ROX-101018	10/10/2018		41.17	NE	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095	<0.0095
	MW1-ROX-010819	1/8/2019		40.96	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	0.0043 J	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	0.00002 J	0.000023 J	<0.01	<0.02	<0.01	<0.01	<0.02	0.000057 J	<0.01	<0.0002	<0.01
	MW1-ROX-041119	4/11/2019		40.50	NE	<0.00019 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019 UJ	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW1-ROX-071119	7/11/2019		38.16	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW1-ROX-101119	10/11/2019		35.72	NE	<0.00019	<0.0097	<0.0097	<0.0097 UJ	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097 UJ	<0.019 UJ	<0.0097 UJ	<0.0097 UJ	<0.019 UJ	<0.00019	<0.0097 UJ	<0.00019	<0.0097
	MW1-ROX-010920	1/9/2020		37.09	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW1-ROX-040920	4/9/2020	48.80 - 58.80	36.54	NE	<0.00019	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.00019	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.00019	<0.0099 H UJ	<0.00019	<0.0099 H UJ
MW-02	MW2-ROX-071217	7/12/2017	49.87 - 59.87	38.66	NE	<0.00039	<0.0097	<0.0097	<0.0097	<0.0097	0.00048 J	<0.0097	<0.00039	<0.00039	<0.0097	<0.00039	<0.0097	0.01	0.0057	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00039	<0.0097	<0.00039	<0.0097
	MW2-ROX-101217	10/12/2017		39.03	NE	<0.00095 UJ	<0.0095	<0.0095	0.0059 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00095 UJ	<0.0095	0.013	0.025	<0.0095	0.0011 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00095 UJ	<0.0095
	MW2-ROX-011118	1/11/2018		41.24	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	0.01	0.0068	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW2-ROX-040918	4/9/2018		42.10	NE	<0.0002	<0.01 UJ	<0.01	0.013	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	0.015	0.031	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW2-ROX-071018	7/10/2018		42.59	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	0.000062 J	<0.011	0.0087	0.0069	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW2-ROX-101218	10/12/2018		42.71	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	0.0048	0.003 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002	<0.0098 UJ
	MW2-ROX-101218-DUP	10/12/2018		42.71	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	0.0051	0.0018 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097 UJ	<0.00019	<0.0097 UJ
	MW2-ROX-010819	1/8/2019		42.43	NE	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.0029 J	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.012	0.017	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW2-ROX-010819-DUP	1/8/2019		42.43	NE	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.013	0.018	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW2-ROX-041619	4/16/2019		41.80	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.014	0.031	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW2-ROX-070919	7/9/2019		37.86	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.016	0.031	<0.0095	0.0049 J	<0.0095	<0.0095	<0.019	0.000021 J	<0.0095	<0.00019	<0.0095
	MW2-ROX-101019	10/10/2019		36.99	NE	<0.00025	<0.013	0.00061 J	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	0.011	0.022	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW2-ROX-010920	1/9/2020		38.52	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0092	0.013	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW2-ROX-040820	4/8/2020	49.87 - 59.87	37.69	NE	<0.00019	<0.0096	<0.01 H UJ	<0.0096	<0.01 H UJ	<0.0096	<0.0096	<0.00019	<0.00019	0.0014 J	<0.00019	<0.0096	0.018	0.032	<0.0096	0.0011 J	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
MW-03	MW3-ROX-071217	7/12/2017	34.67 - 44.67	24.25	NE	<0.0004	<0.0099	<0.0099	<0.0099	<0.0099	0.00055 J	<0.0099	<0.0004	<0.0004	<0.0099	<0.0004	<0.0099	0.00094	0.00067	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0004	<0.0099	<0.0004	<0.0099
	MW3-ROX-100517	10/5/2017		25.02	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	0.00018 J	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW3-ROX-010818	1/8/2018		27.28	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.0012	0.00051	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW3-ROX-040518	4/5/2018		27.98	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.00058	0.00024	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098 UJ
	MW3-ROX-070618	7/6/2018		28.30	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	0.00078	0.00036	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW3-ROX-100518	10/5/2018		28.18	NE	0.000062 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	0.000056 J	<0.0098	0.00058	0.000099 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW3-ROX-010919	1/9/2019		28.05	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00039	0.00015 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000034 J	<0.01
	MW3-ROX-040919	4/9/2019		27.50	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00033	0.0002	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW3-ROX-071019	7/10/2019		22.66	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.01	<0.0002	<0.01	0.0012	0.00062	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW3-ROX-101419	10/14/2019		22.66	NE	<0.00019	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095 UJ	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095 UJ	0.00044	0.000071 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW3-ROX-011020	1/10/2020		24.02	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00076	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW3-ROX-040820	4/8/2020	34.67 - 44.67	23.42	NE	<0.00019	<0.0096	<0.01 H UJ	<0.0096	<0.01 H UJ	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00027	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
MW-04	MW4-ROX-071017	7/10/2017	45.06 - 55.06	35.68	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	0.000095 J	<0.0096	0.00018 J	0.000029 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW4-ROX-100517	10/5/2017		36.32	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000024 J	0.000028 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW4-ROX-010918	1/9/2018		38.65	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00063 U	<0.0095	0.000023 J	<0.00019	<0.0095	0.000062 J	<0.0095	0.000021 J	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095 H	<0.019 H	<0.00019	<0.0095	0.000019 J	<0.0095
	MW4-ROX-040918	4/9/2018		39.32	NE	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW4-ROX-071018	7/10/2018		39.60	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000044 J	0.000022 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW4-ROX-100818	10/8/2018		39.61	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000078 J	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW4-ROX-010719	1/7/2019		39.22	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.00026	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW4-ROX-040819	4/8/2019		38.97	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.001 U	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000056 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW4-ROX-070819	7/8/2019		34.47	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	0.0013 J	<0.01	<0.0002	<0.0002	<0.0002	<0.01	<0.0002	0.000084 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW4-ROX-100819	10/8/2019		34.07	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000049 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW4-ROX-010620	1/6/2020		35.54	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	0.0025 J *	<0.00019	<0.0096	<0.00019	<0.0096
	MW4-ROX-010620-PCP	1/6/2020		35.54	NE																			<0.019				
	MW4-ROX-040620	4/6/2020	45.06 - 55.06	34.92	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-05	MW5-ROX-071217	7/12/2017	33.97 - 43.97	23.96	NE	<0.0004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0004	<0.0004	<0.01	<0.0004	<0.01	0.00013 J	<0.0004	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.0004	<0.01
	MW5-ROX-101217	10/12/2017		25.04	NE	<0.00096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00096	<0.00019	<0.0096	<0.00096	<0.0096	<0.00096	<0.00096	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00096	<0.0096	<0.00096	<0.0096
	MW5-ROX-011118	1/11/2018		26.98	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	0.000034 J	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW5-ROX-040918	4/9/2018		27.78	NE	<0.0002	<0.0099 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW5-ROX-071018	7/10/2018		27.87	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	0.000074 J	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW5-ROX-101218	10/12/2018		27.95	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011 UJ	<0.00022	<0.00022	<0.011	<0.00022	<0.011 UJ	0.000026 J	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011 UJ	<0.00022	<0.011 UJ
	MW5-ROX-010819	1/8/2019		27.65	NE	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002 UJ	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000056 J	<0.0098	<0.0002	<0.0098
	MW5-ROX-041519	4/15/2019		26.96	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW5-ROX-071219	7/12/2019		22.37	NE	<0.00019 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.0096 H UJ	0.00052 J H J	<0.0096 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0096 H UJ	<0.00019 H UJ	<0.0096 H UJ	0.00062 H J	<0.00019 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.0096 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
	MW5-ROX-101519	10/15/2019		22.23	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000081 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW5-ROX-010620	1/6/2020		23.68	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW5-ROX-041320	4/13/2020	33.97 - 43.97	23.11	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
MW-06A	MW6A-ROX-071117	7/11/2017	34.83 - 44.83	26.16	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000023 J	0.000024 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW6A-ROX-100417	10/4/2017		27.09	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J	0.000031 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW6A-ROX-010518	1/5/2018		29.22	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6A-ROX-040518	4/5/2018	33.85 - 43.85	29.83	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000052 J	<0.01 UJ
	MW6A-ROX-070518	7/5/2018		30.10	NE	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.001	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.000043 U	<0.01
	MW6A-ROX-100418	10/4/2018		30.10	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000062 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.00059 UJ	<0.00059 UJ	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000094 J	<0.0099	0.00007 J	<0.0099
	MW6A-ROX-010819	1/8/2019		29.77	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.00016 J	<0.01
	MW6A-ROX-040519	4/5/2019		29.34	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW6A-ROX-071119	7/11/2019		24.57	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01 UJ	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01 UJ	<0.00021	<0.01 UJ
	MW6A-ROX-101019	10/10/2019		24.39	NE	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	0.0001 J	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW6A-ROX-010820	1/8/2020		26.03	NE	<0.00019	<0.0096	<0.0096 UJ	<0.0096	<0.0096 UJ	<0.0096 UJ	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096 UJ	<0.019 UJ	<0.0096 UJ	<0.0096 UJ	<0.019 UJ	<0.00019	<0.0096 UJ	<0.00019	<0.0096
	MW6A-ROX-041320	4/13/2020	33.85 - 43.85	25.14	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-06B	MW6B-ROX-071117	7/11/2017	64.05 - 69.05	26.18	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000037 J	0.000071 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW6B-ROX-100417	10/4/2017		27.16	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J	0.000038 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW6B-ROX-010518	1/5/2018		29.25	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000028 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6B-ROX-040518	4/5/2018		29.95	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW6B-ROX-070518	7/5/2018		30.15	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW6B-ROX-100418	10/4/2018		30.13	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6B-ROX-010819	1/8/2019		29.83	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6B-ROX-040519	4/5/2019		29.40	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	0.00044 J	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6B-ROX-071119	7/11/2019		24.62	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.01 UJ	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01 UJ	<0.00021	<0.01 UJ
	MW6B-ROX-101019	10/10/2019		24.43	NE	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW6B-ROX-010820	1/8/2020		26.09	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	0.0022 J	<0.00019	<0.0096	<0.00019	<0.0096
	MW6B-ROX-010820-PCP	1/8/2020		26.09	NE																			<0.019				
	MW6B-ROX-041320	4/13/2020	64.05 - 69.05	25.19	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
MW-06C	MW6C-ROX-071117	7/11/2017	84.95 - 89.95	25.99	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000034 J	0.000056 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	MW6C-ROX-100417	10/4/2017		26.98	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW6C-ROX-010818	1/8/2018		29.05	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.000059 U	<0.0095	0.000036 J	0.000048 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW6C-ROX-040518	4/5/2018		29.74	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW6C-ROX-070518	7/5/2018		29.93	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW6C-ROX-070518-DUP	7/5/2018		29.93	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6C-ROX-100418	10/4/2018		29.93	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW6C-ROX-010819	1/8/2019		29.62	NE	<0.00019 UJ	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019 UJ	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW6C-ROX-040519	4/5/2019		29.20	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000023 J	0.000035 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6C-ROX-071119	7/11/2019		24.42	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002	<0.0099 UJ
	MW6C-ROX-101019	10/10/2019		24.23	NE	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW6C-ROX-101019-DUP	10/10/2019		24.23	NE	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW6C-ROX-010820	1/8/2020		25.86	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW6C-ROX-041320	4/13/2020	84.95 - 89.95	24.88	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-06D	MW6D-ROX-071117	7/11/2017	104.72 - 109.72	25.83	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	0.000051 J	<0.0099	0.00003 J	0.000034 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW6D-ROX-071117-DUP	7/11/2017		25.83	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000038 J	0.000066 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW6D-ROX-100517	10/5/2017		26.83	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.000025 J	0.000033 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW6D-ROX-010818	1/8/2018		28.90	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW6D-ROX-040518	4/5/2018		29.52	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099 UJ
	MW6D-ROX-070518	7/5/2018		29.76	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.00002 U	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6D-ROX-100418	10/4/2018		29.76	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000023 J	0.000026 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW6D-ROX-010819	1/8/2019		29.45	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002 UJ	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW6D-ROX-040519	4/5/2019		29.02	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW6D-ROX-071119	7/11/2019		24.24	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	0.000023 J	<0.0002	<0.01	0.000048 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01 UJ	0.000022 J J	<0.01 UJ
	MW6D-ROX-101019	10/10/2019		24.07	NE	<0.00025	<0.013	<0.013	<0.013	<0.013	<0.013	<0.013	<0.00025	<0.00025	<0.013	<0.00025	<0.013	<0.00025	<0.00025	<0.013	<0.025	<0.013	<0.013	<0.025	<0.00025	<0.013	<0.00025	<0.013
	MW6D-ROX-010820	1/8/2020		25.68	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW6D-ROX-041320	4/13/2020	104.72 - 109.72	24.85	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW6D-ROX-041320-DUP	4/13/2020		24.85	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
MW-07	MW7-ROX-071117	7/11/2017	42.92 - 52.92	37.79	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0019	0.003	0.0035 J	0.0042 J	<0.0097	<0.0097 UJ	<0.019	0.00013 J	0.27	<0.00019	<0.0097 UJ
	MW7 ROX-071117-DUP	7/11/2017		37.79	NE	<0.00019	<0.0097	<0.0097	0.0038 J	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0016	0.0025	0.0034 J	0.0047 J	<0.0097	<0.0097 UJ	<0.019	<0.00019	0.24	<0.00019	<0.0097 UJ
	MW7-ROX-100517	10/5/2017		38.45	NE	<0.00019	<0.0096	<0.0096	0.0069 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0023 J	<0.00019	<0.0096	0.0088	0.004	<0.0096	0.0042 J	<0.0096	<0.0096	<0.019	<0.00019	0.17	<0.00019	<0.0096
	MW7-ROX-010918	1/9/2018		40.67	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00048 U	<0.0095	<0.00019	0.00013 J	0.0019 J	<0.00019	<0.0095	0.0027	0.0038	0.0031 J	<0.019	<0.0095	<0.0095 H UJ	<0.019 H UJ	0.00021	0.077	<0.00019	<0.0095
	MW7-ROX-040918	4/9/2018		41.38	NE	<0.0002	<0.0099 UJ	<0.0099	<0.0099 UJ	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	0.0025 J	<0.0002	<0.0099 UJ	0.0018	0.0027	<0.0099 UJ	<0.02 UJ	<0.0099 UJ	<0.0099 UJ	<0.02 UJ	0.000082 J	0.013 J	<0.0002	<0.0099 UJ
	MW7-ROX-040918-DUP	4/9/2018		41.38	NE	<0.0002	<0.01 UJ	<0.01	0.0056 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0025 J	<0.0002	<0.01 UJ	0.0023	0.0029	0.003 J	0.0034 J	<0.01	<0.01	<0.02	0.00011 J	0.087 J	<0.0002	<0.01 UJ
	MW7-ROX-071018	7/10/2018		41.64	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.000089 J	0.0018 J	<0.00022	<0.011	0.0021	0.0029	<0.011	0.0026 J	<0.011	<0.011	<0.022	0.00013 J	0.18	<0.00022	<0.011
	MW7-ROX-071018-DUP	7/10/2018		41.64	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	0.002 J	<0.0002	<0.0098	0.0022	0.0033	<0.0098	0.0028 J	<0.0098	<0.0098	<0.02	0.00015 J	0.18	<0.0002	<0.0098
	MW7-ROX-100818	10/8/2018		41.69	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00021	<0.0098	<0.0002	<0.0098	0.0014	0.0019	<0.0098	0.0022 J	<0.0098	<0.0098	<0.02	0.00029	0.086	0.000058 J	<0.0098
	MW7-ROX-010719	1/7/2019		41.25	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00014 J	0.001 J	<0.00019 UJ	<0.0095	0.0017	0.0024	<0.0095	0.0017 J	<0.0095	<0.0095	<0.019	0.00029	0.061	<0.00019	<0.0095
	MW7-ROX-040819	4/8/2019		40.94	NE	<0.00095 UJ	<0.0095	<0.0095	0.0063 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.00099 J	<0.00095 UJ	<0.0095	0.0018	0.0027	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00021	0.13	<0.00019	<0.0095
	MW7-ROX-040819-DUP	4/8/2019		40.94	NE	<0.00095 UJ	<0.0095	<0.0095	0.0067 J	<0.0095	<0.001 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00095 UJ	<0.0095	0.0017	0.0026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00026	0.16	<0.00019	<0.0095
	MW7-ROX-070819	7/8/2019		36.58	NE	<0.00019	<0.0096	<0.0096	0.0046 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0034 J	<0.00019	<0.0096	0.0022	0.0035	<0.0096	0.0027 J	<0.0096	<0.0096	<0.019	<0.00019	0.08 J	<0.00019	<0.0096
	MW7-ROX-070819-DUP	7/8/2019		36.58	NE	<0.00019	<0.0096	<0.0096	0.0044 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0038 J	<0.00019	<0.0096	0.0027	0.0042	<0.0096	0.0028 J	<0.0096	<0.0096	<0.019	<0.00019	0.049 J	<0.00019	<0.0096
	MW7-ROX-100819	10/8/2019		36.10	NE	<0.00019	<0.0096	<0.0096	0.0045 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0022 J	<0.00019	<0.0096	0.0017 J	0.0026 J	<0.0096	0.0024 J	<0.0096	<0.0096	<0.019	<0.00019	0.14	<0.00019	<0.0096
	MW7-ROX-100819-DUP	10/8/2019		36.10	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00073 J	0.0012 J	<0.0096	0.0012 J	<0.0096	<0.0096	<0.019	<0.00019	0.07	<0.00019	<0.0096
	MW7-ROX-010620	1/6/2020		37.60	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0024	0.0033	<0.0096	0.0012 J	<0.0096	<0.0096 UJ	0.0025 J *	<0.00019	0.096	<0.00019	<0.0096
	MW7-ROX-010620-DUP	1/6/2020		37.60	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0025	0.0031	<0.0096	0.0012 J	<0.0096	<0.0096 UJ	0.0025 J *	<0.00019	0.1	<0.00019	<0.0096
	MW7-ROX-010620-DUP-PCP	1/6/2020		37.60	NE																			<0.019				
	MW7-ROX-010620-PCP	1/6/2020		37.60	NE																			<0.019				
	MW7-ROX-040620	4/6/2020	42.92 - 52.92	36.84	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0004 UJ	<0.0002	<0.0099	<0.0002	<0.0099	0.0016	0.0026	<0.0099	0.0015 J	<0.0099	<0.0099	<0.02	<0.0004 UJ	0.061	<0.0002	<0.0099
	MW7-ROX-040620-DUP	4/6/2020		36.84	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.02 UJ	<0.0099	<0.0004 UJ	<0.0002	<0.0099	<0.0002	<0.0099	0.0019	0.0027	<0.0099	0.0016 J	<0.0099	<0.0099	<0.02	<0.0004 UJ	0.067	<0.0002	<0.0099
MW-08	MW8-ROX-071017	7/10/2017	33.60 - 43.60	28.48	NE	<0.00019	<0.0096	<0.0096	0.0067 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0092	0.0052	<0.0096	0.0023 J	<0.0096	<0.0096	0.0018 J	<0.00019	0.14	<0.00019	<0.0096
	MW8-ROX-100517	10/5/2017		29.28	NE	<0.00019	<0.0095	<0.0095	0.0065 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0019 J	<0.00019	<0.0095	0.0086 J	0.004 J	<0.0095	0.0039 J	<0.0095	<0.0095	<0.019	<0.00019	0.16	<0.00019	<0.0095
	MW8-ROX-100517-DUP	10/5/2017		29.28	NE	<0.00019	<0.0096	<0.0096	0.004 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0022 J	0.0031 J	0.0036 J	0.0045 J	<0.0096	<0.0096	<0.019	<0.00019	0.16	<0.00019	<0.0096
	MW8-ROX-010918	1/9/2018		31.60	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0006 U	<0.0095	<0.00019	<0.0095	<0.00019	<0.0095	0.01	0.0046	<0.0095	<0.019	<0.0095	<0.0095 H UJ	0.002 J H J	0.000085 J	0.043	<0.00019	<0.0095
	MW8-ROX-040918	4/9/2018		32.27	NE	<0.0002	<0.01 UJ	<0.01	0.0093 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0018 J	<0.0002	<0.01 UJ	0.0098	0.0035	<0.01	0.0011 J	<0.01	<0.01	0.0019 J	0.00013 J	0.08	<0.0002	<0.01 UJ
	MW8-ROX-071018	7/10/2018		32.42	NE	<0.00021	<0.011	<0.011	0.0052 J	<0.011	<0.011	<0.011	<0.00021	0.0002 J	0.0028 J	<0.00021	<0.011	0.0074	0.0031	<0.011	<0.021	<0.011	<0.011	<0.021	0.00011 J	0.19	<0.00021	<0.011
	MW8-ROX-100818	10/8/2018		32.45	NE	0.000075 J	<0.0098	<0.0098	0.0048 J	<0.0098	<0.0098	<0.0098	<0.0002	0.00031	0.0031 J	0.000057 J	<0.0098	0.0057 J	0.0023	<0.0098	<0.02	<0.0098	<0.0098	0.0024 J	0.00013 J	0.085	<0.0002	<0.0098
	MW8-ROX-100818-DUP	10/8/2018		32.45	NE	<0.0002	<0.0098	<0.0098	0.0046 J	<0.0098	<0.0098	<0.0098	<0.0002	0.00055	0.0027 J	<0.0002	<0.0098	0.0095 J	0.0035	<0.0098	<0.02	<0.0098	<0.0098	0.0023 J	0.00015 J	0.09	<0.00098	<0.0098
	MW8-ROX-010719	1/7/2019		32.04	NE	<0.00019 UJ	<0.0095	<0.0095	0.0045 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00036	0.0039 J	<0.00019 UJ	<0.0095	0.0072	0.0046	<0.0095	<0.019	<0.0095	<0.0095	0.0023 J	0.00023	0.057	<0.00019	<0.0095
	MW8-ROX-010719-DUP	1/7/2019		32.04	NE	<0.00019 UJ	<0.0095	<0.0095	0.0039 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00031	0.0038 J	<0.00019 UJ	<0.0095	0.0074	0.0049	<0.0095	<0.019	<0.0095	<0.0095	0.0024 J	<0.00019	0.055	<0.00019	<0.0095
	MW8-ROX-040819	4/8/2019		31.70	NE	<0.00019	<0.0095	<0.0095	0.008 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0044 J	<0.00019	<0.0095	0.0084	0.0045	<0.0095	<0.019	<0.0095	<0.0095	0.0029 J	0.00021	0.092	<0.00019	<0.0095
	MW8-ROX-070819	7/8/2019		27.15	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	0.0034 J	<0.0002	<0.01	0.0083	0.0039	<0.01	0.0014 J	<0.01	<0.01	0.0025 J	<0.0002	0.31	<0.0002	<0.01
	MW8-ROX-100819	10/8/2019		26.91	NE	<0.00019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019 H UJ	<0.00019 H UJ	0.0027 J H J	<0.00019 H UJ	<0.0095 H UJ	0.0082 H J	0.0019 H J	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.00019 H UJ	0.27 H J	<0.00019 H UJ	<0.0095 H UJ
	MW8-ROX-010620	1/6/2020		28.35	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0021 J	<0.00019	<0.0096	0.01	0.0015	<0.0096	<0.019	<0.0096	<0.0096 UJ	0.0025 J *	<0.00019	0.2	<0.00019	<0.0096
	MW8-ROX-010620-PCP	1/6/2020		28.35	NE																			<0.019				
	MW8-ROX-040620	4/6/2020	33.60 - 43.60	27.70	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	0.0026 J	<0.0002	<0.0098	0.0076	0.00087	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.091	<0.0002	<0.0098
MW-09	MW9-ROX-071217	7/12/2017	46.45 - 56.45	38.86	NE	<0.00038	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00038	<0.00038	<0.0096	<0.00038	<0.0096	<0.00038	<0.00038	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00038	<0.0096	<0.00038	<0.0096
	MW9-ROX-100917	10/9/2017		39.17	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-011018	1/10/2018		41.10	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW9-ROX-040618	4/6/2018	46.04 - 56.04	42.29	NE	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000024 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000034 J	<0.0099
	MW9-ROX-070918	7/9/2018		42.82	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW9-ROX-101018	10/10/2018		42.88	NE	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095	<0.0095
	MW9-ROX-011419	1/14/2019		42.97	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW9-ROX-011419-DUP	1/14/2019		42.97	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW9-ROX-041119	4/11/2019		42.54	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW9-ROX-071019	7/10/2019		38.74	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000025 J	0.000026 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW9-ROX-071019-DUP	7/10/2019		38.74	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW9-ROX-101419	10/14/2019		38.08	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096 UJ	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-011320	1/13/2020		38.95	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW9-ROX-011320-DUP	1/13/2020		38.95	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW9-ROX-041020	4/10/2020	46.04 - 56.04	38.51	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
MW-10	MW10-ROX-071117	7/11/2017	44.43 - 54.43	38.86	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.00002 J	0.000021 J	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW10-ROX-100917	10/9/2017		38.94	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-100917-DUP	10/9/2017		38.94	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J J	0.000027 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-011018	1/10/2018		40.88	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-011018-DUP	1/10/2018		40.88	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-040518	4/5/2018		41.94	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW10-ROX-070918	7/9/2018		42.88	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW10-ROX-101018	10/10/2018		42.87	NE	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000095	<0.000095	<0.0095	<0.000095	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	<0.000095	<0.0095
	MW10-ROX-011119	1/11/2019		43.06	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-042219	4/22/2019		42.54	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000034 J	<0.000055 U	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-071219	7/12/2019		39.33	NE	<0.0002 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.000059 H UJ	<0.0002 H UJ	<0.01 H UJ	0.000048 J H J	<0.01 H UJ	0.000021 J H J	0.000032 J H J	<0.01 H UJ	<0.02 H UJ	<0.01 H UJ	<0.01 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.000057 H UJ	<0.01 H UJ
	MW10-ROX-101419	10/14/2019		38.40	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.000025 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW10-ROX-011020	1/10/2020		39.05	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	0.00012 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW10-ROX-041020	4/10/2020	44.43 - 54.43	38.59	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
MW-11	MW11-ROX-071017	7/10/2017	41.66 - 51.66	36.39	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW11-ROX-100917	10/9/2017		36.32	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW11-ROX-011018	1/10/2018		39.00	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW11-ROX-040618	4/6/2018		39.98	NE	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW11-ROX-070918	7/9/2018		40.54	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW11-ROX-101118	10/11/2018		40.65	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002	<0.0098 UJ
	MW11-ROX-011019	1/10/2019		40.45	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW11-ROX-041119	4/11/2019		40.03	NE	<0.00019 UJ	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.00019	<0.00019	<0.0094	<0.00019 UJ	<0.0094	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.0094	<0.019	<0.00019	<0.0094	0.000044 J	<0.0094
	MW11-ROX-070919	7/9/2019		35.95	NE	0.000053 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	0.000053 J	<0.01	<0.00021	0.000027 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW11-ROX-100419	10/4/2019		35.36	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW11-ROX-010720	1/7/2020		36.45	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW11-ROX-040920	4/9/2020	41.66 - 51.66	36.02	NE	<0.00019 UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.00019 UJ	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.00019	<0.0099 H UJ	<0.00019	<0.0099 H UJ
MW-12	MW-12-ROX-07072017	7/7/2017	41.92 - 51.92	36.84	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000031 J	0.000045 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW12-ROX-100617	10/6/2017		37.23	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000024 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW12-ROX-011118	1/11/2018		39.62	NE	<0.00019	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094	<0.0094 UJ	0.00003 J	<0.00019	<0.0094	<0.000063 U	<0.0094 UJ	<0.00019	<0.00019	<0.0094	<0.019	<0.0094	<0.0094	<0.019	<0.00019	<0.0094	0.00002 J	<0.0094 UJ
	MW12-ROX-040518	4/5/2018		40.50	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	0.000025 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000031 J	<0.0099 UJ
	MW12-ROX-040518-DUP	4/5/2018		40.50	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	0.000023 J	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000028 J	<0.0099 UJ
	MW12-ROX-070618	7/6/2018		41.03	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011 UJ	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW12-ROX-101018	10/10/2018		40.84	NE	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000077 J	<0.000095	<0.0095	0.000066 J	<0.0095	<0.000095	<0.000095	<0.0095	<0.0095	<0.0095	<0.024	<0.024	<0.000095	<0.0095	0.000071 J	<0.0095
	MW12-ROX-010919	1/9/2019		40.78	NE	0.00045	<0.01	<0.01	<0.01	<0.01	<0.00075 UJ	<0.01	0.00014 J	0.000052 J	<0.01	0.00046	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.000021 J	<0.01	0.00016 J	<0.01
	MW12-ROX-010919-RE	1/9/2019		40.78	NE	<0.0002 H UJ							0.00002 J H J	<0.0002 H UJ		<0.0002 H UJ		<0.0002 H UJ	<0.0002 H UJ						<0.0002 H UJ		<0.0002 H UJ	
	MW12-ROX-040919	4/9/2019		40.42	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00004 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.000021 J J	<0.0095
	MW12-ROX-071019	7/10/2019		35.87	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000028 J	<0.0002	<0.01	0.000042 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW12-ROX-100419	10/4/2019		35.49	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW12-ROX-010720	1/7/2020		36.78	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW12-ROX-040820	4/8/2020	41.92 - 51.92	36.20	NE	<0.00019	<0.0097	<0.01 H UJ	<0.0097	<0.01 H UJ	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019 UJ	<0.0097	<0.0097	<0.019 UJ	<0.00019	<0.0097 UJ	<0.00019	<0.0097 UJ
MW-13	MW13-ROX-070717	7/7/2017	25.57 - 35.57	23.64	NE	<0.00095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	<0.00095	<0.0095	<0.00095	<0.0095	<0.00095	<0.00095	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00095	<0.0095	<0.00095	<0.0095
	MW13-ROX-101017	10/10/2017		25.20	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-010918	1/9/2018		27.20	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.00045 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0096 H UJ	<0.019 H UJ	<0.00019	<0.0095	<0.00019	<0.0095
	MW13-ROX-040618	4/6/2018	24.80 - 34.80	27.71	NE	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW13-ROX-070918	7/9/2018		27.6	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW13-ROX-101118	10/11/2018		27.66	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097 UJ	<0.00019	<0.0097 UJ
	MW13-ROX-010719	1/7/2019		27.18	NE	<0.00019 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019 UJ	<0.0096	0.00017 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW13-ROX-041519	4/15/2019		26.44	NE	<0.00098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.00098	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.00098	<0.0098
	MW13-ROX-070919	7/9/2019		21.59	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00051	<0.0095	<0.00019	<0.0095	0.00047	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW13-ROX-100919	10/9/2019		21.95	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00075	<0.0095	<0.00019	<0.0095	0.0021	0.00042	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW13-ROX-010620	1/6/2020		23.41	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.0062	0.0017	<0.0095	<0.019	<0.0095	<0.0095 UJ	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW13-ROX-040820	4/8/2020	24.80 - 34.80	22.75	NE	<0.00019	<0.0096	<0.01 H UJ	<0.0096	<0.01 H UJ	<0.0096	<0.0096	<0.00019	0.00046	<0.0096	<0.00019	<0.0096	0.00028	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	0.00005 J J	<0.0096

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
MW-14	MW14-ROX-070717	7/7/2017	33.42 - 43.42	28.28	NE	0.000042 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000056 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW14-ROX-101017	10/10/2017		29.44	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW14-ROX-010918	1/9/2018		31.34	NE	<0.000014	<0.00071	<0.00071	<0.00071	<0.00071	<0.000034 U	<0.00071	<0.000014	<0.000014	<0.00071	<0.000014	<0.00071	0.0000015 J	<0.000014	<0.00071	<0.0014	<0.00071	<0.0096 H UJ	<0.019 H UJ	<0.000014	<0.00071	<0.000014	<0.00071
	MW14-ROX-010918-DUP	1/9/2018		31.34	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0007 U	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000021 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0096 H UJ	<0.019 H UJ	<0.00019	<0.0095	<0.00019	<0.0095
	MW14-ROX-041018	4/10/2018		31.96	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01 UJ	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01 UJ	<0.0002	<0.01 UJ
	MW14-ROX-071118	7/11/2018		32.06	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000032 J J	0.000033 J J	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	MW14-ROX-101518	10/15/2018		32.32	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	0.0019 J	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000083 J	0.00012 J	<0.0098	<0.02	<0.0098	<0.0098 UJ	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW14-ROX-010919	1/9/2019		32.04	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000096 J	0.000077 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW14-ROX-041619	4/16/2019		31.06	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000064 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW14-ROX-071019	7/10/2019		26.95	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000059 J	0.00004 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW14-ROX-101119	10/11/2019		26.73	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW14-ROX-010720	1/7/2020		28.03	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	0.0024 J	<0.00019	<0.0097	<0.00019	<0.0097
	MW14-ROX-010720-PCP	1/7/2020		28.03	NE																			<0.019				
	MW14-ROX-041420	4/14/2020	33.42 - 43.42	27.28	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
MW-16	MW16-ROX-071017	7/10/2017	37.06 - 47.06	38.16	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW16-ROX-100617	10/6/2017		38.04	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.0017 J	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.00002 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW16-ROX-010818	1/8/2018		40.71	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000027 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.00002 J	<0.0095 UJ
	MW16-ROX-040618	4/6/2018	37.50 - 47.50	41.54	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	0.000023 J	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	0.000033 J	<0.0098 UJ
	MW16-ROX-070618	7/6/2018		42.35	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	0.000029 J J	<0.011	<0.00022	<0.011
	MW16-ROX-100518	10/5/2018		42.24	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW16-ROX-011119	1/11/2019		42.10	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW16-ROX-041219	4/12/2019		41.74	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW16-ROX-070919	7/9/2019		37.55	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	0.000053 J	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00003 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.000029 J	<0.0096	0.000038 J	<0.0096 UJ
	MW16-ROX-100719	10/7/2019		36.86	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097 UJ	<0.00019	<0.0097	<0.00019	0.000023 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00002 U	<0.0097
	MW16-ROX-010920	1/9/2020		38.16	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000036 J	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW16-ROX-041320	4/13/2020	37.50 - 47.50	37.64	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
MW-22	MW22-ROX-071217	7/12/2017	37.88 - 47.88	36.83	NE	<0.00041	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00041	<0.00041	0.0047 J	<0.00041	<0.01	0.005	0.0065	<0.01	<0.02	<0.01	<0.01	<0.02	<0.00041	<0.01	<0.00041	<0.01
	MW22-ROX-071217-DUP	7/12/2017		36.83	NE	<0.0004	<0.01	<0.01	0.0069 J	<0.01	<0.01 UJ	<0.01	<0.0004	<0.0004	0.0048 J	<0.0004	<0.01	0.0053	0.0071	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.0004	<0.01
	MW22-ROX-101317	10/13/2017		36.94	NE	<0.00019	<0.0095	<0.0095	0.0044 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0015 J	<0.00019	0.00066 J	0.0014 J	0.0015 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-101317-DUP	10/13/2017		36.94	NE	<0.00019	<0.0096	<0.0096	0.0045 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0017 J	<0.00019	0.00063 J	0.00092 J	0.0011 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW22-ROX-011118	1/11/2018		39.25	NE	<0.00019	<0.0096	<0.0096	0.0049 J	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	0.0097	<0.00019	<0.0096 UJ	0.012 J	0.02 J	<0.0096	0.0043 J	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	MW22-ROX-011118-DUP	1/11/2018		39.25	NE	<0.00019	<0.0095	<0.0095	0.0063 J	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	0.013	<0.00019	<0.0095 UJ	0.016 J	0.026 J	<0.0095	0.006 J	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW22-ROX-041018	4/10/2018	38.43 - 48.43	NM	NE	<0.0002 UJ	<0.0099 UJ	<0.0099 UJ	0.014 J	<0.0099 UJ	<0.0099 UJ	<0.0099 UJ	<0.0002 UJ	<0.0002 UJ	0.02 J	<0.0002 UJ	<0.0099 UJ	0.028 J	0.04 J	<0.0099 UJ	0.011 J J	<0.0099 UJ	<0.0099 UJ	<0.02 UJ	<0.0002 UJ	<0.0099 UJ	<0.0002 UJ	<0.0099 UJ
	MW22-ROX-071018	7/10/2018		40.88	NE	<0.00022	<0.011	<0.011	<0.011	0.014	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.00022	0.031	<0.00022	<0.011	0.024	0.035	<0.011	0.0099 J	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW22-ROX-101518	10/15/2018		41.11	NE	<0.00021	<0.053	<0.053	<0.053	<0.053	<0.053	<0.053	<0.00021	<0.00021	0.019 J	<0.00021	<0.053	0.019	0.028	<0.053	<0.11	<0.053	<0.053 UJ	<0.11	0.00016 J	<0.053	0.000026 J	<0.053
	MW22-ROX-010919	1/9/2019		40.91	NE	<0.0002	<0.01	<0.01	0.0059 J	<0.01	<0.01	<0.01	<0.0002	0.00012 J	0.013	<0.0002	<0.01	0.015	0.022	<0.01	0.0013 J	<0.01	<0.01	<0.02	0.00012 J	<0.01	<0.0002	<0.01
	MW22-ROX-041719	4/17/2019		40.31	NE	<0.0002	<0.0099	<0.0099	0.0068 J	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	0.012	<0.0002	<0.0099	0.02	0.027	<0.0099	0.0015 J	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW22-ROX-101519	10/15/2019		35.38	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0021 J J	<0.00019	<0.0095	0.0022	0.0025	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-101519-DUP	10/15/2019		35.38	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0023 J J	<0.00019	<0.0095	0.0019	0.0021	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW22-ROX-010620	1/6/2020		36.83	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00038	0.0003	<0.0096	<0.019	<0.0096	<0.0096 UJ	0.0023 J *	<0.00019	<0.0096	<0.00019	<0.0096
	MW22-ROX-010620-PCP	1/6/2020		36.83	NE																			<0.019 H UJ				
	MW22-ROX-041520	4/15/2020	38.43 - 48.43	36.30	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.0014	0.0019	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
MW-23	MW23-ROX-071017	7/10/2017	29.02 - 39.02	25.13	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW23-ROX-100517	10/5/2017		26.42	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019 UJ	<0.0095
	MW23-ROX-010518	1/5/2018		28.52	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0013 J	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	0.00002 J	<0.0095
	MW23-ROX-040918	4/9/2018		29.24	NE	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW23-ROX-070918	7/9/2018		29.1	NE	<0.0011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.0011	<0.0011	<0.011	<0.0011	<0.011	<0.0011	<0.0011	<0.011	<0.022	<0.011	<0.011	<0.022	<0.0011	<0.011	<0.0011	<0.011
	MW23-ROX-100918	10/9/2018		29.00	NE	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	0.0001	<0.0095	<0.000096	<0.0095 UJ	0.000055 J	0.000087 J	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.00018	<0.0095	0.000025 J	<0.0095
	MW23-ROX-010919	1/9/2019		28.96	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.000026 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW23-ROX-040919	4/9/2019		28.15	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW23-ROX-071019	7/10/2019		23.01	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW23-ROX-100919	10/9/2019		23.39	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	<0.00019	0.000021 J	<0.0095	<0.019 UJ	<0.0095	<0.0095	<0.019	<0.00019	<0.0095 UJ	<0.00019	<0.0095 UJ
	MW23-ROX-010820	1/8/2020		24.92	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	0.0022 J	<0.00019	<0.0096	<0.00019	<0.0096
	MW23-ROX-010820-PCP	1/8/2020		24.92	NE																			<0.019				
	MW23-ROX-040820	4/8/2020	29.02 - 39.02	24.30	NE	<0.0002	<0.0099	<0.0098 H UJ	<0.0099	<0.0098 H UJ	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
MW-24	MW24-ROX-070717	7/7/2017	38.89 - 48.89	37.68	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	0.000023 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW24-ROX-100617	10/6/2017		37.93	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	0.000022 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW24-ROX-010818	1/8/2018		40.36	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000024 J	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW24-ROX-040618	4/6/2018	39.61 - 49.61	41.28	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000027 J	<0.01
	MW24-ROX-040618-DUP	4/6/2018		41.28	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW24-ROX-070618	7/6/2018		41.87	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	<0.00022	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW24-ROX-100518	10/5/2018		41.81	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW24-ROX-011019	1/10/2019		41.76	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW24-ROX-041219	4/12/2019		41.33	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW24-ROX-070919	7/9/2019		37.04	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW24-ROX-100719	10/7/2019		36.56	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000032 U	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.00002 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.000034 U	<0.0095
	MW24-ROX-010720	1/7/2020		37.67	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	0.0025 J	<0.00019	<0.0096	<0.00019	<0.0096
	MW24-ROX-010720-PCP	1/7/2020		37.67	NE																			<0.019				
	MW24-ROX-040920	4/9/2020	39.61 - 49.61	37.28	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-25	MW25-ROX-071017	7/10/2017	35.59 - 45.59	32.75	NE	<0.00019	<0.0096 H UJ	<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	<0.0096 H UJ	0.000063 J	0.000032 J	<0.0096 H UJ	<0.019 H UJ	<0.0096 H UJ	<0.0096 H UJ	<0.019 H UJ	<0.00019	<0.0096 H UJ	<0.00019	<0.0096 H UJ
	MW25-ROX-100517	10/5/2017		33.52	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000039 J	0.000026 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW25-ROX-010918	1/9/2018		35.80	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	0.000067 J	<0.01	<0.0002	<0.0002	<0.01	<0.02 UJ	<0.01	<0.0095 H UJ	<0.019 H UJ	<0.0002	<0.01	<0.0002	<0.01
	MW25-ROX-040918	4/9/2018		36.49	NE	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01 UJ	0.000028 J	0.000033 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01 UJ
	MW25-ROX-071018	7/10/2018		36.71	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW25-ROX-100818	10/8/2018		36.73	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW25-ROX-010719	1/7/2019		36.33	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	0.00092 J	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW25-ROX-040819	4/8/2019		36.03	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0016 U	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW25-ROX-070819	7/8/2019		31.52	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW25-ROX-100819	10/8/2019		31.18	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW25-ROX-010620	1/6/2020		32.63	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW25-ROX-040620	4/6/2020	35.59 - 45.59	32.00	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
MW-26	MW26-ROX-070717	7/7/2017	38.15 - 48.15	35.61	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	0.000028 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW26-ROX-100517	10/5/2017		36.10	NE	<0.00019	<0.0095 H	<0.0095 H	<0.0095 H	<0.0095 H	<0.0095 H	<0.0095 H	<0.00019	<0.00019	<0.0095 H	<0.00019	<0.0095 H	0.000021 J	0.00003 J	<0.0095 H	<0.019 H	<0.0095 H	<0.0095 H	<0.019 H	<0.00019	<0.0095 H	<0.00019	<0.0095 H
	MW26-ROX-010818	1/8/2018		38.41	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.000023 J	<0.00019	<0.0095	<0.00019	<0.0095	0.000024 J	0.000031 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	MW26-ROX-040518	4/5/2018		39.22	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098 UJ
	MW26-ROX-070618	7/6/2018		39.73	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	<0.00022	0.000026 J J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW26-ROX-100918	10/9/2018		39.53	NE	<0.0000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.0000096	<0.0000096	<0.0095	<0.0000096	<0.0095 UJ	0.00003 J	0.000044 J	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.000048 J	<0.0095	<0.0000096	<0.0095
	MW26-ROX-010919	1/9/2019		39.46	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW26-ROX-041019	4/10/2019		38.90	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW26-ROX-071019	7/10/2019		34.54	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW26-ROX-100919	10/9/2019		33.99	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW26-ROX-010920	1/9/2020		35.45	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000027 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW26-ROX-041020	4/10/2020	38.15 - 48.15	34.83	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
MW-27	MW27-ROX-071017	7/10/2017	39.79 - 49.79	37.23	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099 UJ	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.000029 J	0.000036 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW27-ROX-100917	10/9/2017		37.17	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	0.000025 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW27-ROX-011018	1/10/2018		38.98	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-040618	4/6/2018		40.34	NE	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	MW27-ROX-070918	7/9/2018		41.16	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.000025 J	<0.011	<0.00022	<0.011	0.000058 J	0.000081 J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	MW27-ROX-100918	10/9/2018		41.06	NE	<0.000096	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000096	0.000027 J	<0.0095	<0.000096	<0.0095 UJ	0.000025 J	0.000043 J	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.000058 J	<0.0095	<0.000096	<0.0095
	MW27-ROX-011119	1/11/2019		41.06	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW27-ROX-041519	4/15/2019		40.99	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW27-ROX-070919	7/9/2019		37.65	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	MW27-ROX-100319	10/3/2019		36.07	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW27-ROX-010720	1/7/2020		36.96	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	MW27-ROX-041020	4/10/2020	39.79 - 49.79	36.82	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
MW-28	MW28-ROX-071217	7/12/2017	33.61 - 43.61	36.48	NE	<0.0004	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.00049 J	<0.0004	<0.0004	<0.0099	<0.0004	<0.0099	<0.0004	<0.0004	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0004	<0.0099	<0.0004	<0.0099
	MW28-ROX-100917	10/9/2017		36.44	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000092 J	0.000053 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW28-ROX-011018	1/10/2018		38.18	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000066 J	0.00003 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW28-ROX-040618	4/6/2018		39.25	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW28-ROX-070918	7/9/2018		40.08	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.00021	<0.011
	MW28-ROX-101118	10/11/2018		40.25	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	0.000039 J	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002	<0.0098 UJ
	MW28-ROX-010819	1/8/2019		40.32	NE	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002 UJ	<0.0099	0.000068 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	MW28-ROX-040919	4/9/2019		40.42	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.000053 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	MW28-ROX-071019	7/10/2019		37.14	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	MW28-ROX-100419	10/4/2019		35.90	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW28-ROX-011020	1/10/2020		36.55	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00015 J	0.00024	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	MW28-ROX-041620	4/16/2020	33.61 - 43.61	36.25	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	Sample ID	Sample Date	Screened Interval (ft btoc)	Depth to Water (ft btoc)	Product Thickness (ft)	Analytical Results (mg/L)																						
P-54	P54-ROX-071017	7/10/2017	38.00 - 63.00	36.35	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000041 J	<0.0002	<0.0099	<0.0002	<0.0099	0.000044 J	0.000055 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.000031 J	<0.0099
	P54-ROX-100617	10/6/2017		36.79	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.000046 J	0.000053 J	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	P54-ROX-011118	1/11/2018		39.10	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	0.000034 J	<0.00019	<0.0096	<0.000064 U	<0.0096 UJ	0.00002 J	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	0.000026 J	<0.0096 UJ
	P54-ROX-040618	4/6/2018		40.05	NE	<0.0002 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000032 J	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000033 J	<0.01
	P54-ROX-070618	7/6/2018		40.51	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022	<0.011	<0.00022	<0.011	0.000041 J J	0.00004 J J	<0.011	<0.022	<0.011	<0.011	<0.022	<0.00022	<0.011	<0.00022	<0.011
	P54-ROX-100518	10/5/2018		40.46	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	0.000022 J	<0.0002	<0.0098	<0.0002	<0.0098	0.000028 J	0.000032 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P54-ROX-011019	1/10/2019		40.37	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P54-ROX-041119	4/11/2019		39.91	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P54-ROX-070919	7/9/2019		35.60	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002 J	0.000023 J	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	P54-ROX-100419	10/4/2019		35.22	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000026 J J	0.000026 J J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P54-ROX-010720	1/7/2020		36.29	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	0.0022 J	<0.00019	<0.0096	<0.00019	<0.0096
	P54-ROX-010720-PCP	1/7/2020		36.29	NE																			<0.019				
	P54-ROX-040920	4/9/2020	38.00 - 63.00	35.94	NE	<0.00019	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.00019	<0.0099 H UJ	<0.00019	<0.00019	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.00019	<0.0099 H UJ	<0.00019	<0.0099 H UJ
P-56	P56-ROX-071217	7/12/2017	40.82 - 65.82	41.11	NE	<0.00041	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00041	<0.00041	<0.01	<0.00041	<0.01	0.014	0.014	<0.01	0.029	<0.01	<0.01	<0.021	0.00074	<0.01	<0.00041	<0.01
	P56-ROX-101117	10/11/2017		41.08	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	0.0037	<0.0098	0.0011 J	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P56-ROX-011018	1/10/2018		43.63	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.00025	<0.0096	<0.00019	<0.0096	0.022	0.022	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00081	<0.0096	0.000021 J	<0.0096
	P56-ROX-041118	4/11/2018		44.40	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.01	0.0014	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00038	<0.0098	<0.0002	<0.0098
	P56-ROX-071118	7/11/2018		45.25	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00019 J	<0.011	<0.00022	<0.011	0.02	0.016	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00059	<0.011	<0.00022	<0.011 UJ
	P56-ROX-101518	10/15/2018		45.37	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00019 J	<0.0098	<0.0002	<0.0098	0.024	0.017	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00057	<0.0098	<0.0002	<0.0098
	P56-ROX-011019	1/10/2019		45.16	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00037	<0.0095	<0.00019	<0.0095	0.016	0.0043	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00088	<0.0095	<0.00019	<0.0095
	P56-ROX-041719	4/17/2019		44.38	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00048	<0.0098	<0.0002	<0.0098	0.024	0.0039	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0015	<0.0098	<0.0002	<0.0098
	P56-ROX-071219	7/12/2019		40.50	NE	<0.00099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	0.0012 J H J	<0.0099 H UJ	<0.00099 H UJ	0.00061 J H J	<0.0099 H UJ	<0.00099 H UJ	<0.0099 H UJ	0.032 H B J	0.025 H B J	<0.0099 H UJ	1.8 H J	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	0.0015 H J	<0.0099 H UJ	<0.00099 H UJ	<0.0099 H UJ
	P56-ROX-101519	10/15/2019		39.60	NE	<0.00019	0.00057 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.019	0.02	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00098 B	<0.0095	<0.00019	<0.0095
	P56-ROX-010820	1/8/2020		41.31	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.025	0.019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P56-ROX-041620	4/16/2020	40.82 - 65.82	40.49	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.013	0.013	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00067	<0.0099	<0.0002	<0.0099
P-57	P57-ROX-071317	7/13/2017	44.19 - 54.19	41.95	NE	<0.0002	<0.0099	<0.0099	0.025	<0.0099	<0.0099	<0.0099	<0.0002	0.00054	<0.0099	<0.0002	<0.0099	0.023	0.03	<0.0099	<0.02	<0.0099	<0.0099	<0.02 UJ	0.00038	0.63	0.000066 J	<0.0099
	P57-ROX-101617	10/16/2017		42.64	NE	<0.00019	<0.0095	<0.0095	0.0039 J	<0.0095	<0.0095	<0.0095	<0.00019	0.00047	0.0013 J	<0.00019	<0.0095	0.023	0.032	<0.0095	<0.019	<0.0095	<0.0095	<0.019 UJ	0.00049	0.093	0.000091 J	<0.0095
	P57-ROX-011818	1/18/2018		44.86	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00049	<0.0095	<0.00019	<0.0095	0.024	0.032 J	<0.0095	<0.019	<0.0095 UJ	<0.0095	<0.019	0.00035	0.12	<0.00019	<0.0095 UJ
	P57-ROX-011818-DUP	1/18/2018		44.86	NE	<0.00019	0.00068 J *	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00076	0.0018 J	<0.00019	<0.0095	0.03	0.041 J	<0.0095	<0.019	<0.0095 UJ	<0.0095	<0.019	0.0005	0.14	<0.00019	<0.0095 UJ
	P57-ROX-041018	4/10/2018		45.45	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00032	<0.01 UJ	<0.0002	<0.01	0.031	0.039	<0.01	<0.02	<0.01	<0.01	<0.02	0.00041	0.06	<0.0002	<0.01 UJ
	P57-ROX-071118	7/11/2018		45.76	NE	<0.00021	0.00056 J	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	0.00048 J	<0.011	<0.00021	<0.011	0.032	0.042	<0.011	<0.021	<0.011	<0.011 UJ	<0.021	0.00037	0.039	<0.00021	<0.011 UJ
	P57-ROX-071118-DUP	7/11/2018		45.76	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	<0.00022 UJ	<0.011	<0.00022	<0.011	0.032	0.043	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00039	0.057	<0.00022	<0.011 UJ
	P57-ROX-101618	10/16/2018		45.86	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00033	<0.0097	<0.00019	<0.0097	0.021 J	0.027	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00036	0.023	<0.00019	<0.0097
	P57-ROX-101618-DUP	10/16/2018		45.86	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00043	<0.0097	<0.00019	<0.0097	0.027 J	0.034	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00059	0.035	<0.00019	<0.0097
	P57-ROX-011419	1/14/2019		45.63	NE	<0.0002	0.0006 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00056	<0.0099	<0.0002	<0.0099	0.021	0.026	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00041	0.053	<0.0002	<0.0099
	P57-ROX-011419-DUP	1/14/2019		45.63	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00059	<0.0099	<0.0002	<0.0099	0.019	0.024	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00049	0.058	<0.0002	<0.0099
	P57-ROX-041719	4/17/2019		44.89	NE	<0.00098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00071 J	<0.0098	<0.00098	<0.0098	0.022	0.028	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0004	0.078	0.000029 J J	<0.0098
	P57-ROX-041719-DUP	4/17/2019		44.89	NE	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00061 J	<0.0099	<0.00099	<0.0099	0.021	0.028	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00046	0.081	<0.00099	<0.0099
	P57-ROX-071519	7/15/2019		40.82	NE	<0.00097	0.00059 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	0.00092 J J	<0.0097	<0.00097	<0.0097	0.034	0.045	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00058 J	0.37	<0.00097	<0.0097
	P57-ROX-071519-DUP	7/15/2019		40.82	NE	<0.0002	0.00057 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00052	<0.01	<0.0002	<0.01	0.033	0.047	<0.01	<0.02	<0.01	<0.01	<0.02	0.0005	0.31	<0.0002	<0.01
	P57-ROX-101519	10/15/2019		40.18	NE	<0.00019	0.00066 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00037	<0.0095 UJ	<0.00019	<0.0095	0.028	0.03	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00029	0.079 *	<0.00019	<0.0095
	P57-ROX-101519-DUP	10/15/2019		40.18	NE	<0.00019	0.00056 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.00039	<0.0096 UJ	<0.00019	<0.0096	0.024	0.026	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00025	0.071 *	<0.00019	<0.0096
	P57-ROX-010920	1/9/2020		41.77	NE	<0.00019	0.00062 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.0004	<0.0096	<0.00019	<0.0096	0.028	0.033	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00034	0.033	<0.00019	<0.0096
	P57-ROX-041720	4/17/2020	44.19 - 54.19	40.70	NE	<0.0002	0.00066 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00069	<0.01	<0.0002	<0.01	0.029	0.034	<0.01	<0.02	<0.01	<0.01	<0.02	0.00033	0.18	<0.0002	<0.01
	P57-ROX-041720-DUP	4/17/2020		40.70	NE	<0.0002	0.00072 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0006	<0.01	<0.0002	<0.01	0.029	0.036	<0.01	<0.02	<0.01	<0.01	<0.02	0.00041	0.067	<0.0002	<0.01
P-58	P58-ROX-071317	7/13/2017	40.21 - 65.21	39.88	NE	<0.00039 H UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.01 UJ	<0.00039 H UJ	0.00088 H J	<0.01 UJ	<0.00039 H UJ	<0.01 UJ	0.037 H J	0.038 H J	<0.01 UJ	<0.02 UJ	<0.01 UJ	<0.01 UJ	<0.02 UJ	0.00097 H J	0.46	0.00064 H J	<0.01 UJ
	P58-ROX-041118	4/11/2018		43.19	NE	<0.0002	0.0017 J	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0016	<0.01	<0.0002	<0.01	0.073	0.079	<0.01	<0.02	<0.01	<0.01	<0.02	0.0019 J	0.33	<0.0002 UJ	<0.01
	P58-ROX-041118-DUP	4/11/2018		43.19	NE	<0.00097	0.0019 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.0017	<0.0097	<0.00097	<0.0097	0.061	0.064	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0014 J	0.25	<0.00019 UJ	<0.0097
	P58-ROX-101618	10/16/2018		43.66	NE	<0.00019	0.0014 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.0011	<0.0097	<0.00019	<0.0097	0.029	0.021	<0.0097	0.001 J	<0.0097	<0.0097 UJ	<0.019	0.0011	0.093	0.00069	<0.0097
	P58-ROX-041719	4/17/2019		42.49	NE	<0.00099	0.0019 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.00026	0.0018	<0.0099	<0.00099	<0.0099	0.036	0.025	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.0015	0.078	0.001	<0.0099
	P58-ROX-071519	7/15/2019		38.43	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00041	0.0017 J	<0.01	<0.0002	<0.01	0.059 J	0.033 J	<0.01	<0.02	<0.01	<0.01	<0.02	0.0024 J	0.12	0.0015 J	<0.01
	P58-ROX-071519-DUP	7/15/2019		38.43	NE	<0.00097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.00068	0.0046 J	<0.0097	0.00028 J	<0.0097	0.059	0.04	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0041 J	0.15	0.004 J	<0.0097
P-59	P59-ROX-071317	7/13/2017	47.91 - 72.91	42.16	NE	<0.0002	<0.01	<0.01	0.012	<0.01	<0.01	<0.01	0.00016 J	<0.0002	0.018	<0.0002	<0.01	0.021	0.034	<0.01	<0.02	<0.01	<0.01	<0.02 UJ	0.00054	0.066	<0.0002	<0.01
	P59-ROX-101317	10/13/2017		41.87	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00039 UJ	0.0057 J	<0.00019	<0.0097	0.022	0.019 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	P59-ROX-101317-DUP	10/13/2017		41.87	NE	<0.00039 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	0.0081 J	<0.00039 UJ	<0.0098	0.024	0.027 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P59-ROX-011118	1/11/2018		44.44	NE	<0.0004 U	<0.0096	<0.0096	0.035	<0.0096	<0.0096	<0.0096 UJ	<0.00096	<0.00096	0.0063 J	<0.00036 U	<0.0096 UJ	0.024	0.035	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0016	<0.0096	<0.00096	<0.0096 UJ
	P59-ROX-041218	4/12/2018		45.13	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00005 J	0.00017 J	0.0048 J J	<0.0002	<0.01	0.02	0.036	<0.01	<0.02	<0.01	<0.01	<0.02	0.00056	0.015	0.0001 J	<0.01
	P59-ROX-071118	7/11/2018		46.16	NE	<0.00022	<0.011	<0.011	0.013	<0.011	<0.011	<0.011	0.00021 J	0.00063	0.0066 J	<0.00022	<0.011	0.013	0.023	<0.011	0.0038 J	<0.011	<0.011 UJ	<0.022	0.001	<0.011	0.00027	<0.011 UJ
	P59-ROX-101618	10/16/2018		45.99	NE	<0.00019	<0.0097	<0.0097	0.0035 J	<0.0097	0.002 J	<0.0097	0.00031	0.001	0.0092 J	<0.00019	<0.0097	0.021	0.03	<0.0097	0.0038 J	<0.0097	<0.0097 UJ	<0.019	0.0013	0.012	0.00065	<0.0097
	P59-ROX-011419	1/14/2019		46.10	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	0.0061	0.0096	<0.01	<0.02	<0.01 UJ	<0.01	<0.02	<0.0002	<0.01	0.00061 J	<0.01
	P59-ROX-101519	10/15/2019		40.46	NE	<0.00019	<0.0095	<0.0095	0.0042 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	0.0061 J J	<0.00019	<0.0095	0.013	0.019	<0.0095	0.0033 J	<0.0095	<0.0095	<0.019	<0.00019	0.02	<0.00011 U	<0.0095
	P59-ROX-010920	1/9/2020		42.14	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0015 J	<0.00019	<0.0096	0.015	0.013	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.011	<0.00019	0.0035 J
	P59-ROX-042120	4/21/2020	47.91 - 72.91	41.45	NE	<0.00098	<0.0098	<0.0098	0.0034 J	<0.0098	<0.0098	<0.0098	<0.00098	<0.00098	0.009 J	<0.00098	<0.0098	0.019	0.03	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00049 J	0.0073 J	<0.00098	0.0035 J

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
P-66	P66-ROX-071217	7/12/2017	34.72 - 59.72	31.38	NE	<0.0004	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0004	<0.0004	0.0019 J	<0.0004	<0.01	0.051 H J	0.03	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	<0.0004	<0.01	0.00022 J J	<0.01
	P66-ROX-101017	10/10/2017		32.27	NE	<0.00019	0.0011 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.00055	0.0024 J	<0.00019	<0.0097	0.063	0.035	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	P66-ROX-011118	1/11/2018		34.09	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.072	0.035	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	P66-ROX-041018	4/10/2018		34.93	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.001	<0.0099 UJ	<0.0002	<0.0099	0.1	0.037	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00065	<0.0099 UJ	<0.0002	<0.0099 UJ
	P66-ROX-071118	7/11/2018		35.10	NE	<0.00097	0.002 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	0.0011 J	<0.0097	<0.00097	<0.0097	0.07	0.045	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00033 J	<0.0097	<0.00097	<0.0097 UJ
	P66-ROX-071118-DUP	7/11/2018		35.10	NE	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.00099	0.0011 J	<0.0099	<0.00099	<0.0099	0.074	0.053	<0.0099	<0.02	<0.0099	<0.0099 UJ	<0.02	0.00047 J	<0.0099	<0.00099	<0.0099 UJ
	P66-ROX-101518	10/15/2018		35.31	NE	<0.00019	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.00019	<0.00019	<0.049	<0.00019	<0.049	0.046	0.023	<0.049	<0.097	<0.049	<0.049	<0.097	<0.00019	<0.049	<0.00019	<0.049
	P66-ROX-101518-DUP	10/15/2018		35.31	NE	<0.0002	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0002	<0.0002	<0.049	<0.0002	<0.049	0.042	0.025	<0.049	<0.099	<0.049	<0.049	<0.099	<0.0002	<0.049	<0.0002	<0.049
	P66-ROX-010919	1/9/2019		34.99	NE	<0.0002	<0.05 UJ	<0.05 UJ	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00075	<0.01	<0.0002	<0.01	0.031	0.012	<0.01	<0.02	<0.01	<0.05 UJ	<0.02	0.00071	<0.01	<0.0002	<0.01
	P66-ROX-041619	4/16/2019		34.08	NE	<0.00099 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.00099	<0.0099	<0.00099	<0.0099	0.012	0.013	<0.0099	0.055	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	0.00019 J J	<0.0099
	P66-ROX-071019	7/10/2019		30.00	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00049 J J	0.0021 J	<0.0002	<0.01	0.055	0.026	<0.01	0.0063 J	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.001	<0.01
	P66-ROX-101119	10/11/2019		29.52	NE	<0.00019 UJ	0.0012 J	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.00002 J J	0.00018 J J	<0.0096	<0.00019 UJ	<0.0096	0.01 J	0.0076 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.000038 J J	<0.0096	<0.00019 UJ	<0.0096
	P66-ROX-010720	1/7/2020		31.09	NE	<0.00019	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.049 UJ	<0.00019	<0.00019	<0.049 UJ	<0.00019	<0.049 UJ	0.066	0.042	<0.049 UJ	<0.097 UJ	<0.049 UJ	<0.049 UJ	<0.097 UJ	<0.00019	<0.049 UJ	<0.00019	<0.049 UJ
	P66-ROX-041420	4/14/2020		30.12	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.00098	0.02	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.014	<0.0002	<0.0098
P-74	P74-ROX-071217	7/12/2017	44.43 - 69.43	38.08	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.000065 J	<0.0099	<0.0002	<0.0099	0.00059	0.00042	<0.0099	<0.02	<0.0099	<0.0099 UJ	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	P74-ROX-101617	10/16/2017		38.57	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.0012	0.0016	<0.0096	<0.019	<0.0096	<0.0096	<0.019 UJ	<0.00019	<0.0096	<0.00019	<0.0096
	P74-ROX-011018	1/10/2018		40.25	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.000085 J	<0.0095	<0.00019	<0.0095	0.002	0.0026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000065 J	0.035	<0.00019	<0.0095
	P74-ROX-041018	4/10/2018	43.83 - 68.83	40.69	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002	<0.0099 UJ
	P74-ROX-041018-DUP	4/10/2018		40.69	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099 UJ	<0.0002	<0.0099 UJ
	P74-ROX-071118	7/11/2018		42.22	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	<0.00019	<0.0097	<0.00019	<0.0097 UJ
	P74-ROX-101618	10/16/2018		42.18	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	0.000071 J	<0.0097	<0.00019	<0.0097	0.0013	0.0014	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.00004 J	0.0035 J	0.00002 J	<0.0097
	P74-ROX-011019	1/10/2019		42.14	NE	<0.00019	<0.0095	0.0017 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P74-ROX-041719	4/17/2019		41.57	NE	<0.0002	<0.0098	0.00096 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P74-ROX-071219	7/12/2019		37.95	NE	<0.0002 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	0.000022 J H J	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0099 H UJ
	P74-ROX-101419	10/14/2019		36.74	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.000021 U	<0.00019	<0.0095	<0.00019	<0.0095	0.00025	0.00023	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000024 J	<0.0095	<0.00019	<0.0095
	P74-ROX-010820	1/8/2020		38.40	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P74-ROX-041720	4/17/2020		37.40	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
P-93A	P93A-ROX-071317	7/13/2017	43.07 - 53.07	40.11	NE	<0.00037	<0.019	<0.019	<0.019	<0.019	<0.019	<0.019	<0.00037	<0.00037	<0.019	<0.00037	<0.019	0.00016 J	0.00018 J	<0.019	<0.037	<0.019	<0.019	<0.037 UJ	<0.00037	<0.019	<0.00037	<0.019
	P93A-ROX-101117	10/11/2017		40.87	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019 UJ	<0.0095
	P93A-ROX-011118	1/11/2018		42.71	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.00002 J	0.000025 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.012	<0.00019	<0.0096 UJ
	P93A-ROX-011118-DUP	1/11/2018		42.71	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096 UJ	0.000027 J	0.000023 J	<0.0096	<0.019	0.0019 J	0.0023 J	<0.019	<0.00019	0.0035 J	<0.00019	<0.0096 UJ
	P93A-ROX-041118	4/11/2018		NM	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.00092	0.00047	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000049 J	0.07	<0.0002	<0.0099
	P93A-ROX-052218	5/22/2018		NM	NE																						
	P93A-ROX-071218	7/12/2018		44.03	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000029 J	<0.0098	<0.0002	<0.0098	0.00033	0.00006 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.047	<0.0002	<0.0098
	P93A-ROX-101618	10/16/2018		44.05	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	0.002 J	<0.0097	0.000039 J	0.000095 J	<0.0097	<0.00019	<0.0097	0.0026	0.00075	<0.0097	<0.019	<0.0097	<0.0097 UJ	<0.019	0.000086 J	0.088	<0.00019	<0.0097
	P93A-ROX-011419	1/14/2019		43.78	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00007 J	<0.0099	<0.0002	<0.0099	0.0015	0.00026	<0.0099	<0.02	<0.0099 UJ	<0.0099	<0.02	0.00007 J	0.071	<0.0002	<0.0099
	P93A-ROX-041819	4/18/2019		42.98	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.000079 J	<0.0099	<0.0002	<0.0099	0.0026	0.00026	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000059 J	0.091	<0.0002	<0.0099
	P93A-ROX-071519	7/15/2019		38.92	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00075	0.00012 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.048	<0.00019	<0.0096
	P93A-ROX-101519	10/15/2019		38.31	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00012 U	<0.00019	<0.0095	<0.00005 U	<0.0095	0.0023	0.00053	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.000084 U	0.059	<0.000085 U	<0.0095
	P93A-ROX-010920	1/9/2020		39.89	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00066	0.0003	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.028	<0.00019	<0.0096
	P93A-ROX-010920-DUP	1/9/2020		39.89	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00076	0.00016 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.023	<0.00019	<0.0096
	P93A-ROX-041720	4/17/2020	43.07 - 53.07	38.79	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	0.0011	0.000068 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	0.022	<0.0002	<0.0099

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																						
P-93B	P93B-ROX-071117	7/11/2017	74.60 - 76.60	41.59	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095 UJ	<0.019	<0.00019	0.16	<0.00019	<0.0095 UJ
	P93B-ROX-071117-DUP	7/11/2017		41.59	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	0.22	<0.00019	<0.0096 UJ
	P93B-ROX-101117	10/11/2017		42.21	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.098 J	<0.00019	<0.0096
	P93B-ROX-101117-DUP	10/11/2017		42.21	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	0.0013 J	<0.0095	<0.0095	<0.019	<0.00019	0.28 J	<0.00019	<0.0095
	P93B-ROX-011518	1/15/2018		44.42	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	<0.000074 U	<0.000053 U	<0.0095	0.0013 J	<0.0095	<0.0095	<0.019	<0.00019	0.058	<0.00019	<0.0095 UJ
	P93B-ROX-041218	4/12/2018	74.88 - 76.88	44.75	NE	<0.0002	<0.0090	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099 UJ	0.000041 J	<0.0099	0.000028 J	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	0.36	<0.0002	<0.0099
	P93B-ROX-041218-DUP	4/12/2018		44.75	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098 UJ	<0.0002	<0.0098	0.000045 J	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.35	<0.0002	<0.0098
	P93B-ROX-071218	7/12/2018		45.36	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	0.019	<0.00019	<0.0097	0.0002	0.00032	0.0019 J	0.004 J	<0.0097	<0.0097	<0.019	<0.00019	0.35	<0.00019	<0.0097
	P93B-ROX-071218-DUP	7/12/2018		45.36	NE	<0.00097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00097	<0.00019	<0.0097	<0.00097	<0.0097	<0.00019	<0.00019	0.0019 J	0.0041 J	<0.0097	<0.0097	<0.019	<0.00097	0.33	<0.00097	<0.0097
	P93B-ROX-101518	10/15/2018		45.64	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	0.0021 J	0.0058 J	<0.0097	<0.0097	<0.019	<0.00019	0.22 *	<0.00019	<0.0097
	P93B-ROX-101518-DUP	10/15/2018		45.64	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	0.0023 J	0.0061 J	<0.0096	<0.0096	<0.019	<0.00019	0.25 *	<0.00019	<0.0096
	P93B-ROX-011119	1/11/2019		45.15	NE	<0.00019	<0.0096	<0.0096	0.0041 J	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	0.004 J	0.013 J	<0.0096	<0.0096	<0.019	<0.00019	0.34	<0.00019	<0.0096
	P93B-ROX-011119-DUP	1/11/2019		45.15	NE	<0.00019	<0.0095	<0.0095	0.0035 J	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	0.0041 J	0.013 J	<0.0095	<0.0095	<0.019	<0.00019	0.21	<0.00019	<0.0095
	P93B-ROX-041819	4/18/2019	74.78 - 76.78	44.33	NE	<0.0002	<0.01	<0.01	0.0035 J	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.0002	<0.01	<0.0002	<0.0002	<0.01	0.0049 J	<0.01	<0.01	<0.02	<0.0002	0.22	<0.0002	<0.01
	P93B-ROX-041819-DUP	4/18/2019		44.33	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	0.0045 J	<0.0099	<0.0099	<0.02	<0.0002	0.24	<0.0002	<0.0099
	P93B-ROX-071219	7/12/2019		40.35	NE	<0.0002 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0098 H UJ	<0.02 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.02 H UJ	<0.0002 H UJ	0.26 H J	<0.0002 H UJ	<0.0098 H UJ
	P93B-ROX-071219-DUP	7/12/2019		40.35	NE	<0.0002 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0099 H UJ	<0.0099 H UJ	<0.02 H UJ	<0.0002 H UJ	0.24 H J	<0.0002 H UJ	<0.0099 H UJ
	P93B-ROX-101519	10/15/2019		39.62	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.15	<0.00019	<0.0095
	P93B-ROX-101519-DUP	10/15/2019		39.62	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.13	<0.00019	<0.0095
	P93B-ROX-010820	1/8/2020		41.48	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	0.19 J	<0.00019	<0.0095
	P93B-ROX-010820-DUP	1/8/2020		41.48	NE	<0.00019	<0.0096 UJ	<0.0096 UJ	<0.0096	<0.0096 UJ	<0.0096 UJ	<0.0096 UJ	<0.00019	<0.00019	<0.0096 UJ	<0.00019	<0.0096 UJ	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.09 J	<0.00019	<0.0096 UJ
	P93B-ROX-042020	4/20/2020	74.78 - 76.78	40.23	NE	<0.0004 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0004 UJ	<0.0004 UJ	<0.0099	<0.0004 UJ	<0.0099	<0.0004 UJ	<0.0004 UJ	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0004 UJ	0.13	<0.0004 UJ	<0.0099
	P93B-ROX-042020-DUP	4/20/2020		40.23	NE	<0.00099 UJ	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.00099 UJ	<0.00099 UJ	<0.05	<0.00099 UJ	<0.05	<0.00099 UJ	<0.00099 UJ	<0.05	<0.099	<0.05	<0.05	<0.099	<0.00099 UJ	0.085	<0.00099 UJ	<0.05
P-93C	P93C-ROX-071217	7/12/2017	92.47 - 97.47	41.30	NE	<0.00039	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.00039	<0.00039	<0.0098	<0.00039	<0.0098	0.000083 J	<0.00039	<0.0098	<0.02	<0.0098	<0.0098 UJ	<0.02	<0.00039	<0.0098	<0.00039	<0.0098
	P93C-ROX-101117	10/11/2017		42.04	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93C-ROX-011118	1/11/2018		43.95	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095 UJ	0.000033 J	0.000034 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095 UJ
	P93C-ROX-041118	4/11/2018	92.88 - 97.88	44.69	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	<0.0002	<0.01	<0.000054 U	<0.01	0.000048 J	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	<0.0002	<0.01
	P93C-ROX-071218	7/12/2018		45.22	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	0.000062 J	<0.01	<0.00021	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	<0.00021	<0.01	<0.00021	<0.01
	P93C-ROX-101518	10/15/2018		45.31	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	0.013	<0.0002	<0.0098
	P93C-ROX-011019	1/10/2019		45.01	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	0.041	<0.00019	<0.0096
	P93C-ROX-041819	4/18/2019		44.15	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	0.000021 J	0.000034 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P93C-ROX-071219	7/12/2019		40.18	NE	<0.0002 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.02 H UJ	<0.01 H UJ	<0.01 H UJ	<0.02 H UJ	<0.0002 H UJ	<0.01 H UJ	<0.0002 H UJ	<0.01 H UJ
	P93C-ROX-101419	10/14/2019		39.65	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.00017 J	0.00017 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93C-ROX-010820	1/8/2020		41.30	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93C-ROX-041620	4/16/2020	92.88 - 97.88	40.17	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
P-93D	P93D-ROX-071117	7/11/2017	125.75 - 127.75	41.64	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	<0.00019	<0.0096	<0.00019	<0.0096 UJ
	P93D-ROX-101117	10/11/2017		42.42	NE	<0.00019 UJ	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019 UJ	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93D-ROX-011718	1/17/2018		44.80	NE	<0.00019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.00019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.00019 H UJ	<0.0095 H UJ	<0.00019 H UJ	<0.0095 H UJ
	P93D-ROX-041218	4/12/2018		45.95	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.000051 J	<0.0002	<0.01 UJ	0.00015 J	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	<0.0002	<0.01	0.000076 J	<0.01
	P93D-ROX-071218	7/12/2018		45.57	NE	<0.0011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.0011	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	<0.00021	<0.011	<0.0011	<0.011
	P93D-ROX-101518	10/15/2018		45.70	NE	0.000097 J	<0.0097	<0.0097	<0.0097	<0.0097	0.00057 J	<0.0097	0.000035 J	<0.00019	<0.0097	0.000073 J	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	0.000035 J	<0.0097
	P93D-ROX-011119	1/11/2019		45.31	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	P93D-ROX-041819	4/18/2019		44.50	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	0.00094 J	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P93D-ROX-071219	7/12/2019		40.53	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098	<0.0002	<0.0098
	P93D-ROX-101519	10/15/2019		39.88	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000019 J	0.000021 J	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P93D-ROX-010820	1/8/2020		41.68	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096 UJ	<0.019 UJ	<0.0096 UJ	<0.0096 UJ	<0.019 UJ	<0.00019	<0.0096 UJ	<0.00019	<0.0096
	P93D-ROX-042020	4/20/2020	125.66 - 127.66	40.41	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
P-114R	P114R-ROX-071117	7/11/2017	23.01 - 33.01	22.45	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	0.000095 J	0.00014 J	<0.0096	<0.019	<0.0096	<0.0096 UJ	<0.019	0.00015 J	<0.0096	<0.00019	<0.0096 UJ
	P114R-ROX-101017	10/10/2017		24.45	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	P114R-ROX-010918	1/9/2018		26.37	NE	<0.00095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00095	0.00028 J	<0.0095	<0.00095	<0.0095	0.000095 J	0.0001 J	<0.0095	<0.019	<0.0095	<0.0095 H UJ	<0.019 H UJ	<0.00095	<0.0095	<0.00095	<0.0095
	P114R-ROX-040618	4/6/2018		26.76	NE	<0.0002 UJ	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
	P114R-ROX-070918	7/9/2018		26.38	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	<0.00019	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00017 J	<0.0097	<0.00019	<0.0097
	P114R-ROX-101118	10/11/2018		26.27	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.0002	<0.0098 UJ
	P114R-ROX-101118-DUP	10/11/2018		26.27	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	<0.0002	<0.0098 UJ	<0.00039	<0.0098 UJ
	P114R-ROX-010719	1/7/2019		25.88	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019 UJ	<0.0095	0.000052 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	P114R-ROX-041519	4/15/2019		24.70	NE	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.00016 J	<0.0002	<0.01	<0.001	<0.01	<0.0002	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.000043 J	<0.01	<0.001	<0.01
	P114R-ROX-041519-DUP	4/15/2019		24.70	NE	<0.00099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000057 J	<0.0002	<0.0099	<0.00099	<0.0099	0.000042 J	0.000091 J	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.000031 J	<0.0099	0.000053 J	<0.0099
	P114R-ROX-070919	7/9/2019		19.48	NE	<0.00096 UJ	<0.048	<0.048	<0.048	<0.048	<0.048	<0.048	<0.00096 UJ	<0.00096 UJ	<0.048	<0.00096 UJ	<0.048	<0.00096 UJ	<0.00096 UJ	<0.048	0.0054 J	<0.048	<0.048	<0.096	<0.00096 UJ	<0.048	<0.00096 UJ	<0.048
	P114R-ROX-100919	10/9/2019		20.46	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.000041 J	<0.00019	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	0.00012 J	<0.0097
	P114R-ROX-010620	1/6/2020		22.15	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095 UJ	0.0028 J *	<0.00019	<0.0095	<0.00019	<0.0095
	P114R-ROX-010620-PCP	1/6/2020		22.15	NE																			0.0021 J H J				
	P114R-ROX-040720	4/7/2020	23.01 - 33.01	21.49	NE	0.00087 J J	<0.046	<0.046	<0.046	<0.046	<0.046	<0.046	<0.00092	<0.00092	<0.046	0.0006 J J	<0.046	<0.00092	<0.00092	<0.046	<0.092	<0.046	<0.046	<0.092	<0.00092	<0.046	<0.00092	<0.046
	P114R-ROX-040720-RE	4/7/2020		21.49	NE	<0.0012 UJ	<0.024	<0.019 H UJ	<0.024	<0.019 H UJ	0.0035 J	<0.024	<0.00024	<0.00024	<0.024	<0.0012 UJ	<0.024	<0.00024	<0.00024	<0.024	<0.048	<0.024	<0.024	<0.039 H UJ	<0.00024	<0.024	<0.0012 UJ	<0.024

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																				
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
ROST-3-MW	ROST3MW-ROX-071117	7/11/2017	37.81 - 47.81	36.61	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.000085 J	<0.01	<0.0002	<0.01	0.0029	0.0014	<0.01	<0.02	<0.01	<0.01 UJ	<0.02	0.00018 J	<0.01	0.00003 J	<0.01 UJ
	ROST3MW-ROX-101217	10/12/2017		38.05	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.000062 J	<0.0096	<0.00019	<0.0096	0.0015	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	ROST3MW-ROX-112017-R	11/20/2017		38.05	NE																						
	ROST3MW-ROX-011518	1/15/2018		40.00	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.0018 J J	0.000035 J	0.000061 J	<0.0095	<0.00019	<0.0095 UJ	0.0011 B	<0.000042 U	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000058 J	<0.0095	0.000025 J	<0.0095 UJ
	ROST3MW-ROX-022618	2/26/2018		40.00	NE																						
	ROST3MW-ROX-040618	4/6/2018		39.98	NE	<0.0002 UJ	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000087 J	<0.0098	<0.0002	<0.0098	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000067 J	<0.0098	<0.0002	<0.0098
	ROST3MW-ROX-070518	7/5/2018		40.74	NE	<0.00021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.00021	<0.00021	<0.01	<0.00021	<0.01	0.00043 B	<0.00021	<0.01	<0.021	<0.01	<0.01	<0.021	0.000054 J	<0.01	<0.00021	<0.01
	ROST3MW-ROX-100918	10/9/2018		40.72	NE	<0.000095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.0095 UJ	<0.0095	<0.000095	0.00016 J	<0.0095	<0.000095	<0.0095 UJ	0.00032	0.000091 J J	<0.0095	<0.0095	<0.0095	<0.024	<0.024 UJ	0.00026 J	<0.0095	0.00002 J	<0.0095
	ROST3MW-ROX-011019	1/10/2019		40.62	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.0001 J	<0.0095	<0.00019	<0.0095	0.00016 J	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00013 J	<0.0095	<0.00019	<0.0095
	ROST3MW-ROX041219	4/12/2019		40.40	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.000079 J	<0.0098	<0.0002	<0.0098	0.00022	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.000094 J	<0.0098	<0.0002	<0.0098
	ROST3MW-ROX-071119	7/11/2019		36.38	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096 UJ	<0.00019	0.00012 J	<0.0096	<0.00019	<0.0096	0.0036	0.0014	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00015 J	<0.0096 UJ	<0.00019	<0.0096 UJ
	ROST3MW-ROX-101419	10/14/2019		35.57	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	0.00015 J	0.000027 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000045 J	<0.0095	<0.00019	<0.0095
	ROST3MW-ROX-010920	1/9/2020		36.56	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	ROST3MW-ROX-041020	4/10/2020		36.33	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	<0.0002	<0.0099	<0.0002	<0.0099	<0.0002	<0.0002	<0.0099	<0.02	<0.0099	<0.0099	<0.02	<0.0002	<0.0099	<0.0002	<0.0099
ROST-4-PZ(C)	ROST4PZC-ROX-071217	7/12/2017	34.95 - 44.95	37.20	NE	<0.0002	<0.01	<0.01	<0.01 UJ	<0.01	<0.01	<0.01	<0.0002	0.00013 J	<0.01	<0.0002	<0.01	0.00014 J	<0.0002	<0.01 UJ	0.0026 J J	<0.01 UJ	<0.01 UJ	<0.02 UJ	<0.0002	<0.01 UJ	<0.0002	<0.01
	ROST4PZC-ROX-101217	10/12/2017		36.88	NE	<0.00096 UJ	<0.0096	<0.0096	0.012	<0.0096	<0.0096	<0.0096	<0.00019	0.0013	0.0021 J	<0.00096 UJ	<0.0096	0.058	0.07	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0031	<0.0096	<0.00096 UJ	<0.0096
	ROST4PZC-ROX-011518	1/15/2018		39.04	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	0.00005 J	0.00071	<0.0095	<0.00019	<0.0095 UJ	0.026 B	0.0025 B	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0021	<0.0095	0.00012 J	<0.0095 UJ
	ROST4PZC-ROX-040918	4/9/2018		40.13	NE	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.0002	<0.01	<0.0002	<0.01 UJ	0.0043	<0.0002	<0.01	<0.02	<0.01	<0.01	<0.02	0.00068	<0.01	0.00006 J	<0.01 UJ
	ROST4PZC-ROX-070918	7/9/2018		40.87	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00019 J	<0.011	<0.00022	<0.011	0.002	0.00011 J	<0.011	<0.022	<0.011	<0.011	<0.022	0.00062	<0.011	0.000034 J	<0.011
	ROST4PZC-ROX-101218	10/12/2018		40.91	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0002	0.00032	0.0012 J	<0.0002	<0.0098 UJ	0.0064	0.00058	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00083	<0.0098 UJ	<0.0002	<0.0098 UJ
	ROST4PZC-ROX-010919	1/9/2019		40.89	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.00003 J	0.00068	<0.01	<0.0002	<0.01	0.019	0.0065	<0.01	<0.02	<0.01	<0.01	<0.02	0.0017	<0.01	0.000061 J	<0.01
	ROST4PZC-ROX-041619	4/16/2019		40.69	NE	<0.0002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0002	0.000024 J	0.0005	<0.01	<0.0002	<0.01	0.02	0.0018	<0.01	<0.02	<0.01	<0.01	<0.02	0.00078	<0.01	0.000052 J	<0.01
	ROST4PZC-ROX-071219	7/12/2019		37.64	NE	<0.00097 H UJ	0.00094 J H J	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.00097 H UJ	0.0016 H J	0.0015 J H J	<0.00097 H UJ	<0.0097 H UJ	0.072 H J	0.066 H J	<0.0097 H UJ	<0.019 H UJ	<0.0097 H UJ	<0.0097 H UJ	<0.019 H UJ	0.0041 H J	<0.0097 H UJ	<0.00097 H UJ	<0.0097 H UJ
	ROST4PZC-ROX-101419	10/14/2019		35.97	NE	<0.00019	0.0016 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	0.00019 J	<0.0095	<0.00019	<0.0095 UJ	0.035	0.0078	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0037	<0.0095	<0.00011 U	<0.0095
	ROST4PZC-ROX-010720	1/7/2020		36.95	NE	<0.0002	0.00082 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00098	<0.0098	<0.0002	<0.0098	0.024	0.013	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.003	<0.0098	<0.0002	<0.0098
	ROST4PZC-ROX-041520	4/15/2020	34.95 - 44.95	36.71	NE	<0.0002	0.0016 J	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.0015	<0.0098	<0.0002	<0.0098	0.054	0.025	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0037	<0.0098	0.000059 J	<0.0098
ROST-4-PZ(E)	ROST4PZE-ROX-101317	10/13/2017	34.75 - 44.75	35.98	NE	<0.0002	0.00066 J	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.00012 J	0.0014	0.004 J	<0.0002	<0.0099	0.033	0.036	<0.0099	0.0014 J	<0.0099	<0.0099	<0.02	0.0041	0.0065 J	0.0002	<0.0099
	ROST4PZE-ROX-011518	1/15/2018		38.07	NE	<0.00019	0.00072 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	0.000066 J	0.0012	0.003 J	<0.00019	<0.0095 UJ	0.046 B	0.045 B	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0032	<0.0095	0.00019	<0.0095 UJ
	ROST4PZE-ROX-040918	4/9/2018		38.93	NE	<0.0002	<0.01 UJ	<0.01	<0.01	<0.01	<0.01	<0.01	0.00011 J	<0.0002	<0.01	<0.0002	<0.01 UJ	0.024	0.019	<0.01	<0.02	<0.01	<0.01	<0.02	0.0021	<0.01	0.00045	<0.01 UJ
	ROST4PZE-ROX-071018	7/10/2018		39.52	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	0.00054	<0.00022	<0.011	0.000061 J	<0.011	0.011	0.014	<0.011	<0.022	<0.011	<0.011	<0.022	0.0042	<0.011	0.0008	<0.011
	ROST4PZE-ROX-101518	10/15/2018		39.76	NE	<0.0002	<0.049	<0.049	<0.049	<0.049	<0.049	<0.049	<0.0002	<0.0002	<0.049	<0.0002	<0.049	0.0051	0.004	<0.049	<0.098	<0.049	<0.049	<0.098	0.0028	<0.049	<0.0002	<0.049
	ROST4PZE-ROX-010719	1/7/2019		39.72	NE	<0.00038 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00095	<0.00038	<0.0095	<0.00038 UJ	<0.0095	0.0015	0.0018	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00038	<0.0095	0.0015	<0.0095
	ROST4PZE-ROX-041219	4/12/2019		39.55	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00019 J	<0.0098	<0.0002	<0.0098	0.0019 J	0.0021 J	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0014	<0.0098	0.00042 J	<0.0098
	ROST4PZE-ROX-041219-DUP	4/12/2019		39.55	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.0029 J	0.0032 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.0014	<0.0097	0.00024	<0.0097
	ROST4PZE-ROX-071219	7/12/2019		NM	NE	<0.00098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.0098 H UJ	0.00044 J H J	0.0025 H J	<0.0098 H UJ	<0.00098 H UJ	<0.0098 H UJ	0.048 H J	0.021 H J	<0.0098 H UJ	<0.02 H UJ	<0.0098 H UJ	<0.0098 H UJ	<0.02 H UJ	0.01 H J	0.026 H J	0.0012 H J	<0.0098 H UJ
	ROST4PZE-ROX-101519	10/15/2019		35.01	NE	<0.00019	0.0018 J	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	0.00012 J B	0.0016	0.0059 J J	<0.00019	<0.0095	0.053	0.059	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0057	0.0042 J *	0.00036 B	<0.0095
	ROST4PZE-ROX-010720	1/7/2020		36.10	NE	<0.0002	0.0021 J	<0.0098	<0.0098 UJ	<0.0098	<0.0098	<0.0098	0.00035	0.0041	<0.004 U	<0.0002	<0.0098	0.074	0.07	<0.0098 UJ	<0.02 UJ	<0.0098 UJ	<0.0098 UJ	<0.02 UJ	0.011	<0.0098 UJ	0.0013	<0.0098
	ROST4PZE-ROX-041620	4/16/2020	34.75 - 44.75	35.90	NE	<0.00019	0.0023 J	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	0.00012 J J	0.0023	0.0064 J	<0.00019	<0.0097	0.076	0.09	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.007	<0.0097	0.00039	<0.0097
ROST-4-PZ(G)	ROST4PZG-ROX-101217	10/12/2017	34.28 - 44.28	36.58	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097	0.00019	0.00012 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	<0.00019	<0.0097	<0.00019	<0.0097
	ROST4PZG-ROX-011118	1/11/2018		38.95	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095 UJ	<0.00019	0.000038 J	<0.0095	<0.00019	<0.0095 UJ	0.00009 J	0.00011 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00012 J	<0.0095	<0.00019	<0.0095 UJ
	ROST4PZG-ROX-040918	4/9/2018		40.07	NE	<0.0002	<0.0098 UJ	<0.0098	<0.0098	<0.0098	<0.0098 UJ	<0.0098	0.000026 J	<0.0002	<0.0098	<0.0002	<0.0098 UJ	<0.0002	<0.0002	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.0001 J	<0.0098	0.000032 J	<0.0098 UJ
	ROST4PZG-ROX-070918	7/9/2018		40.81	NE	<0.00021	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00021	<0.00021	<0.011	<0.00021	<0.011	<0.00021	<0.00021	<0.011	<0.021	<0.011	<0.011	<0.021	0.000087 J	<0.011	<0.00021	<0.011
	ROST4PZG-ROX-101218	10/12/2018		40.93	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097	<0.0097 UJ	<0.00019	<0.00019	<0.0097	<0.00019	<0.0097 UJ	0.00012 J	0.00014 J	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00013 J	<0.0097 UJ	<0.00019	<0.0097 UJ
	ROST4PZG-ROX-010719	1/7/2019		40.49	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000093 J	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-041119	4/11/2019		40.35	NE	<0.00019 UJ	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	0.00006 J	<0.0095	<0.00019 UJ	<0.0095	0.000022 J	0.000025 J	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.000058 J	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-071219	7/12/2019		36.60	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.000038 J	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	0.0015 J	<0.0096	<0.0096	<0.019	0.000031 J	<0.0096	<0.00019	<0.0096
	ROST4PZG-ROX-100719	10/7/2019		35.69	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095 UJ	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-011320	1/13/2020		37.07	NE	<0.00019	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	<0.00019	<0.00019	<0.0095	<0.019	<0.0095	<0.0095	<0.019	<0.00019	<0.0095	<0.00019	<0.0095
	ROST4PZG-ROX-041520	4/15/2020	34.28 - 44.28	36.28	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	<0.0096	<0.00019	<0.0096	<0.00019	<0.00019	<0.0096	<0.019	<0.0096	<0.0096	<0.019	<0.00019	<0.0096	<0.00019	<0.0096
	ROST4PZG-ROX-041520-DUP	4/15/2020		36.28	NE	<0.0002	0.0013 J H J	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.0002	<0.0002	<0.0095 H UJ	<0.0002	<0.0095 H UJ	0.000099 J J	<0.0002	<0.0095 H UJ	<0.019 H UJ	<0.0095 H UJ	<0.0095 H UJ	<0.019 H UJ	<0.0002	<0.0095 H UJ	<0.0002	<0.0095 H UJ

SEE LAST PAGE OF TABLE FOR NOTES

TABLE 3
SUMMARY OF GROUNDWATER MONITORING WELL ANALYTICAL DETECTIONS AND EXCEEDANCES

						SVOCs																			
						Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	2,4-Dimethylphenol	Di-n-butyl phthalate	Di-n-octyl phthalate	1,4-Dioxane	Fluoranthene	Fluorene	Indene	Indeno(1,2,3-cd)pyrene	Isophorone (3,5,5-trimethyl-2-cyclohexene-1-one)	1-Methylnaphthalene	2-Methylnaphthalene	2-Methylphenol (o-Cresol)	3 & 4-Methylphenol (m & p-Cresol)	2-Nitrophenol	4-Nitrophenol	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
Screening Values (mg/L)						0.0003 [1]	0.007 [3]	5.6 [1]	0.14 [2]	0.7 [1]	0.14 [2]	0.0077 [1]	0.28 [1]	0.28 [1]		0.00043 [1]	1.4 [2]	0.49 [3]	0.028 [1]	0.35 [1]	0.35 [3]			0.001 [1]	0.21 [3]	0.1 [1]	0.21 [1]	0.007 [3]
Location	**Sample ID**	**Sample Date**	**Screened Interval (ft btoc)**	**Depth to Water (ft btoc)**	**Product Thickness (ft)**	**Analytical Results (mg/L)**																					
T-12	T12-ROX-071317	7/13/2017	46.83 - 72.83	40.10	NE	<0.00019	<0.0095	<0.0095	<0.0095	0.0035 J	<0.0095	<0.0095	0.000041 J	0.00027	0.0014 J	<0.00019	<0.0095	0.018	0.026	<0.0095	<0.019	<0.0095	<0.0095	<0.019 UJ	0.00053	0.028	0.000072 J	<0.0095
	T12-ROX-101317	10/13/2017		39.48	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00045	0.0017 J	<0.0002	<0.0098	0.03	0.033	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00084	0.052	0.000061 J	<0.0098
	T12-ROX-011018	1/10/2018		42.14	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	0.00002 J	0.00029	<0.0096	<0.00019	<0.0096	0.021	0.033	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.00062	0.08	0.000038 J	<0.0096
	T12-ROX-041218	4/12/2018		43.03	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0002	0.00031	<0.0099 UJ	<0.0002	<0.0099	0.033	0.036	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.0008	0.037	<0.0002	<0.0099
	T12-ROX-071118	7/11/2018		44.12	NE	<0.00022	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.00022	0.00028	<0.011	<0.00022	<0.011	0.022	0.034	<0.011	<0.022	<0.011	<0.011 UJ	<0.022	0.00054	0.053	0.000033 J	<0.011 UJ
	T12-ROX-101618	10/16/2018		43.90	NE	<0.00019	<0.0097	<0.0097	<0.0097	<0.0097	0.003 J	0.0017 J	<0.0097	0.000057 J	0.00046	<0.0097	<0.00019	<0.0097	0.022	0.031	<0.0097	<0.019	<0.0097	<0.0097 UJ	0.0018 J	0.00065	0.032	0.000054 J	<0.0097
	T12-ROX-011019	1/10/2019		44.00	NE	<0.00019	<0.0095	<0.0095	<0.0095	0.0037 J	<0.0095	<0.0095	<0.00019	<0.00019	<0.0095	<0.00019	<0.0095	0.022	0.032	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.00094	0.065	0.000084 J	<0.0095
	T12-ROX-041719	4/17/2019		43.38	NE	<0.0002	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	<0.0099	0.000028 J	0.00033	<0.0099	<0.0002	<0.0099	0.019	0.027	<0.0099	<0.02	<0.0099	<0.0099	<0.02	0.00068	0.048	0.000046 J J	<0.0099
	T12-ROX-041719-PCE	4/17/2019		43.38	NE																						
	T12-ROX-071519	7/15/2019		39.74	NE	<0.00019	<0.0097	<0.0097	<0.0097	0.0034 J	<0.0097	<0.0097	<0.00019	0.0002	<0.0097	<0.00019	<0.0097	0.025	0.034	<0.0097	<0.019	<0.0097	<0.0097	<0.019	0.00047	0.076	<0.00019	<0.0097
	T12-ROX-101519	10/15/2019		38.40	NE	<0.00019	<0.0095	<0.0095	<0.0095	0.0053 J	<0.0095	<0.0095	<0.00019	<0.00019	0.0015 J J	<0.00019	<0.0095	0.018	0.026	<0.0095	<0.019	<0.0095	<0.0095	<0.019	0.0005 B	0.063	<0.00019	<0.0095
	T12-ROX-010920	1/9/2020		40.17	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	<0.00019	0.0017 J	<0.00019	<0.0096	0.028	0.039	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0008	0.06	<0.00019	<0.0096
	T12-ROX-010920-DUP	1/9/2020		40.17	NE	<0.00019	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.0096	<0.00019	0.0003	0.0019 J	<0.00019	<0.0096	0.03	0.04	<0.0096	<0.019	<0.0096	<0.0096	<0.019	0.0008	0.071	<0.00019	<0.0096
	T12-ROX-041720	4/17/2020	46.83 - 72.83	39.44	NE	<0.0002	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0098	<0.0002	0.00032	<0.0098	<0.0002	<0.0098	0.016	0.017	<0.0098	<0.02	<0.0098	<0.0098	<0.02	0.00034	0.07	0.000081 J	<0.0098

Notes:

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

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

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

Groundwater monitoring wells designated for sampling in the Interim Groundwater Monitoring Program, P-55R, P-58, and P-68, contained LNAPL; therefore, these wells were not sampled.

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

Indicates a historical exceedance of screening criteria.

Indicates a current exceedance of screening criteria.

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

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

LABORATORY QUALIFIERS

B = Target analyte was identified in the method blank, indicating poss ble 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.

F2 = MS/MSD RPD exceeds control limits.

* = Indicates LCS and/or LCSD and/or LCS/LCSD RPD is outside contol limit, and/or internal standard recovery is outside contol limit.

p = The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

<#.## 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:

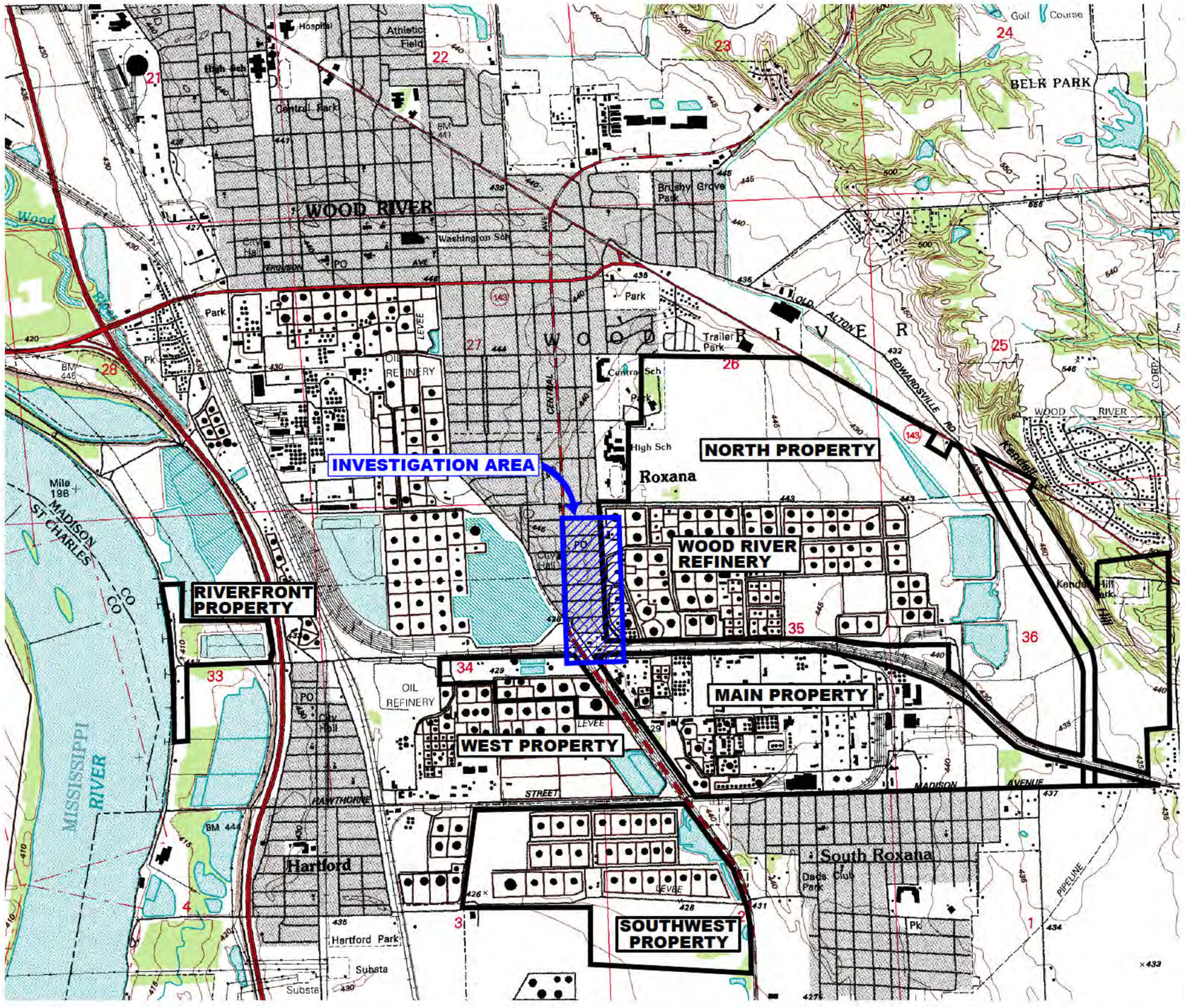
Plan View Model Output – The data input for the plan view model was not limited by depth and was modeled in two dimensions (2D). Regardless of sample depth, benzene concentrations were modeled on a flat horizontal plane.

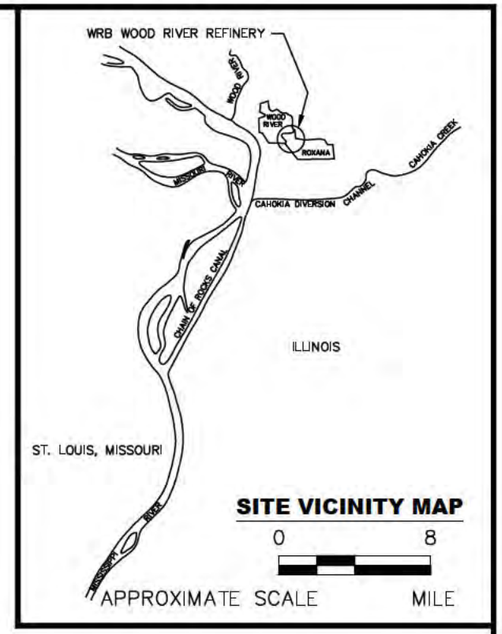
Inward Kriging / Boundary Cut-off – This method of Kriging limits the horizontal extent of data modeling to the extent of the data on the x/y plane in a convex hull.

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. 60619901

AECOM

DRN. BY:gds July 2020
DSGN. BY: wmp
CHKD. BY:bJ

Investigation Area Location Map

FIG. NO. 1

File: C:\USERS\MADALINA.TAMAS\AECOM DIRECTORY\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USFD0668-900-S_CENTRAL_AVE–ROXANA–IL\ROXANA 2020 GW RPT\02 WORKSPACE\FIGURE 1 INVESTIGATION AREA LOCATION MAP.DWG Last edited: 05/20/20 @ 12:59 PM @ WCC–STLOUIS

File: C:\USERS\MADALINA.TAMAS\AECOM DIRECTORY\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILUNOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2Q20 GW RPT\02.WORKSPACE\FIGURE 2 GROUNDWATER MONITORING WELL SAMPLING LOCATIONS.DWG Last edited: May. 21, 20 @ 10:17 AM by: madalina.tamas

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
NORTH PROPERTY
WEST PROPERTY
MAIN PROPERTY
BP
HIGHWAY 111 (S. CENTRAL AVE)
CHAFFER AVE
RAND AVENUE
1986 APPROXIMATE BENZENE RELEASE SITE

PZ-1(101)
PZ-1(85)
MW-9 *
MW-10 *
MW-28 *
MW-27 *
P-55R *
ROST-4-PZ(A)
ROST-4-PZ(B)
ROST-4-PZ(C) *
ROST-4-PZ
P-60-11
ROST-3-MW *
ROST-4-PZ(D)
ROST-4-PZ(E) *
ROST-4-PZ(F)
P-60-S
P-60-12
P-60
ROST-4-PZ(G) *
P-68 *
P-60-13
MW-11 *
P-54 *
MW-17
T-12 *
MW-24 *
MW-22 *
MW-18
MW-19
P-59 *
MW-16 *
PZ-2(84)
PZ-2(70.5)
MW-12 *
MW-20
P-56 *
MW-2 *
MW-1 *
MW-26 *
MW-21
P-57 *
MW-4 *
MW-3 *
P-93A *
P-93B *
P-93C *
P-93D *
MW-25 *
MW-23 *
MW-5 *
MW-7 *
MW-8 *
P-58 *
P-66 *
MW-13 *
MW-6A
MW-6B *
MW-6C *
MW-6D *
MW-14 *
P-114R *
T-1
T-24
T-6
P-69
P-70
P-74 *
P-61
P-73
P-75
GP-9-PZ
A-28
A-27

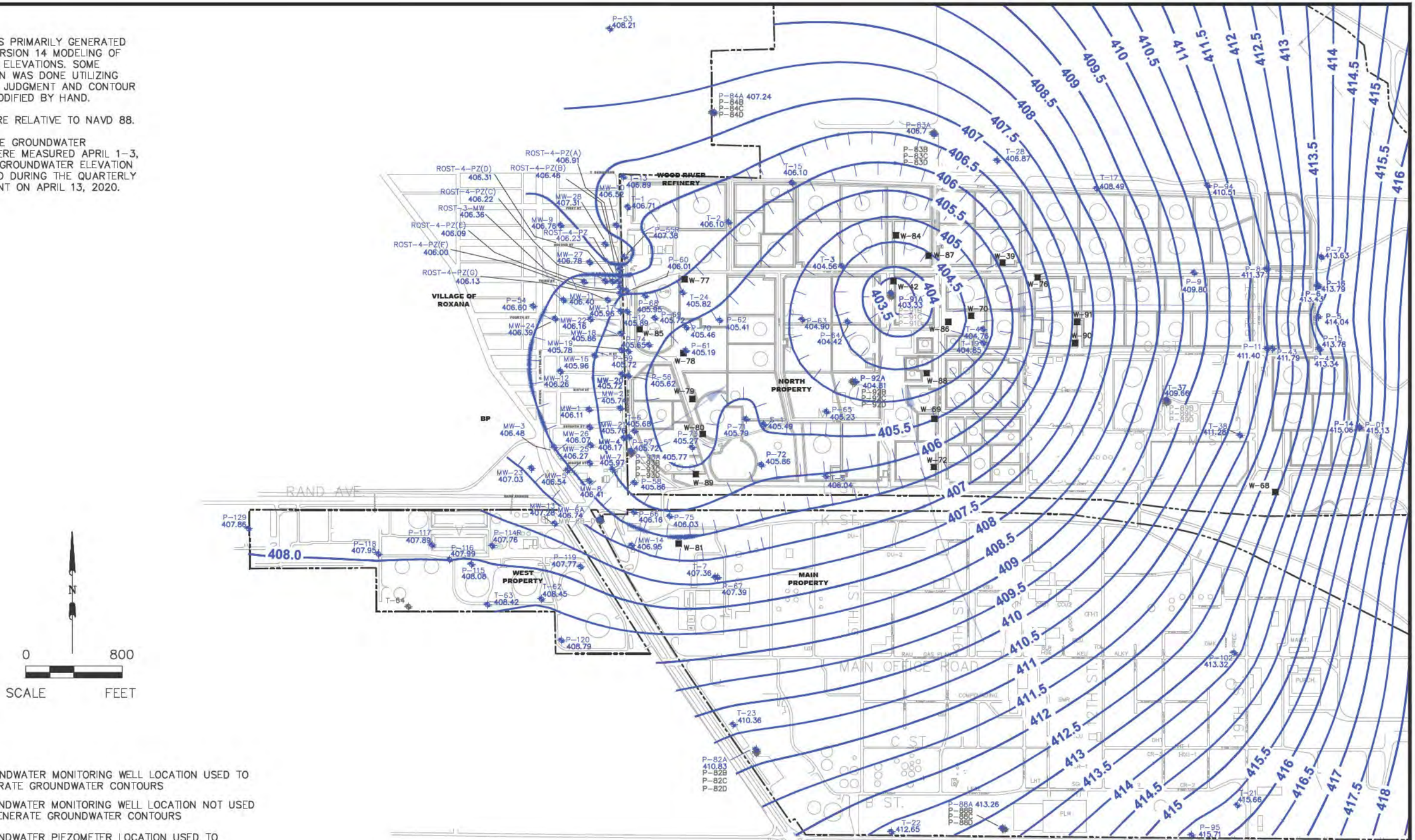
0 200
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS		PROJECT NO. 60619901
AECOM		
DRN. BY:gds July 2020 DSGN. BY:mr CHKD. BY:b3	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 APRIL 1–3, 2020. MW–16 GROUNDWATER ELEVATION WAS MEASURED DURING THE QUARTERLY SAMPLING EVENT ON APRIL 13, 2020.



LEGEND

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

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

PROJECT NO. 60619901

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DRN. BY:gds July 2020
DSGN. BY:gds
CHKD. BY:mr/b3

Groundwater Contours
2Q20

FIG. NO. 3a

File: C:\USERS\LILIANAGEORGETA.CROI\AECOM DIRECTORY\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2Q20 GW RPT\02.WORKSPACE\FIGURE 3A ROXANA 2Q20 CONTOUR MAP (800 SCALE).DWG Last edited: Jun. 16, 20 @ 12:07 PM by: lilianageorgeta.croi

File: C:\USERS\LILIANAGEORGETA.CROI\AECOM DIRECTORY\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2Q20 GW RPT\02.WORKSPACE\FIGURE 3B ROXANA 2Q20 CONTOUR MAP.DWG Last edited: Jun. 16, 20 @ 12:09 PM by: lilianageorge

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. COMPREHENSIVE GROUNDWATER ELEVATIONS WERE MEASURED April 1-3, 2020. MW-16 GROUNDWATER ELEVATION WAS MEASURED DURING THE QUARTERLY SAMPLING EVENT ON APRIL 13, 2020.
2. 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.
3. ELEVATIONS ARE RELATIVE TO NAVD 88.

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

407
406.5
406
405.5
406.5
405.5
406
406.5
407
407.5
408
408.5

I-13 406.89
T-1 406.71
T-2 406.10
MW-9 406.76
MW-10 406.52
MW-28 407.31
P-55R 407.58
ROST-4-PZ(B) 406.46
ROST-4-PZ(D) 406.31
MW-27 406.78
ROST-4-PZ(A) 406.91
ROST-4-PZ(C) 406.22
ROST-4-PZ 406.23
W-77
ROST-3-MW 406.36
ROST-4-PZ(E) 406.09
P-60 406.01
A-28
P-68 405.95
T-24 405.82
ROST-4-PZ(G) 406.13
ROST-4-PZ(F) 406.00
MW-11 406.40
MW-17 405.96
T-12 405.89
P-69 405.72
P-62 405.41
P-54 406.60
MW-24 406.39
MW-22 406.16
A-27
W-85
MW-18 405.86
P-70 405.46
P-74 405.65
P-61 405.19
W-78
MW-19 405.78
P-59 405.72
MW-16 405.96
MW-12 406.26
MW-20 405.72
P-56 405.62
MW-2 405.74
W-79
MW-1 406.11
T-6 405.68
P-71 405.79
S-1 405.49
W-80
MW-26 406.07
MW-21 405.76
P-57 405.72
P-73 405.27
MW-3 406.48
MW-4 406.17
P-93A 405.77
P-93B
P-93C
P-93D
MW-25 406.27
MW-23 407.03
MW-5 406.54
MW-7 405.97
P-72 405.86
W-89
MW-8 406.41
P-58 405.86
P-66 406.16
P-75 406.03
MW-6A 406.74
MW-6B
MW-6C
MW-6D
MW-13 407.28
MW-14 406.95
W-81
P-117 407.89
P-114R 407.76
P-116 407.99
P-115 408.08
P-119 407.77
P-67 407.39
T-7 407.36
T-64
T-63 408.42
T-62 408.45

0 300
SCALE FEET
N

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60619901
AECOM	
DRN. BY: gds July 2020 DSGN. BY: gds CHKD. BY: mr/b3	Groundwater Contours 2Q20– West Fenceline
	FIG. NO. 3b

File: C:\USERS\MADALINA.TAMAS\AECOM DIRECTORY\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2Q20 GW RPT\02.WORKSPACE\FIGURE 4A THICKNESS OF LNAPL (WEST FENCLINE).DWG Last edited: May. 20, 20 @ 12:59 PM by: madalina.tamas

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 APRIL 1–3, 2020.

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

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

0 300
SCALE FEET
N

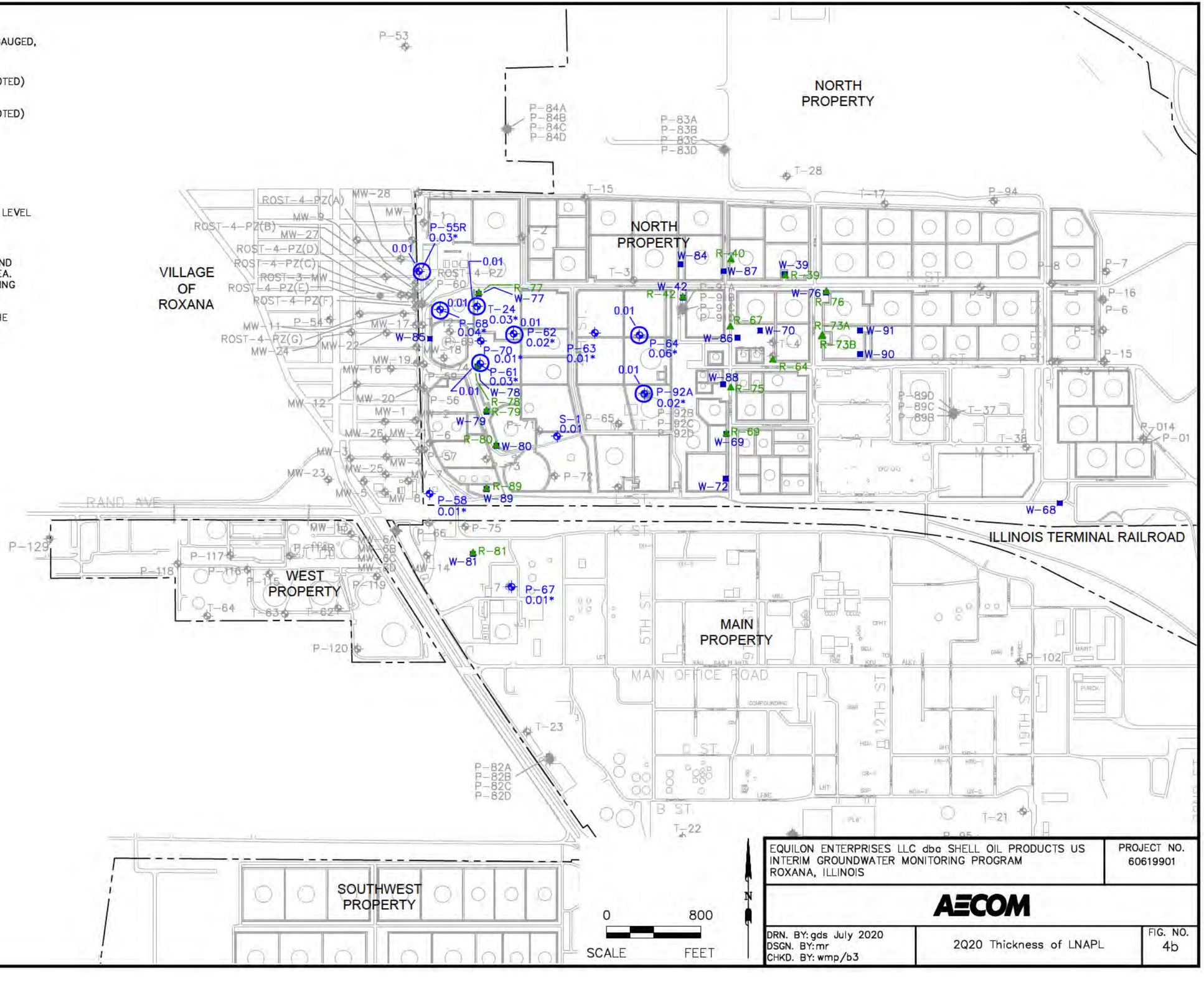
EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60619901
AECOM	
DRN. BY:gds July 2020 DSGN. BY:mr CHKD. BY:wmp\b3	2Q20 Thickness of LNAPL – West Fenceline
	FIG. NO. 4a

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 APRIL 1–3, 2020.



EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60619901
AECOM	
DRN. BY: gds July 2020 DSGN. BY: mr CHKD. BY: wmp/b3	2Q20 Thickness of LNAPL
	FIG. NO. 4b

File: C:\USERS\MADALINA.TAMAS\AECOM DIRECTORY\GDS GIS SERVICES - DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2020 GW RPT\02.WORKSPACE\FIGURE 4B THICKNESS OF LNAPL (REFINERY).DWG Last edited: May. 21, 20 @ 11:52 AM by: madalina.tamas

File: C:\USERS\POPAA\AECOM DIRECTORY\GDS GIS SERVICES - SHELL\ILLINOIS\USF00666-900 S CENTRAL AVE-ROXANA-IL\ROXANA 2020 GW RPT\02.WORKSPACE\FIGURE 5 2020 GROUNDWATER ANALYTICAL RESULTS SUMMARY.DWG Last edited: Jun. 05, 20 @ 3:21 PM by: popaa

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
Ethylbenzene	0.7
Naphthalene	0.14
1,2,4-Trimethylbenzene	0.07
1,3,5-Trimethylbenzene	0.07
bis(2-Ethylhexyl)phthalate	0.006
2-Methylnaphthalene	0.028
Phenol	0.1

J = THE RESULT IS ESTIMATED.

3. MULTIPLE RESULTS (e.g., 700/700) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
4. WELLS IDENTIFIED IN BLUE WITH NO DATA BOX INDICATE THE RESULTS DID NOT EXCEED SCREENING CRITERIA.
5. WELLS P-55R, P-58, AND P-68 WERE NOT SAMPLED DURING 2Q20 DUE TO THE PRESENCE OF LNAPL.
6. DATA FROM THE SVOC CONFIRMATION RE-ANALYSIS WAS USED FOR WELL P-114R; SEE TABLE 3 FOR ORIGINAL AND CONFIRMATION SVOC RESULTS.

Sample Location	MW-28
Sampled 4/16/2020	Result (mg/L)
Benzene	0.012

Sample Location	ROST-4-PZ(E)
Sampled 4/16/2020	Result (mg/L)
Benzene	0.088
1,2,4-Trimethylbenzene	0.18
2-Methylnaphthalene	0.09

Sample Location	T-12
Sampled 4/17/2020	Result (mg/L)
Benzene	1.6

Sample Location	P-59
Sampled 4/21/2020	Result (mg/L)
Benzene	2.3
Ethylbenzene	1.6
Naphthalene	0.15
1,2,4-Trimethylbenzene	0.71
1,3,5-Trimethylbenzene	0.17
2-Methylnaphthalene	0.03

Sample Location	MW-2
Sampled 4/8/2020	Result (mg/L)
Ethylbenzene	0.77
1,2,4-Trimethylbenzene	0.18
2-Methylnaphthalene	0.032

Sample Location	P-57
Sampled 4/17/2020	Result (mg/L)
Benzene	2.5 / 2.8
2-Methylnaphthalene	0.034 / 0.036
Phenol	0.18 / 0.067

Sample Location	MW-25
Sampled 4/6/2020	Result (mg/L)
Benzene	0.019

Sample Location	P-93A	P-93B	P-93D
Sampled 4/17, 4/20/2020	Result (mg/L)	Result (mg/L)	Result (mg/L)
Benzene	58	160 J / 120 J	
Phenol		0.13 / 0.0085	
bis(2-Ethylhexyl)phthalate			0.011

Sample Location	MW-7
Sampled 4/6/2020	Result (mg/L)
Benzene	700 / 700

Sample Location	P-66
Sampled 4/14/2020	Result (mg/L)
Benzene	0.13

Sample Location	MW-8
Sampled 4/6/2020	Result (mg/L)
Benzene	49

Sample Location	MW-6D
Sampled 4/13/2020	Result (mg/L)
Benzene	0.058 / 0.052

MW-9, MW-10, MW-28, SECOND ST, P-55R, NORTH PROPERTY, MW-27, ROST-4-PZ(A), ROST-4-PZ(B), ROST-4-PZ(C), ROST-4-PZ, THIRD ST, ROST-3-MW, ROST-4-PZ(D), ROST-4-PZ(E), ROST-4-PZ(F), P-60, P-68, A-28, T-24, MW-11, ROST-4-PZ(G), P-54, T-12, MW-17, MW-24, FOURTH ST, MW-22, P-69, WOOD RIVER REFINERY, A-27, P-70, MW-18, MW-19, P-59, P-74, P-61, FIFTH ST, MW-16, MW-12, VILLAGE OF ROXANA, MW-20, P-56, HIGHWAY 111 (S. CENTRAL AVE), CHAFFER AVE, SIXTH ST, MW-1, MW-2, BP, MW-26, SEVENTH ST, T-6, P-57, MW-21, MW-4, P-93A, P-93B, P-93C, P-93D, P-73, MW-3, MW-25, EIGHTH ST, MW-5, MW-23, MW-7, MW-8, P-58, 1986 APPROXIMATE BENZENE RELEASE SITE, RAND AVENUE, P-66, P-75, MW-13, MW-6A, MW-6B, MW-6C, MW-6D, WEST PROPERTY, MAIN PROPERTY, 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. 60619901

AECOM

DRN. BY:gds July 2020
DSGN. BY:mr
CHKD. BY:mr/b3

2Q20 Groundwater Monitoring Well Analytical Exceedances

FIG. NO. 5

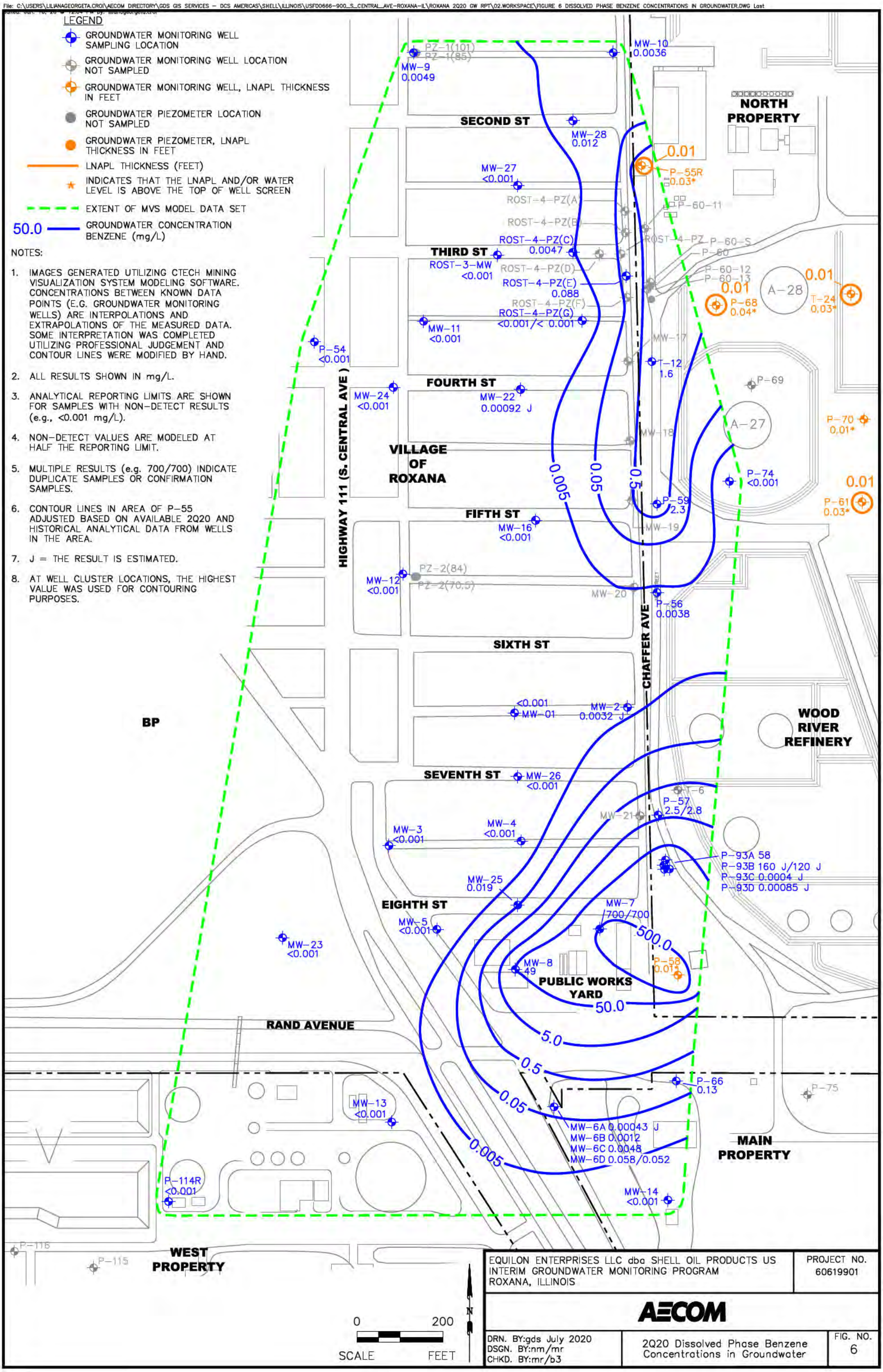
File: C:\USERS\LILIANAGEORGETA.CROI\AECOM DIRECTORY\GDS GIS SERVICES – DCS AMERICAS\SHELL\ILLINOIS\USF00666-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2Q20 GW RPT\02.WORKSPACE\FIGURE 6 DISSOLVED PHASE BENZENE CONCENTRATIONS IN GROUNDWATER.DWG Last saved: Jun. 16, 20 @ 12:04 PM By: lilianageorgeta.croi

LEGEND

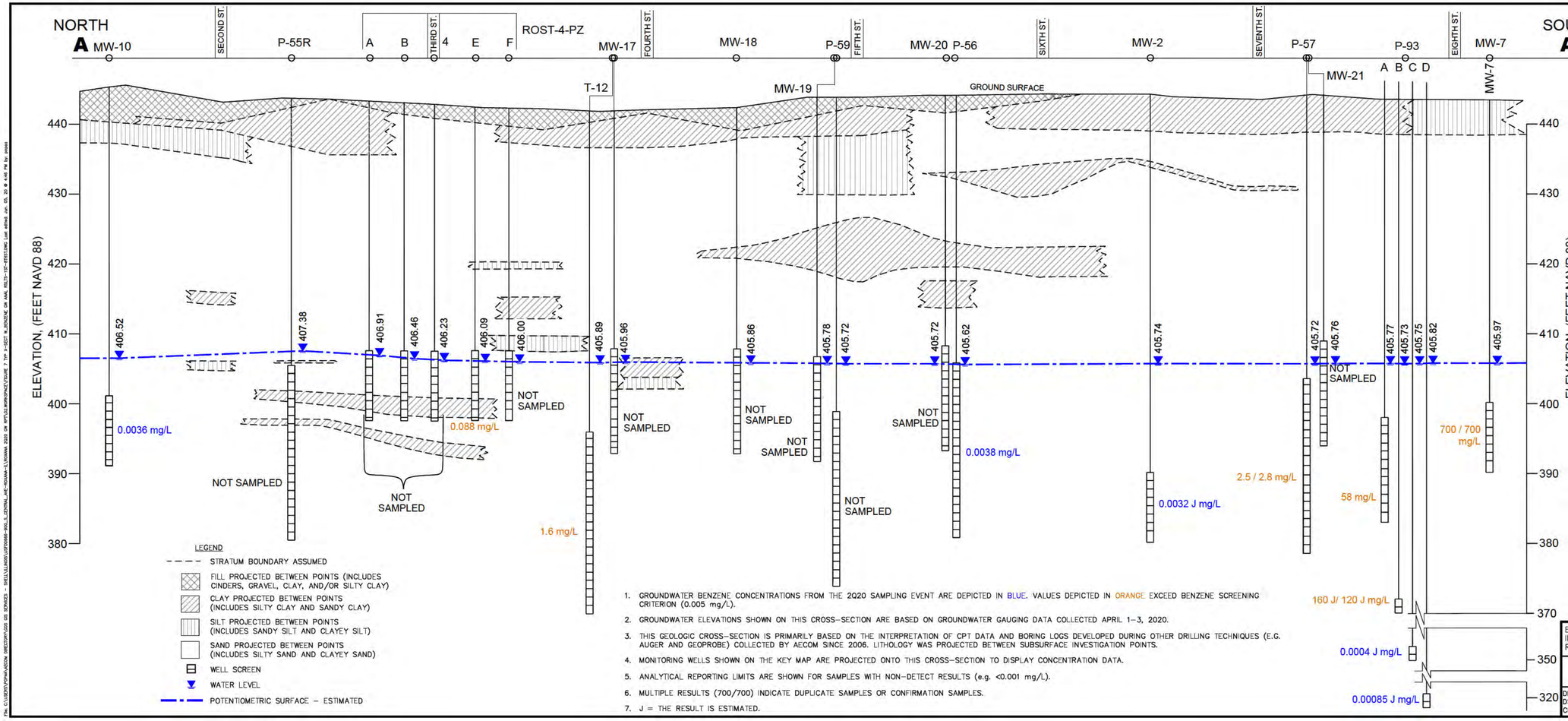
- GROUNDWATER MONITORING WELL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION NOT SAMPLED
- GROUNDWATER MONITORING WELL, LNAPL THICKNESS IN FEET
- GROUNDWATER PIEZOMETER LOCATION NOT SAMPLED
- GROUNDWATER PIEZOMETER, LNAPL THICKNESS IN FEET
- LNAPL THICKNESS (FEET)
- INDICATES THAT THE LNAPL 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:

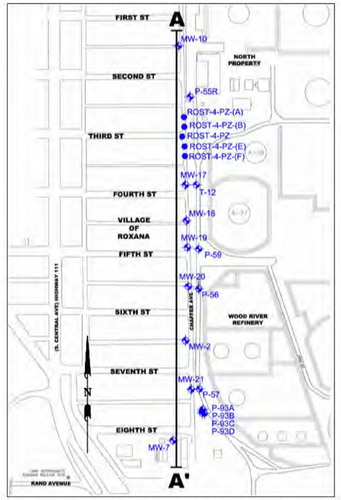
1. IMAGES GENERATED UTILIZING CTECH MINING VISUALIZATION SYSTEM MODELING SOFTWARE. CONCENTRATIONS BETWEEN KNOWN DATA POINTS (E.G. GROUNDWATER MONITORING WELLS) ARE INTERPOLATIONS AND EXTRAPOLATIONS OF THE MEASURED DATA. SOME INTERPRETATION WAS COMPLETED UTILIZING PROFESSIONAL JUDGEMENT AND CONTOUR LINES 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. 700/700) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
6. CONTOUR LINES IN AREA OF P-55 ADJUSTED BASED ON AVAILABLE 2Q20 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. 60619901
AECOM	
DRN. BY:gds July 2020 DSGN. BY:nm/mr CHKD. BY:mr/b3	2Q20 Dissolved Phase Benzene Concentrations in Groundwater FIG. NO. 6



1. GROUNDWATER BENZENE CONCENTRATIONS FROM THE 2Q20 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 APRIL 1–3, 2020.
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 (700/700) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.
7. J = THE RESULT IS ESTIMATED.



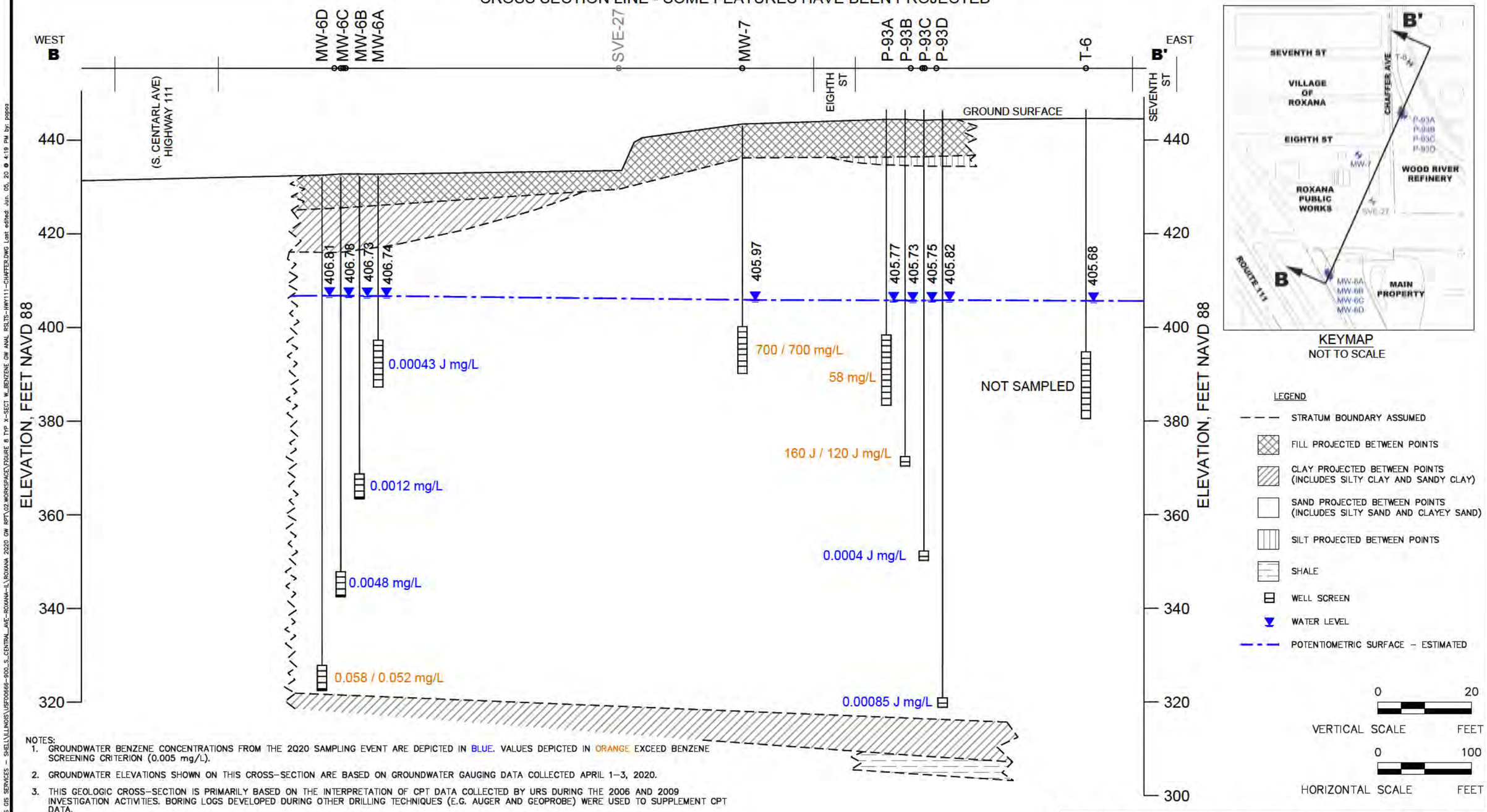
KEYMAP
NOT TO SCALE

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. 60619901
AECOM	
DRN. BY: gds July 2020 DSGN. BY: mr CHKD. BY: mr/b3	2Q20 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 2Q20 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 APRIL 1–3, 2020.
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 (700/700) INDICATE DUPLICATE SAMPLES OR CONFIRMATION SAMPLES.

EQUILON ENTERPRISES LLC dba SHELL OIL PRODUCTS US INTERIM GROUNDWATER MONITORING PROGRAM ROXANA, ILLINOIS	PROJECT NO. 60619901
AECOM	
DRN. BY:gds July 2020 DSGN. BY:mr CHKD. BY:mr/b3	2Q20 Cross-Section of Benzene Groundwater Analytical Results–Roxana Public Works Yard
	FIG. NO. 8

File: C:\USERS\POPMA\AECOM DIRECTORY\GIS SERVICES - SHELL\ILLINOIS\USFO0668-900_S_CENTRAL_AVE-ROXANA-IL\ROXANA 2020 GW RPT\02.WORKSPACE\FIGURE 8 TYP X-SECT W_BENZENE GW ANAL RSLTS-HWY111-CHAPTER.DWG Last edited: Jun. 05, 20 @ 4:19 PM by: popma

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 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).

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.

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).

Appendix B

Low Flow Groundwater Sampling Data Sheets

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: BJ Boteson, BJ Howell

DATE: 4/9/2020 WEATHER: Sunny 50°

MONITORING WELL ID: MW-1 SAMPLE ID: MW1-ROX-040920

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 53.80 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 59.13 ft	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): 36.54 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 48.80 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		
Water Column Height (not including NAPL): 22.59 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 3 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	0910	36.55	Clear	none	16.3	2.09	1.066 mS/cm uS/cm	6.09	163.4	16.32
300	0911	36.55			16.5	0.81	1.058 mS/cm uS/cm	6.38	153.5	14.55
600	0912	36.55			17.0	0.48	0.968 mS/cm uS/cm	6.59	142.8	16.25
900	0913				17.1	0.40	0.953 mS/cm uS/cm	6.65	139.0	16.05
1200	0914				17.3	0.33	0.950 mS/cm uS/cm	6.70	135.7	18.70
1500	0915				17.5	0.26	0.947 mS/cm uS/cm	6.75	132.9	20.37
1800	0916				17.6	0.23	0.945 mS/cm uS/cm	6.78	129.9	21.14
							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			

4/9

Start Time: 0910 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 0916 Average Purge Rate (mL/min): 300 Date Calibrated: 4/9/2020

SAMPLING DATA

Sample Date: 4/9/2020 Sample Time: 0925 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BTB BH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B Boksa, B. Howell

DATE: 4/ 8 /2020 WEATHER: Sunny 85°

MONITORING WELL ID: MW-2 SAMPLE ID: MW2-ROX- 040820

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	
Depth to Water (btoc): 37.69 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): 49.87 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 22.51 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

Volume of Flow Through Cell : 320* mL
Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Ambient PID/FID Reading: 0.0 ppm
Wellbore PID/FID Reading: 101.4 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

	STABLE: (over 3 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	1314	37.70	clear	moderate	20.8	2.19	1.161	mS/cm uS/cm	6.91	-90.5	9.69
300	1315	37.70			19.7	0.81	1.161	mS/cm uS/cm	6.80	-98.9	11.95
600	1316	37.70			19.5	0.50	1.158	mS/cm uS/cm	6.79	-103.4	14.35
900	1317				19.4	0.30	1.155	mS/cm uS/cm	6.79	-107.6	18.75
1200	1318				19.3	0.22	1.151	mS/cm uS/cm	6.80	-109.9	22.22
1500	1319				19.4	0.15	1.147	mS/cm uS/cm	6.80	-112.3	26.05
1800	1320				19.5	0.12	1.143	mS/cm uS/cm	6.81	-114.9	29.62
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

4/8/20

Start Time: 1314 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1320 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 8 /2020

SAMPLING DATA

Sample Date: 4/ 8 /2020 Sample Time: 1325 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BBBK

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: TS Burkson TS Howell

DATE: 4/ 8 /2020 WEATHER: Sunny 75°

MONITORING WELL ID: MW-3 SAMPLE ID: MW3-ROX- 040820

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	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 23.42 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
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): 34.67 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): 21.58 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1100	23.45	Clear	none	19.4	1.52	1.153 mS/cm uS/cm	6.58	-103.2	3.65
300	1101	23.45			18.8	0.60	1.160 mS/cm uS/cm	6.65	-113.9	4.00
600	1102	23.45			18.8	0.35	1.154 mS/cm uS/cm	6.70	-119.9	6.40
900	1103				18.8	0.28	1.151 mS/cm uS/cm	6.73	-122.9	5.03
1200	1104				19.0	0.26	1.142 mS/cm uS/cm	6.76	-123.9	4.22
1500	1105				19.3	0.23	1.140 mS/cm uS/cm	6.79	-129.1	4.15
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

RR 4/8/20

Start Time: 1100 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- KD101603

Stop Time: 1105 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 8 /2020

SAMPLING DATA

Sample Date: 4/ 8 /2020 Sample Time: 1110 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: TS TS BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Barteson, B. Howell

DATE: 4/ 6 /2020 WEATHER: Cloudy 55

MONITORING WELL ID: MW-4 SAMPLE ID: MW4-ROX- 040620

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
Total Well Depth (btoc): 55.39 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 34.92 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
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): 45.06 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 20.47 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0932	34.95	clear	moderate	16.7	6.44	1.453 mS/cm uS/cm	6.32	-51.1	19.22
300	0933	34.95			16.9	5.26	1.457 mS/cm uS/cm	6.41	-68.9	38.82
600	0934	34.95			17.0	4.50	1.457 mS/cm uS/cm	6.47	-79.8	31.95
900	0935				17.2	3.79	1.458 mS/cm uS/cm	6.52	-86.3	28.11
1200	0936				17.3	3.44	1.456 mS/cm uS/cm	6.55	-90.3	25.84
1500	0937				17.3	3.09	1.452 mS/cm uS/cm	6.58	-94.1	24.79
3000	0942				17.6	2.37	1.436 mS/cm uS/cm	6.64	-102.4	22.28
3300	0943				17.6	2.29	1.433 mS/cm uS/cm	6.64	-103.4	20.73
3600	0944				17.7	2.20	1.433 mS/cm uS/cm	6.65	-104.9	19.03
3900	0945				17.7	2.18	1.432 mS/cm uS/cm	6.66	-106.5	18.79
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/6/20

Start Time: 0932 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0945 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 6 /2020

SAMPLING DATA

Sample Date: 4/ 6 /2020 Sample Time: 0950 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: BTB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: TJ. Borlescon TJ. Howell

DATE: 4/13/2020 WEATHER: Sunny 90°

MONITORING WELL ID: MW-5 SAMPLE ID: MW5-ROX-041320

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 38.97 ft btoc	Volume of Flow Through Cell : 320* mL	
Total Well Depth (btoc): 44.30 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL	
Depth to Water (btoc): 23.11 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft			
Depth to Top of Screen (btoc): 33.97 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 21.19 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc		
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) — Monitor Temp. — +/-0.2 mg/L or +/-10% — +/-5% or +/-2 uS/cm — +/-0.2 mg/L — +/-20 mV — Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1040	23.12	Clear	none	15.9	2.24	0.940 mS/cm uS/cm	6.54	20.0	12.99
300	1041	23.12			15.7	1.13	0.949 mS/cm uS/cm	6.56	-13.2	11.75
600	1042	23.12			15.7	0.64	0.949 mS/cm uS/cm	6.59	-32.5	12.66
900	1043				15.9	0.46	0.950 mS/cm uS/cm	6.63	-52.4	14.69
1200	1044				16.0	0.38	0.950 mS/cm uS/cm	6.65	-63.9	16.58
1500	1045				16.0	0.32	0.950 mS/cm uS/cm	6.65	-70.2	18.52
1800	1046				16.1	0.30	0.950 mS/cm uS/cm	6.66	-77.7	20.88
2100	1047				16.2	0.25	0.952 mS/cm uS/cm	6.67	-82.6	23.39
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1040 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1047 Average Purge Rate (mL/min): 300 Date Calibrated: 4/13/2020

SAMPLING DATA

Sample Date: 4/13/2020 Sample Time: 1055 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: TJB BA

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: TS Butescu, TB Howell

DATE: 4/13/2020 WEATHER: Sunny 45°

MONITORING WELL ID: MW-6A SAMPLE ID: MW6A-ROX-041320

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
Total Well Depth (btoc): 44.18 ft	
Depth to Water (btoc): 25.14 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): 33.85 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
Screen Length: 10 ft	
Water Column Height (not including NAPL): 19.04 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1200	25.15	Clear	none	15.5	3.08	0.937 mS/cm uS/cm	6.57	-40.8	22.58
300	1201	25.15			15.4	2.43	0.978 mS/cm uS/cm	6.52	-48.1	26.59
600	1202	25.15			16.1	1.42	0.997 mS/cm uS/cm	6.50	-57.6	30.02
900	1203				16.4	0.87	1.017 mS/cm uS/cm	6.50	-64.8	33.34
1200	1204				16.9	0.62	1.031 mS/cm uS/cm	6.50	-71.6	35.58
1500	1205				17.1	0.54	1.038 mS/cm uS/cm	6.50	-75.6	37.02
1800	1206				17.3	0.47	1.040 mS/cm uS/cm	6.50	-79.6	40.2
2100	1207				17.3	0.43	1.040 mS/cm uS/cm	6.52	-83.1	42.50
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/13/20

Start Time: 1200 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1207 Average Purge Rate (mL/min): 300 Date Calibrated: 4/13/2020

SAMPLING DATA

Sample Date: 4/13/2020 Sample Time: 1215 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TSB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Dotson B. Howell

DATE: 4/17/2020 WEATHER: Sunny 45°

MONITORING WELL ID: MW-6B SAMPLE ID: MW6B-ROX-041320

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): 25.19 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 (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Screen Length: 5 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	
Water Column Height (not including NAPL): 44 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) — Monitor Temp. — +/-0.2 mg/L or +/-10% — +/-5% or +/-2 uS/cm — +/-0.2 mg/L — +/-20 mV — Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1245	25.20	Clear	none	18.1	2.96	0.753 mS/cm uS/cm	6.58	-4.9	6.13
300	1246	25.20			17.9	1.48	0.786 mS/cm uS/cm	6.59	-14.5	5.93
600	1247	25.20			17.6	0.92	0.796 mS/cm uS/cm	6.83	-24.6	6.03
900	1248				17.5	0.68	0.800 mS/cm uS/cm	6.84	-32.2	5.92
1200	1249				17.5	0.58	.800 mS/cm uS/cm	6.85	-37.8	4.86
1500	1250				17.5	0.47	0.800 mS/cm uS/cm	6.86	-45.9	4.22
1800	1251				17.7	0.44	0.800 mS/cm uS/cm	6.86	-50.1	3.91
2100	1252				17.8	0.40	0.800 mS/cm uS/cm	6.88	-58.2	3.61
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/15

Start Time: 1245 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1252 Average Purge Rate (mL/min): 300 Date Calibrated: 4/13 /2020

SAMPLING DATA

Sample Date: 4/17/2020 Sample Time: 1255 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BSB

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 2Q20 GW **PROJECT NUMBER:** 60619901 - 1.03.002 **FIELD PERSONNEL:** B. Buteson B. Howell

DATE: 4/13/2020 **WEATHER:** Sunny 45°

MONITORING WELL ID: MW-6C **SAMPLE ID:** MW6C-ROX- 041320

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	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): 24.88 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 84.95 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 5 ft		
Water Column Height (not including NAPL): 65.3 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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)
~~4/13 315~~ 0	1315	24.97	Clear	none	17.1	5.57	0.620 mS/cm uS/cm	7.15	7.2	11.12
300	1316	24.97			17.5	4.60	0.639 mS/cm uS/cm	7.02	-4.8	9.69
600	1317	24.97			17.9	2.47	0.641 mS/cm uS/cm	6.98	-30.6	9.64
900	1318				17.9	1.73	0.642 mS/cm uS/cm	6.98	-44.9	9.54
1200	1319				18.0	1.24	0.642 mS/cm uS/cm	6.99	-57.3	9.54
1500	1320				18.0	1.11	0.641 mS/cm uS/cm	7.00	-66.9	9.89
1800	1321				18.0	0.86	0.641 mS/cm uS/cm	7.01	-73.0	10.0
2100	1322				18.0	0.79	0.640 mS/cm uS/cm	7.02	-79.7	10.23
2400	1323				18.0	0.70	0.640 mS/cm uS/cm	7.02	-84.2	10.53
2700	1324				18.0	0.68	0.640 mS/cm uS/cm	7.02	-90.5	10.85
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

BB 4/13/20

Start Time: 1315 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1324 Average Purge Rate (mL/min): 300 Date Calibrated: 4/13/2020

SAMPLING DATA

Sample Date: 4/13/2020 Sample Time: 1330 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: D Bateson, B. Howell

DATE: 4/ 13 /2020 WEATHER: Sunny 45°

MONITORING WELL ID: MW-6D SAMPLE ID: MW6D-ROX-041320

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 107.22 ft btoc
Total Well Depth (btoc): 110.05 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 24.85 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
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): 104.72 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 5 ft	
Water Column Height (not including NAPL): 85.2 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
		STABLE: (over 3 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	1350	24.86	clear	none	17.0	5.73	0.775	mS/cm uS/cm	7.11	10.6	9.55
300	1351	24.86			17.4	2.74	0.867	mS/cm uS/cm	6.97	-2.3	22.90
600	1352	24.86			17.4	0.98	0.899	mS/cm uS/cm	6.93	-31.5	44.65
900	1353				17.7	0.79	0.899	mS/cm uS/cm	6.94	-56.3	64.00
1200	1354				17.6	0.74	0.900	mS/cm uS/cm	6.95	-66.5	63.00
1500	1355				17.6	0.62	0.900	mS/cm uS/cm	7.00	-77.1	65.08
1800	1356				17.2	0.60	0.900	mS/cm uS/cm	6.99	-85.8	50.92
2100	1357				16.8	0.55	0.900	mS/cm uS/cm	7.00	-54.9	49.94
2400	1358				16.8	0.50	0.900	mS/cm uS/cm	7.00	-93.2	48.98
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

4/13/20

Start Time: 1350 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1358 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 13 /2020

SAMPLING DATA

Sample Date: 4/ 13 /2020 Sample Time: 1405 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: BTBTSH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: JBurkso JHowell

DATE: 4/ 6 /2020 WEATHER: ~~Sunny~~ JB 4/6 Sunny 64°

MONITORING WELL ID: MW-7 SAMPLE ID: MW7-ROX- 040620

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	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): 36.84 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Wellbore PID/FID Reading: 64.88 ppm
Depth to Top of Screen (btoc): 42.92 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): 16.08 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	~~Clear~~ DB 4/6 36.87	~~Strong~~ DB 4/6	Strong	18.7	5.00	1.567	mS/cm uS/cm	6.80	-62.1	63.00
300	1311	36.87	Clear		18.4	3.68	1.572	mS/cm uS/cm	6.74	-67.1	61.50
600	1312	36.87			18.2	3.22	1.570	mS/cm uS/cm	6.72	-68.6	58.85
2100	1317				18.4	1.79	1.564	mS/cm uS/cm	6.68	-76.8	43.32
2400	1318				18.4	1.68	1.563	mS/cm uS/cm	6.68	-77.6	43.89
2700	1319				18.3	1.64	1.562	mS/cm uS/cm	6.68	-78.2	41.74
3000	1320				18.4	1.57	1.560	mS/cm uS/cm	6.68	-78.9	39.62
3300	1321				18.4	1.50	1.560	mS/cm uS/cm	6.68	-79.5	39.81
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1310 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1321 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 6 /2020

SAMPLING DATA

Sample Date: 4/ 6 /2020 Sample Time: 1325 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: JBJBA

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B Johnson / B Howell

DATE: 4/ 6 /2020 WEATHER: Cloudy 60°

MONITORING WELL ID: MW-8 SAMPLE ID: MW8-ROX- 040620

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
Total Well Depth (btoc): 43.60 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 27.70 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 33.60 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): 18.9 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: 62.9 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 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	1206	27.73	Clear	Strong	18.0	5.99	1.600 mS/cm uS/cm	6.80	-110.5	2.60
300	1207				18.1	5.17	1.650 mS/cm uS/cm	6.79	-116.2	2.68
600	1208				18.0	4.52	1.680 mS/cm uS/cm	6.80	-119.9	2.65
900	1209				18.0	3.85	1.693 mS/cm uS/cm	6.80	-125.2	3.07
1200	1210				18.1	3.48	1.698 mS/cm uS/cm	6.81	-127.4	3.17
1500	1211				18.2	3.37	1.700 mS/cm uS/cm	6.81	-130.9	3.21
3000	1216				18.4	2.38	1.706 mS/cm uS/cm	6.81	-135.6	3.35
3300	1217				18.5	2.31	1.706 mS/cm uS/cm	6.81	-136.2	3.22
3600	1218				18.5	2.23	1.709 mS/cm uS/cm	6.81	-137.3	3.84
3900	1219				18.4	2.13	1.711 mS/cm uS/cm	6.81	-137.9	3.67
4200	1220				18.5	2.11	1.710 mS/cm uS/cm	6.82	-138.6	3.55
4500	1221				18.5	2.08	1.710 mS/cm uS/cm	6.82	-139.1	3.81
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/6/20

Start Time: 1206 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1221 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 6 /2020

SAMPLING DATA

Sample Date: 4/ 6 /2020 Sample Time: 1230 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BK

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burkso B. Howell

DATE: 4/ 10 /2020 WEATHER: Sunny 50°

MONITORING WELL ID: MW-9 SAMPLE ID: MW9-ROX- 041020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 51.04 ft btoc
Total Well Depth (btoc): 56.37 ft	
Depth to Water (btoc): 38.51 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 46.04 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 17.86 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 3 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	1230	38.54	Clear	none	15.8	2.12	1.620 mS/cm uS/cm	7.03	-15.0	11.73
300	1231	38.54			15.9	1.45	1.664 mS/cm uS/cm	6.88	-28.8	9.33
600	1232	38.54			16.2	0.82	1.700 mS/cm uS/cm	6.81	-33.2	9.16
900	1233				16.4	0.57	1.717 mS/cm uS/cm	6.77	-40.6	8.30
1200	1234				16.5	0.49	1.726 mS/cm uS/cm	6.75	-43.8	7.65
1500	1235				16.5	0.44	1.729 mS/cm uS/cm	6.74	-48.1	7.55
1800	1236				16.6	0.37	1.733 mS/cm uS/cm	6.73	-49.2	7.69
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/10/20

Start Time: 1230 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1236 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 10 /2020

SAMPLING DATA

Sample Date: 4/ 10 /2020 Sample Time: 1245 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Jokson, T. Harrell

DATE: 4/10/2020 WEATHER: Sunny 50°

MONITORING WELL ID: MW-10 SAMPLE ID: MW10-ROX-041020

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
Total Well Depth (btoc): 54.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 38.59 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 44.43 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 10 ft	Volume of Flow Through Cell: 320* mL
Water Column Height (not including NAPL): 16.17 ft	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
	Ambient PID/FID Reading: 0.0 ppm
	Wellbore PID/FID Reading: 0.0 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	38.63	clear	none	16.7	2.49	1.126 ~~mS/cm~~ uS/cm	6.95	-39.8	40.79
300	1311	38.63			16.7	1.50	1.132 mS/cm uS/cm	6.88	-49.1	39.89
600	1312	38.63			16.7	1.08	1.138 mS/cm uS/cm	6.87	-59.9	37.06
900	1313				16.8	0.71	1.140 mS/cm uS/cm	6.86	-70.8	34.50
1200	1314				16.8	0.51	1.140 mS/cm uS/cm	6.87	-80.7	31.22
1500	1315				17.0	0.41	1.138 mS/cm uS/cm	6.87	-80.6	27.72
1800	1316				17.1	0.35	1.139 mS/cm uS/cm	6.88	-90.0	26.79
2100	1317				17.2	0.29	1.139 mS/cm uS/cm	6.88	-95.8	26.89
2400	1318				17.3	0.22	1.139 mS/cm uS/cm	6.89	-100.2	25.58
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1310 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1318 Average Purge Rate (mL/min): 300 Date Calibrated: 4/10/2020

SAMPLING DATA

Sample Date: 4/10/2020 Sample Time: 1325 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BBBH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B Bolson, D. Howell

DATE: 4/ 9 /2020 WEATHER: Sunny 60°

MONITORING WELL ID: MW-11 SAMPLE ID: MW11-ROX- 040920

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
Total Well Depth (btoc): 51.99 ft	
Depth to Water (btoc): 36.02 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 41.66 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 15.97 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 3 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	1248	36.04	clear	none	16.6	2.21	1.346 mS/cm uS/cm	6.69	-4.3	13.1
300	1249	36.04			16.7	0.95	1.370 mS/cm uS/cm	6.67	-25.9	9.77
600	1250	36.04			16.8	0.65	1.382 mS/cm uS/cm	6.69	-36.6	7.68
900	1251				16.9	0.45	1.392 mS/cm uS/cm	6.71	-47.7	6.37
1200	1252				17.1	0.33	1.399 mS/cm uS/cm	6.74	-57.1	5.94
1500	1253				17.1	0.27	1.400 mS/cm uS/cm	6.75	-63.3	6.05
1800	1254				17.1	0.25	1.400 mS/cm uS/cm	6.76	-66.7	6.40
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: 1248 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1254 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 9 /2020

SAMPLING DATA

Sample Date: 4/ 9 /2020 Sample Time: 1300 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: BB BH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B Burkson D. Howell

DATE: 4/ 8 /2020 WEATHER: Sunny 85°

MONITORING WELL ID: MW-12 SAMPLE ID: MW12-ROX- 041020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 46.92 ft btoc
Total Well Depth (btoc): 52.25 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Water (btoc): 36.20 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
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): 41.92 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): 16.05 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1205	36.24	Clear	none	19.2	1.12	0.841 mS/cm uS/cm	7.09	-41.0	7.53
300	1206	36.24			18.6	0.58	0.843 mS/cm uS/cm	6.98	-38.5	8.61
600	1207	36.24			18.4	0.34	0.845 mS/cm uS/cm	6.93	-35.6	10.63
900	1208				18.5	0.21	0.846 mS/cm uS/cm	6.92	-33.1	12.57
1200	1209				18.4	0.17	0.846 mS/cm uS/cm	6.92	-31.6	14.31
1500	1210				18.5	0.12	0.846 mS/cm uS/cm	6.92	-30.1	16.08
1800	1211				18.5	0.11	0.846 mS/cm uS/cm	6.92	-29.2	17.52
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/8/20

Start Time: 1205 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1211 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 8 /2020

SAMPLING DATA

Sample Date: 4/ 8 /2020 Sample Time: 1215 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: BBBB

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 2Q20 GW | PROJECT NUMBER: 60619901 - 1.03.002 | FIELD PERSONNEL: TJ. Barkson, D. Howell

DATE: 4/ 8 /2020 | WEATHER: Sunny 72° TSB 4/8 60°

MONITORING WELL ID: MW-13 | SAMPLE ID: MW13-ROX- 040820

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 29.9 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 35.05 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 22.75 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: TSB 4/8 ~~0.0~~ 1.2 ppm
Depth to Top of Screen (btoc): 24.80 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.30 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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)
TSB 4/8 0	~~1111~~	~~22.76~~	TSB 4/7 ~~Clear~~ cloudy	none	~~20.2~~	~~1.46~~	~~1.034~~ mS/cm uS/cm	~~6.54~~	~~-97.3~~	
~~1500~~	~~1116~~						mS/cm uS/cm			
0	0837	22.77	clear	none	18.9	1.31	1.075 mS/cm uS/cm	6.09	-38.1	40.69
1000	0842	22.77			19.5	0.14	1.002 mS/cm uS/cm	6.44	-103.2	21.96
1800	0843	22.77			19.5	0.10	1.001 mS/cm uS/cm	6.46	-106.5	20.87
2100	0844				19.6	0.09	1.001 mS/cm uS/cm	6.47	-108.5	19.30
2400	0845				19.6	0.07	1.000 mS/cm uS/cm	6.49	-110.6	19.52
							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			

4/8/20

Start Time: 0837 | Elapsed Time (min): 8 | Water Quality Meter ID & SN: YSI ProDSS TSB 4/8 ~~18L0194D~~ 19D101603

Stop Time: 0845 | Average Purge Rate (mL/min): 300 | Date Calibrated: 4/ 8 /2020

SAMPLING DATA

Sample Date: 4/ 8 /2020 | Sample Time: 0850 | Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow | Sample Flow Rate (mL/min): 300 | QA/QCSamples: TSB 4/7 ~~EB~~ NA

VOA Vials, No Headspace ☒ Initials: TSB BH

COMMENTS:

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

YSI failure 4/7/20 task manager ordered new YSI will sample well 4/8/20

Estimated Total Purge Volume: 2400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: D. Burleson B. Howell

DATE: 4/14/2020 WEATHER: Sunny 40°

MONITORING WELL ID: MW-14 SAMPLE ID: MW14-ROX-041420

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	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): 27.28 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	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 75.4 ppm
Depth to Top of Screen (btoc): 33.42 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): 16.72 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	0950	27.31	Clear	moderate	15.8	2.43	1.227 mS/cm uS/cm	6.05	54.2	5.02
300	0951	27.31			16.5	1.45	1.225 mS/cm uS/cm	6.19	64.0	4.57
600	0952	27.31			16.8	0.78	1.238 mS/cm uS/cm	6.28	46.7	4.44
900	0953				16.8	0.58	1.232 mS/cm uS/cm	6.35	30.8	4.47
1200	0954				17.2	0.44	1.230 mS/cm uS/cm	6.39	16.0	4.85
1500	0955				17.7	0.34	1.229 mS/cm uS/cm	6.42	5.1	5.22
1800	0956				17.7	0.29	1.227 mS/cm uS/cm	6.45	-7.3	5.61
2100	0957				17.5	0.27	1.226 mS/cm uS/cm	6.48	-16.4	5.89
2400	0958				17.8	0.22	1.223 mS/cm uS/cm	6.50	-27.8	6.10
2700	0959				17.6	0.19	1.223 mS/cm uS/cm	6.52	-37.7	7.07
3000	1000				17.7	0.17	1.219 mS/cm uS/cm	6.54	-42.7	6.93
3300	1001				18.0	0.15	1.218 mS/cm uS/cm	6.54	-45.2	6.99
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/14/20

Start Time: 0950 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1001 Average Purge Rate (mL/min): 300 Date Calibrated: 4/14/2020

SAMPLING DATA

Sample Date: 4/14/2020 Sample Time: 1005 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BJS BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Bokson, B. Howell

DATE: 4/ 13 /2020 WEATHER: Sunny 400

MONITORING WELL ID: MW-16 SAMPLE ID: MW16-ROX- 041320

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 47.75 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 41.69 ft btoc
Depth to Water (btoc): 37.64 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
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to Top of Screen (btoc): 37.50 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.11 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1000	37.67	clear	none	13.9	1.93	1.235 mS/cm uS/cm	6.38	192.1	29.77
300	1001	37.67			14.4	1.08	1.220 mS/cm uS/cm	6.41	184.0	20.99
600	1002	37.67			14.5	0.85	1.226 mS/cm uS/cm	6.44	178.2	13.44
900	1003				14.9	0.70	1.231 mS/cm uS/cm	6.46	173.2	11.17
1200	1004				15.0	0.58	1.238 mS/cm uS/cm	6.48	169.6	8.90
1500	1005				14.8	0.52	1.243 mS/cm uS/cm	6.51	166.2	7.80
1800	1006				14.6	0.52	1.245 mS/cm uS/cm	6.53	163.5	6.10
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/13/20

Start Time: 1000 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1006 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 13 /2020

SAMPLING DATA

Sample Date: 4/ 17 /2020 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: NA

VOA Vials, No Headspace ☑ Initials: BBBH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW | PROJECT NUMBER: 60619901 - 1.03.002 | FIELD PERSONNEL: B. Bjorkson B. Howell

DATE: 4/15/2020 | WEATHER: Sunny 45°

MONITORING WELL ID: MW-22 | SAMPLE ID: MW22-ROX- 041520

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 45.43 ft btoc
Total Well Depth (btoc): 48.68 ft	
Depth to Water (btoc): 36.30 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): NF ft	
Depth to Top of Screen (btoc): 38.43 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 12.38 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0822	36.32	clear	slight	15.9	1.76	1.170 mS/cm uS/cm	6.24	148.4	21.05
300	0823	36.32			16.8	1.10	1.169 mS/cm uS/cm	6.32	134.2	20.85
600	0824	36.32			17.2	0.76	1.171 mS/cm uS/cm	6.40	119.2	20.52
900	0825				17.6	0.55	1.174 mS/cm uS/cm	6.45	109.5	19.94
1200	0826				17.6	0.42	1.176 mS/cm uS/cm	6.51	98.9	21.73
1500	0827				17.4	0.37	1.176 mS/cm uS/cm	6.59	80.2	21.64
1800	0828				17.4	0.37	1.171 mS/cm uS/cm	6.62	71.9	21.09
2100	0829				17.2	0.35	1.173 mS/cm uS/cm	6.64	62.9	21.09
2400	0830				17.5	0.29	1.173 mS/cm uS/cm	6.66	55.6	21.32
2700	0831				17.6	0.25	1.173 mS/cm uS/cm	6.67	53.9	22.73
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

BB BH 4/15/20

Start Time: 0822 | Elapsed Time (min): 9 | Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 0831 | Average Purge Rate (mL/min): 300 | Date Calibrated: 4/15/2020

SAMPLING DATA

Sample Date: 4/15/2020 | Sample Time: 0835 | Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BB BH

COMMENTS:

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

Estimated Total Purge Volume: 2760 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burleson TS. Howell

DATE: 4/ 8 /2020 WEATHER: Sunny 75°

MONITORING WELL ID: MW-23 SAMPLE ID: MW23-ROX- 040820

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 24.02 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 39.27 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): 24.30 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): ND ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 29.02 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		
Water Column Height (not including NAPL): 14.97 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1011	22.33	clear	none	19.5	2.29	0.904 mS/cm uS/cm	6.47	-46.5	99.23
1500	1016	22.32			19.2	0.23	0.910 mS/cm uS/cm	6.63	-80.4	41.20
1800	1017	22.32			19.3	0.18	0.910 mS/cm uS/cm	6.65	-82.9	37.15
2100	1018	22.32			19.4	0.13	0.910 mS/cm uS/cm	6.66	-85.8	31.63
2400	1019	⊥	⊥	⊥	19.3	0.10	0.910 mS/cm uS/cm	6.67	-88.1	30.31
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/8/20

Start Time: 1011 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1019 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 8 /2020

SAMPLING DATA

Sample Date: 4/ 8 /2020 Sample Time: 1025 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BBH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: TJ. Burteson TJ. Howell

DATE: 4/ 9 /2020 WEATHER: Sunny 50°

MONITORING WELL ID: MW-24 SAMPLE ID: MW24-ROX- 040920

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	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): 37.28 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 39.61 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc	
Screen Length: 10 ft		
Water Column Height (not including NAPL): 12.58 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1025	37.30	Clear	none	17.1	1.20	0.974 mS/cm uS/cm	6.78	130.5	32.00
300	1026	37.30			17.0	0.82	0.973 mS/cm uS/cm	6.83	129.4	26.70
600	1027	37.30			17.1	0.63	0.973 mS/cm uS/cm	6.85	128.3	21.58
900	1028				17.2	0.50	0.973 mS/cm uS/cm	6.87	127.4	17.07
1200	1029				17.3	0.43	0.972 mS/cm uS/cm	6.87	126.4	13.02
1500	1030				17.5	0.33	0.972 mS/cm uS/cm	6.87	126.0	11.58
1800	1031				17.6	0.31	0.971 mS/cm uS/cm	6.87	125.6	10.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/9/20

Start Time: 1025 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 17D101603

Stop Time: 1031 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 9 /2020

SAMPLING DATA

Sample Date: 4/ 9 /2020 Sample Time: 1040 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BBBH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Barkson B. Howell

DATE: 4/ 6 /2020 WEATHER: Cloudy 60°

MONITORING WELL ID: MW-25 SAMPLE ID: MW25-ROX- 040620

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	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): 32.00 ft		Ambient PID/FID Reading: 0.0 ppm	
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Wellbore PID/FID Reading: 150.1 ppm	
Depth to Top of Screen (btoc): 35.59 ft			
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): 13.84 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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)	4/6 Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	~~0937~~ 1037	32.02	Clear	moderate	16.7	6.92	0.976 mS/cm uS/cm	6.84	-103.9	4.11
300	~~0938~~ 1038				17.0	5.49	0.990 mS/cm uS/cm	6.80	-107.9	3.91
600	~~0939~~ 1039				16.9	4.84	0.999 mS/cm uS/cm	6.79	-109.9	4.11
900	~~0940~~ 1040				17.0	4.40	1.002 mS/cm uS/cm	6.79	-111.5	5.11
1200	~~0941~~ 1041				17.0	4.01	1.005 mS/cm uS/cm	6.79	-113.0	6.28
2700	~~0946~~ 1046				17.8	2.55	1.011 mS/cm uS/cm	6.82	-121.5	9.90
3000	~~0947~~ 1047				17.9	2.45	1.010 mS/cm uS/cm	6.83	-122.6	10.80
3300	~~0948~~ 1048				17.9	2.33	1.013 mS/cm uS/cm	6.83	-123.8	12.05
3600	~~0949~~ 1049				18.0	2.21	1.013 mS/cm uS/cm	6.84	-125.7	13.54
3900	~~0950~~ 1050				18.0	2.10	1.013 mS/cm uS/cm	6.85	-126.9	14.38
4200	~~0951~~ 1051				18.1	2.03	1.013 mS/cm uS/cm	6.85	-127.9	15.49
4500	~~0952~~ 1052				18.2	2.02	1.014 mS/cm uS/cm	6.88	-128.9	17.18
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: ~~0937~~ 1037 Elapsed Time (min): 15 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: ~~0952~~ 1052 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 6 /2020

SAMPLING DATA

Sample Date: 4/ 6 /2020 Sample Time: 1100 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burkson, D. Howell

DATE: 4/10/2020 WEATHER: Sunny 40°

MONITORING WELL ID: MW-26 SAMPLE ID: MW26-ROX-041020

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	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): 34.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 38.15 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): 13.57 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	0902	34.86	clear	none	14.2	2.78	1.453 mS/cm uS/cm	6.38	209.0	11.70
300	0903	34.86			16.2	1.45	1.497 mS/cm uS/cm	6.47	195.5	9.57
600	0904	34.86			17.1	1.12	1.512 mS/cm uS/cm	6.52	189.1	10.09
900	0905				17.3	0.99	1.520 mS/cm uS/cm	6.56	184.6	8.98
1200	0906				17.5	0.85	1.522 mS/cm uS/cm	6.60	178.4	9.16
1500	0907				17.5	0.78	1.518 mS/cm uS/cm	6.62	174.0	8.75
1800	0908				17.7	0.73	1.516 mS/cm uS/cm	6.63	171.8	8.52
2100	0909				17.6	0.70	1.514 mS/cm uS/cm	6.64	170.1	8.33
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/10/20

Start Time: 0902 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 0909 Average Purge Rate (mL/min): 300 Date Calibrated: 4/10/2020

SAMPLING DATA

Sample Date: 4/10/2020 Sample Time: 0915 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: TJ, TJ Watson TS, Howell

DATE: 4/ 10 /2020 WEATHER: Sunny 40°

MONITORING WELL ID: MW-27 SAMPLE ID: MW27-ROX- 041020

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 44.79 ft btoc	Volume of Flow Through Cell : 320* mL
Total Well Depth (btoc): 50.04 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): 36.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc	Wellbore PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 39.79 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): 13.22 ft		

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	36.93	clear	none	14.8	4.73	0.815 mS/cm uS/cm	7.29	25.4	14.34
300	1054	36.93			15.3	4.24	0.820 mS/cm uS/cm	7.16	26.2	17.30
600	1055	36.93			15.7	4.04	0.821 mS/cm uS/cm	7.08	26.8	22.98
900	1056				15.9	3.97	0.821 mS/cm uS/cm	7.04	27.4	24.69
1200	1057				16.0	3.93	0.819 mS/cm uS/cm	7.02	28.0	24.47
1500	1058				16.0	3.88	0.818 mS/cm uS/cm	7.00	28.4	24.41
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

TJ TS 4/10/20

Start Time: 1053 Elapsed Time (min): 5 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1058 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 10 /2020

SAMPLING DATA

Sample Date: 4/ 10 /2020 Sample Time: 1105 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJB TSH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Bobson D. Howell

DATE: 4/ 16 /2020 WEATHER: Sunny 45°

MONITORING WELL ID: MW-28 SAMPLE ID: MW28-ROX- 041620

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): 43.86 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.06 ft btoc
Depth to Water (btoc): 36.25 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
Depth to LNAPL/DNAPL (btoc): NF ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 33.61 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): 7.62 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	0942	36.30	clear	none	14.9	1.51	1.506 mS/cm uS/cm	6.31	127.6	34.29
300	0943	36.30			15.4	0.96	1.493 mS/cm uS/cm	6.31	119.1	35.24
600	0944	36.30			15.7	0.77	1.494 mS/cm uS/cm	6.34	107.4	29.24
900	0945				16.2	0.46	1.505 mS/cm uS/cm	6.37	101.3	28.77
1200	0946				16.8	0.35	1.511 mS/cm uS/cm	6.39	91.1	30.79
1500	0947				16.9	0.28	1.511 mS/cm uS/cm	6.40	86.4	29.65
1800	0948				17.0	0.26	1.511 mS/cm uS/cm	6.42	82.5	27.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0942 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 0948 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 16 /2020

SAMPLING DATA

Sample Date: 4/ 16 /2020 Sample Time: 0955 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: DS 4/15 ~~EB~~ N/A

VOA Vials, No Headspace ☒ Initials: BDSH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burleson, D. Howell

DATE: 4/ 9 /2020 WEATHER: Sunny 60°

MONITORING WELL ID: P-54 SAMPLE ID: P54-ROX-040920

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): 63.00 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 35.94 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 43.00 ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 38.00 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: 25 ft	
Water Column Height (not including NAPL): 27.06 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1107	35.97	clear	none	16.6	5.33	1.039 mS/cm uS/cm	6.69	122.6	5.70
300	1108	35.97			16.8	4.08	1.080 mS/cm uS/cm	6.90	121.8	5.11
600	1109	35.97			17.0	3.69	1.114 mS/cm uS/cm	6.87	121.3	4.89
900	1110				17.2	3.35	1.134 mS/cm uS/cm	6.85	120.8	4.83
1200	1111				17.2	3.22	1.143 mS/cm uS/cm	6.85	120.5	4.96
1500	1112				17.3	3.06	1.150 mS/cm uS/cm	6.84	119.9	5.07
3000	1117				18.0	2.50	1.161 mS/cm uS/cm	6.83	117.2	6.17
3300	1118				18.0	2.45	1.161 mS/cm uS/cm	6.83	116.9	6.89
3600	1119				18.0	2.37	1.157 mS/cm uS/cm	6.83	116.5	7.31
3900	1120				18.0	2.30	1.155 mS/cm uS/cm	6.83	116.1	8.12
							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: 1107 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1120 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 9 /2020

SAMPLING DATA

Sample Date: 4/ 9 /2020 Sample Time: 1125 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burks B. Howell

DATE: 4/17/2020 WEATHER: Cloudy 40°

MONITORING WELL ID: P-55R SAMPLE ID: P55R-ROX- P55R-WRR- 041720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 50.68 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 37.11 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
Depth to LNAPL/DNAPL (btoc): 37.07 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): 40.43 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): — 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: 69.9 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) — Monitor Temp. — +/-0.2 mg/L or +/-10% — +/-5% or +/-2 uS/cm — +/-0.2 mg/L — +/-20 mV — Monitor Turb Readings (<50)

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

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

Stop Time: — Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/2020

SAMPLING DATA

Sample Date: 4/17/2020 Sample Time: — Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BBBK

COMMENTS:

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

presence of LNAPL and inability to sample

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Tony Jones Joe Mayer

DATE: 4/16/2020 WEATHER: Sunny 48°F

MONITORING WELL ID: P56 SAMPLE ID: P56-ROX-041620-55 P56-WRR- 041620-55

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc
Total Well Depth (btoc): 65.82 ft	
Depth to Water (btoc): 40.49 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	
Depth to Top of Screen (btoc): 40.82 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): 45.82 ft btoc
Screen Length: 25 ft	
Water Column Height (not including NAPL): 25.33 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: 66.3 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 3 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	1204	40.49	clear	~~strong~~ slight	17.5	5.79	996 mS/cm uS/cm	7.22 ~~6.93~~	-126.7	13.41
300	1205	40.49			17.6	2.89	1018 mS/cm uS/cm	7.21	-142.4	11.66
600	1206	40.49			17.6	2.17	1030 mS/cm uS/cm	7.21	-145.6	11.44
900	1207	40.49			17.7	1.84	1028 mS/cm uS/cm	7.20	-148.6	10.46
1200	1208				18.0	1.58	1029 mS/cm uS/cm	7.20	-154.2	9.82
1500	1209				18.4	1.26	1031 mS/cm uS/cm	7.20	-156.7	9.20
1800	1210				18.7	1.14	1031 mS/cm uS/cm	7.20	-159.7	8.88
2100	1211				18.7	1.04	1031 mS/cm uS/cm	7.20	-161.7	8.78
2400	1212				18.6	0.96	1030 mS/cm uS/cm	7.19	-163.6	8.52
2700	1213				18.5	0.90	1027 mS/cm uS/cm	7.19	-164.4	8.34
3000	1214				18.4	0.86	1026 mS/cm uS/cm	7.19	-165.0	8.08
3300	1215				18.4	0.81	1026 mS/cm uS/cm	7.19	-165.6	7.96
3600	1216				18.5	0.78	1025 mS/cm uS/cm	7.19	-166.1	8.27
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1204 Elapsed Time (min): 12 Water Quality Meter ID & SN: YSI ProDSS -- 18K101865

Stop Time: 1216 Average Purge Rate (mL/min): 300 Date Calibrated: 4/16/2020

SAMPLING DATA

Sample Date: 4/16/2020 Sample Time: 1220 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ, 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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Bolser B. Howell

DATE: 4/ 17 /2020 WEATHER: cloudy 40°

MONITORING WELL ID: P-57 SAMPLE ID: P57-ROX- 041720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 49.19 ~~54.19~~ 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): 40.70 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: 138.2 ppm
Screen Length: 10 ft		
Water Column Height (not including NAPL): 13.49 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: – ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): – ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) | Monitor Temp. +/-0.2 mg/L or +/-10% | Spec. Cond. +/-5% or +/-2 uS/cm | DO +/-0.2 mg/L | ORP +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	1201	41.11	clear	moderate	17.2	0.88	0.835 mS/cm uS/cm	6.50	55.3	4.91
300	1202	41.07			17.3	0.74	0.841 mS/cm uS/cm	6.54	23.0	4.95
600	1203	41.03			17.6	0.60	0.843 mS/cm uS/cm	6.57	16.3	4.21
900	1204	41.02			17.8	0.47	0.847 mS/cm uS/cm	6.61	3.8	4.05
1200	1205	41.02			18.1	0.45	0.846 mS/cm uS/cm	6.64	-3.8	4.19
1500	1206				18.3	0.36	0.849 mS/cm uS/cm	6.67	-14.8	4.10
1800	1207				18.4	0.32	0.848 mS/cm uS/cm	6.69	-16.0	4.58
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 1201 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1207 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 17 /2020

SAMPLING DATA

Sample Date: 4/ 17 /2020 Sample Time: 1215 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BBSK

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Bolusa B. Hazell

DATE: 4/17 /2020 WEATHER: cloudy 40°

MONITORING WELL ID: P-58 SAMPLE ID: P58-ROX-041720 P58-WRR-041720

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): ~~72.01~~ 65.4 ft	
Depth to Water (btoc): 38.41 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to LNAPL/DNAPL (btoc): 38.39 ft	
Depth to Top of Screen (btoc): ~~47.01~~ 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: 25 ft 40.21	
Water Column Height (not including NAPL): 26.80 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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: 171.2 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							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: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: — Average Purge Rate (mL/min): 300 Date Calibrated: 4/17 /2020

SAMPLING DATA

Sample Date: 4/17 /2020 Sample Time: — Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BD TSH

COMMENTS:

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

Presence of LNAPL and inability to sample

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Joe Mayer, TonyJones

DATE: 4/21/2020 WEATHER: Clear Skies, Low 60's

MONITORING WELL ID: P-59 SAMPLE ID: P59-ROX-042120 P59-WRR-042120

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): 72.91 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 41.45 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
Depth to LNAPL/DNAPL (btoc): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 47.91 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: 25 ft	
Water Column Height (not including NAPL): 31.46 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: 286.3 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color (STABLE: over 3 readings)	Odor (STABLE: over 3 readings)	Temp (°C) (STABLE: over 3 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	1146	41.47	clear	Slight	22.5	2.30	1.354 mS/cm uS/cm	6.74	+126.0	5.76
300	1147	41.47			22.3	1.63	1.354 mS/cm uS/cm	6.74	-131.2	5.69
600	1148	41.46			22.3	1.41	1.352 mS/cm uS/cm	6.74	-132.4	5.79
900	1149	41.46			22.3	1.23	1.351 mS/cm uS/cm	6.75	-133.0	5.83
1200	1150	41.46			22.3	1.10	1.349 mS/cm uS/cm	6.75	-133.6	6.09
1500	1151				22.5	1.02	1.347 mS/cm uS/cm	6.75	-133.9	6.39
1800	1152				22.7	0.94	1.347 mS/cm uS/cm	6.75	-134.3	6.67
2100	1153				22.8	0.85	1.345 mS/cm uS/cm	6.75	-134.6	7.22
2400	1154				22.6	0.79	1.342 mS/cm uS/cm	6.74	-134.6	7.98
2700	1155				22.6	0.75	1.342 mS/cm uS/cm	6.72	-133.4	14.72
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

JM 4/21/20

Start Time: 1146 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 18K101865

Stop Time: 1155 Average Purge Rate (mL/min): 300 Date Calibrated: 4/21/2020

SAMPLING DATA

Sample Date: 4/21/2020 Sample Time: 1210 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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: J. Burleson B. Howell

DATE: 4/14/2020 WEATHER: Sunny 40°

MONITORING WELL ID: P-66 SAMPLE ID: P66-ROX-04142020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 34.72 / 4 = 8.68 ft btoc
Total Well Depth (btoc): 59.72 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 30.12 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 39.72 ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 34.72 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: 25 ft	
Water Column Height (not including NAPL): — 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: 90.7 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1025	30.13	Clear	strong	15.8	2.16	1.225	mS/cm uS/cm	6.54	-10.8	12.60
500	1026	30.13			17.5	0.57	1.225	mS/cm uS/cm	6.49	-23.6	10.14
600	1027	30.13			18.3	0.47	1.273	mS/cm uS/cm	6.48	-33.1	9.92
900	1028				17.8	0.40	1.250	mS/cm uS/cm	6.48	-42.6	10.25
1200	1029				17.7	0.35	1.275	mS/cm uS/cm	6.49	-47.3	10.55
1500	1030				17.8	0.28	1.277	mS/cm uS/cm	6.50	-54.7	10.90
1800	1031				18.0	0.24	1.279	mS/cm uS/cm	6.50	-59.5	11.14
								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			

BB 4/14/20

Start Time: 1025 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1031 Average Purge Rate (mL/min): 300 Date Calibrated: 4/14/2020

SAMPLING DATA

Sample Date: 4/14/2020 Sample Time: 1035 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BLSH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Burleson B. Howell

DATE: 4/17/2020 WEATHER: cloudy 40

MONITORING WELL ID: P-68 SAMPLE ID: P68-ROX- 041720

INITIAL DATA

Well Diameter): 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 68.76 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 39.74 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
Depth to LNAPL/DNAPL (btoc): 39.69 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): 43.76 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: 25 ft	
Water Column Height (not including NAPL): 29.02 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: 200.12 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

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

Start Time: — Elapsed Time (min): — Water Quality Meter ID & SN: YSI ProDSS -- 19

Stop Time: — Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/2020

SAMPLING DATA

Sample Date: 4/17/2020 Sample Time: — Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: —

COMMENTS:

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

Presence of LNAPL and inability to sample

Estimated Total Purge Volume: — mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Boteson B. Hauck

DATE: 4/17/2020 WEATHER: cloudy 40°

MONITORING WELL ID: P-74 SAMPLE ID: P74-ROX-041720

INITIAL DATA

Well Diameter): 4 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 68.83 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 37.40 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 48.83 ft btoc
Depth to LNAPL/DNAPL (btoc): — ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 43.83 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: 25 ft	
Water Column Height (not including NAPL): 31.43 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1022	37.62	clear	none	15.4	3.58	0.170	mS/cm uS/cm	6.09	106.1	4.58
300	1023	37.68			16.5	1.43	0.168	mS/cm uS/cm	6.24	102.3	4.16
600	1024	37.68			16.8	1.16	0.164	mS/cm uS/cm	6.31	100.0	4.07
900	1025	37.68			17.2	0.95	0.165	mS/cm uS/cm	6.40	97.5	3.89
1200	1026				17.4	0.82	0.168	mS/cm uS/cm	6.47	95.7	3.50
1500	1027				17.6	0.78	0.168	mS/cm uS/cm	6.53	94.4	3.50
1800	1028				17.7	0.76	0.168	mS/cm uS/cm	6.56	93.5	3.28
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			
								mS/cm uS/cm			

Start Time: 1022 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS - 19D101603

Stop Time: 1028 Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/2020

SAMPLING DATA

Sample Date: 4/17/2020 Sample Time: 1035 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BDBH

COMMENTS:

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

Estimated Total Purge Volume: 1900 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Tony Jones, Joe Mayer

DATE: 4/17/2020 WEATHER: cloudy 48°F

MONITORING WELL ID: P-93A SAMPLE ID: P93A-ROX- 041720-55 P93A-WRR- 041720-55

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): 38.79 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): 43.07 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ft btoc	Wellbore PID/FID Reading: 6.2 ppm	
Screen Length: 10 ft			
Water Column Height (not including NAPL): 14.28 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 3 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	1035	38.95	clear	slight	19.7	5.45	816	mS/cm uS/cm	7.68	31.5	2.21
300	1036	38.95			20.9	2.58	824	mS/cm uS/cm	7.54	0.0	3.38
600	1037	38.93			21.2	1.75	837	mS/cm uS/cm	7.49	-49.1	3.50
900	1038	38.91			21.3	1.34	837	mS/cm uS/cm	7.48	-62.7	3.46
1200	1039	38.91			21.4	1.21	837	mS/cm uS/cm	7.46	-69.8	3.55
1500	1040	38.91			21.5	1.04	838	mS/cm uS/cm	7.41	-78.8	3.76
1800	1041				21.6	0.96	839	mS/cm uS/cm	7.38	-82.8	3.95
2100	1042				21.6	0.90	840	mS/cm uS/cm	7.34	-86.1	3.99
2400	1043				21.8	0.86	841	mS/cm uS/cm	7.30	-88.2	4.55
2700	1044				21.8	0.82	846	mS/cm uS/cm	7.22	-89.6	5.17
3000	1045				21.9	0.80	849	mS/cm uS/cm	7.20	-91.6	5.29
3300	1046				21.9	0.79	849	mS/cm uS/cm	7.17	-92.3	5.55
3600	1047				21.4	0.77	855	mS/cm uS/cm	7.12	-93.7	5.72
3900	1048				21.6	0.74	861	mS/cm uS/cm	7.10	-94.9	5.79
4200	1049				21.6	0.72	864	mS/cm uS/cm	7.09	-97.0	5.26
4500	1050				21.6	0.70	868	mS/cm uS/cm	7.07	-98.1	5.31

Start Time: 1035 Elapsed Time (min): 18 Water Quality Meter ID & SN: YSI ProDSS -18K101865

Stop Time: 1053 Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/2020

SAMPLING DATA

Sample Date: 4/17/2020 Sample Time: 1055 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ, JM

COMMENTS:

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

Estimated Total Purge Volume: 5400 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2020 PROJECT NUMBER: 606199001-1.03.002 FIELD PERSONNEL: Tony Jones, Jones Mayer

DATE: 4/17/20 MONITORING WELL ID: P-93A SAMPLE ID: P93A-Rox-04172055 P93A-WRR-04172055

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
					STABLE: (over 3 readings)	Monitor Temp.	+/-0.2 mg/L or +/-10%	+/-5% or +/-2 uS/cm	+/-0.2 mg/L	+/-20 mV	Monitor Turb Readings (<50)
4800	1051	↓	clear	slight	21.6	0.68	~~874~~ 887 mS/cm uS/cm	7.07	-98.5	5.16
5100	1052		↓	↓	21.7	0.66	874 mS/cm uS/cm	7.06	-98.6	5.27
5400	1053				21.9	0.65	872 mS/cm uS/cm	7.06	-99.0	5.05
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm		

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Joe Meyer Tony Jones

DATE: 4/20/2020 WEATHER: Sunny, 56°

MONITORING WELL ID: P-93B SAMPLE ID: P93B-ROX- 042020 P93B-WRR- 042020

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	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): 40.23 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): 74.78 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): 36.55 ft	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ~~75.52~~ 75.2 ft btoc JM		

PURGE DATA

Pump Type: Dedicated Well Wizard

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings)	DO (mg/L) (Monitor Temp. +/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	1133	40.24	clear	slight	19.2	2.31	1.338 mS/cm uS/cm	6.77	-103.8	14.50
300	1134	40.24			19.2	1.91	1.348 mS/cm uS/cm	6.78	-107.4	13.69
600	1135	40.24			19.2	1.53	1.352 mS/cm uS/cm	6.78	-109.5	13.13
900	1136	40.24			19.3	1.33	1.357 mS/cm uS/cm	6.79	-111.3	16.48
1200	1137				19.4	1.12	1.363 mS/cm uS/cm	6.80	-112.7	22.8
1500	1138				19.6	1.05	1.366 mS/cm uS/cm	6.80	-113.7	27.41
1800	1139				19.7	0.93	1.368 mS/cm uS/cm	6.81	-115.3	30.8
	1140						mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

JM 4/20/20

Start Time: 1133 Elapsed Time (min): 7 Water Quality Meter ID & SN: YSI ProDSS -- 18K101865

Stop Time: 1140 Average Purge Rate (mL/min): 300 Date Calibrated: 4/20/2020

SAMPLING DATA

Sample Date: 4/20/2020 Sample Time: 1145 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TJ JM

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Tony Joner Joe Mayer

DATE: 4/16/2020 WEATHER: Sunny 45°F

MONITORING WELL ID: P-93C SAMPLE ID: P93C-ROX-041620-55 P93C-WRR-041620-55

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 93.88 ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 97.88 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.17 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: TS 4/16/20 ft btoc	
Depth to LNAPL/DNAPL (btoc): NE ft		Ambient PID/FID Reading: 0.0 ppm
Depth to Top of Screen (btoc): 92.88 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): ~~97.88~~ TS 4/16/20 ft btoc	
Screen Length: 2 ft		Wellbore PID/FID Reading: 0.0 ppm
Water Column Height (not including NAPL): 57.71 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 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	1035	40.17	clear	none	18.4	~~37.7~~ 2.03	1009	mS/cm	uS/cm	7.00	-109.8	13.00
900	1038	40.17			18.4	1.66	1013	mS/cm	uS/cm	7.01	-113.9	12.16
1200	1039	40.17			18.5	1.42	1016	mS/cm	uS/cm	7.03	-119.2	10.20
1500	1040	40.17			18.5	1.31	1016	mS/cm	uS/cm	7.03	-122.0	9.21
1800	1041				18.4	1.19	TS ~~1019~~ 1019	mS/cm	uS/cm	7.04	-124.9	8.50
2100	1042				18.4	1.11	1017	mS/cm	uS/cm	7.03	-127.2	7.77
2400	1043				18.4	1.06	1018	mS/cm	uS/cm	7.03	-129.4	7.31
2700	1044				18.5	1.00	1019	mS/cm	uS/cm	7.03	-131.5	6.70
3000	1045				18.5	0.95	1021	mS/cm	uS/cm	7.03	-133.5	6.23
3300	1046				18.3	0.93	1018	mS/cm	uS/cm	7.03	-134.8	5.76
3600	1047				19.0	0.89	1023	mS/cm	uS/cm	7.03	-136.6	5.33
3900	1048				18.8	0.83	1025	mS/cm	uS/cm	7.03	-139.6	4.94
4200	1049				18.8	0.78	1026	mS/cm	uS/cm	7.03	-143.2	4.85
4500	1050				18.6	0.75	1026	mS/cm	uS/cm	7.03	-145.5	4.55
4800	1051				18.7	0.72	1025	mS/cm	uS/cm	7.03	-147.4	4.18
				TS 4/16/20				mS/cm	uS/cm			

Start Time: 1035 Elapsed Time (min): 16 Water Quality Meter ID & SN: YSI ProDSS -- 18K101865

Stop Time: 1051 Average Purge Rate (mL/min): 300 Date Calibrated: 4/16/2020

SAMPLING DATA

Sample Date: 4/16/2020 Sample Time: 1055 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TS, SM

COMMENTS:

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

Estimated Total Purge Volume: 4800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Joe Mayer Tony Jones

DATE: 4/29/2020 WEATHER: Sunny 54°F

MONITORING WELL ID: P-93D SAMPLE ID: P93D-ROX-042020 P93D-WRR-042020

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): 128.00 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 40.41 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): 125.75 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: 2 ft		
Water Column Height (not including NAPL): 87.59 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): 126.75 ft btoc	

PURGE DATA

Pump Type: Dedicated Well Wizard

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings)	DO (mg/L) (Monitor Temp. +/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0947	40.46	clear	slight	18.7	2.53	1.247 mS/cm uS/cm	7.22	-199.0	3.04
300	0948	40.47			18.8	1.96	1.252 mS/cm uS/cm	7.21	-209.9	3.00
600	0949	40.47			18.9	1.70	1.255 mS/cm uS/cm	7.19	-218.9	2.80
900	0950	40.47			18.9	1.49	1.258 mS/cm uS/cm	7.18	-224.9	3.71
1200	0951				19.0	1.28	1.260 mS/cm uS/cm	7.15	-228.6	3.56
1500	0952				19.0	1.20	1.262 mS/cm uS/cm	7.14	-229.8	3.39
1800	0953				18.9	1.12	1.263 mS/cm uS/cm	7.13	-230.7	3.46
2100	0954				18.9	1.09	1.263 mS/cm uS/cm	7.13	-231.3	3.31
2400	0955				18.9	1.02	1.265 mS/cm uS/cm	7.12	-231.3	3.18
							mS/cm uS/cm			
							mS/cm uS/cm			
					TS	4/20/20	mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0947 Elapsed Time (min): TS 4/20/20 8 Water Quality Meter ID & SN: YSI ProDSS - 18K101865

Stop Time: 0955 Average Purge Rate (mL/min): 300 Date Calibrated: 4/20/2020

SAMPLING DATA

Sample Date: 4/20/2020 Sample Time: 1000 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: TS 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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Ben Burkson, Brett Howell

DATE: 4/ 7 /2020 WEATHER: Sunny 70°

MONITORING WELL ID: P-114R SAMPLE ID: P114R-ROX- 040720

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 28.01 ft btoc
Total Well Depth (btoc): 33.31 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 21.49 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
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): 23.01 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): 11.82 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.		pH	ORP (mV)	Turb (NTU)
					STABLE: (over 3 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	1030	21.55	clear	none	21.6	0.83	1.175	mS/cm uS/cm	6.46	-93.4	89.92
1200	1035	21.54			21.7	0.51	1.156	mS/cm uS/cm	6.58	-118.7	72.11
3000	1040	21.54			21.8	0.45	1.140	mS/cm uS/cm	6.60	-123.8	37.59
3300	1041	21.54			21.8	0.44	1.139	mS/cm uS/cm	6.61	-124.5	39.72
3600	1042				21.8	0.43	1.138	mS/cm uS/cm	6.61	-125.2	29.39
3900	1043				21.8	0.42	1.131	mS/cm uS/cm	6.62	-125.9	27.18
								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			
								mS/cm uS/cm			
								mS/cm uS/cm			

R2 4/7/20

Start Time: 1030 Elapsed Time (min): 13 Water Quality Meter ID & SN: YSI ProDSS -- 18A101940

Stop Time: 1043 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 7 /2020

SAMPLING DATA

Sample Date: 4/ 7 /2020 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

Sample Method: Stainless Steel Submersible Pump / Low Flow Sample Flow Rate (mL/min): 300 QA/QCSamples: ~~NA~~ DUP 4/7 EB

VOA Vials, No Headspace ☑ Initials: BB BH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Tjaksen, D. Howell

DATE: 4/10/2020 WEATHER: Sunny 40°

MONITORING WELL ID: ROST-3-MW SAMPLE ID: ROST3MW-ROX-091020

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: 42.81 ft btoc
Total Well Depth (btoc): 48.06 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Water (btoc): 36.33 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHICHEVER IS DEEPER): — ft btoc
Depth to LNAPL/DNAPL (btoc): NE ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
Depth to Top of Screen (btoc): 37.81 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): 11.73 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: 1.4 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0958	36.40	clear	none	14.5	1.14	1.219 mS/cm uS/cm	6.44	-16.7	20.84
300	0959	36.40			15.4	0.64	1.220 mS/cm uS/cm	6.44	-29.4	18.29
600	1000	36.40			16.1	0.38	1.224 mS/cm uS/cm	6.44	-41.2	16.46
900	1001				16.3	0.24	1.220 mS/cm uS/cm	6.45	-51.7	14.30
1200	1002				16.6	0.18	1.220 mS/cm uS/cm	6.46	-58.4	12.00
1500	1003				16.7	0.15	1.218 mS/cm uS/cm	6.46	-64.9	9.50
1800	1004				16.8	0.13	1.219 mS/cm uS/cm	6.47	-68.8	8.15
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

B.T. 4/10/20

Start Time: 0958 Elapsed Time (min): 6 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1004 Average Purge Rate (mL/min): 300 Date Calibrated: 4/10/2020

SAMPLING DATA

Sample Date: 4/10/2020 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: NA

VOA Vials, No Headspace ☑ Initials: BBBH

COMMENTS:

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

Estimated Total Purge Volume: 1800 mL

LOW FLOW GROUNDWATER SAMPLING DATA SHEET

PROJECT NAME: Roxana 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Boleson, D. Howell

DATE: 4/15/2020 WEATHER: Sunny 80°

MONITORING WELL ID: ROST-4-PZ(C) SAMPLE ID: ROST4PZC-ROX-041520

INITIAL DATA

Well Diameter: 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 45.20 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.96 ft btoc
Depth to Water (btoc): 36.71 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): 34.95 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): 8.49 ft	

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
		STABLE: (over 3 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	1117	36.77	Clear	moderate	15.0	2.45	1.186 mS/cm uS/cm	7.18	2.0	19.77
300	1118	36.77			15.7	1.29	1.184 mS/cm uS/cm	7.15	-10.3	20.14
600	1119	36.77			15.8	0.85	1.184 mS/cm uS/cm	7.12	-26.5	20.59
900	~~1315~~ 1120				16.2	0.55	1.205 mS/cm uS/cm	7.11	-41.5	21.53
1200	1121				16.4	0.47	1.205 mS/cm uS/cm	7.10	-52.0	21.82
1500	1122				16.8	0.35	1.210 mS/cm uS/cm	7.10	-62.2	22.10
1800	1123				17.2	0.28	1.214 mS/cm uS/cm	7.10	-70.1	22.47
2100	1124				17.3	0.22	1.217 mS/cm uS/cm	7.11	-77.5	22.84
2400	1125				17.3	0.20	1.214 mS/cm uS/cm	7.11	-80.0	23.55
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/15/20

Start Time: 1117 Elapsed Time (min): 8 Water Quality Meter ID & SN: YSI ProDSS -- 19D10160J

Stop Time: 1125 Average Purge Rate (mL/min): 300 Date Calibrated: 4/15/2020

SAMPLING DATA

Sample Date: 4/15/2020 Sample Time: 1130 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☑ Initials: BSTSH

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: B. Brosan TJ. Howell

DATE: 4/ 16 /2020 WEATHER: Sunny 45°

MONITORING WELL ID: ROST-4-PZ(E) SAMPLE ID: ROST4PZE-ROX-041620

INITIAL DATA

Well Diameter): 2 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: — ft btoc
Total Well Depth (btoc): 45.00 ft	
Depth to Water (btoc): 35.90 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.45 ft btoc
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 (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 9.1 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
		STABLE: (over 3 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	35.97	clear	strong	16.1	2.20	1.833 mS/cm uS/cm	6.64	77.8	17.52
300	1036	35.97			16.9	0.74	1.874 mS/cm uS/cm	6.70	66.2	19.37
600	1037	35.97			17.3	0.53	1.883 mS/cm uS/cm	6.71	57.5	22.41
900	1038				17.8	0.34	1.892 mS/cm uS/cm	6.82	39.0	29.40
1200	1039				17.9	0.31	1.892 mS/cm uS/cm	6.84	31.2	29.51
1500	1040				18.1	0.26	1.892 mS/cm uS/cm	6.88	16.2	28.49
1800	1041				18.2	0.24	1.893 mS/cm uS/cm	6.90	6.1	27.88
2100	1042				18.2	0.21	1.892 mS/cm uS/cm	6.91	-3.0	27.97
2400	1043				18.1	0.20	1.892 mS/cm uS/cm	6.91	-6.8	26.70
2700	1044				18.2	0.18	1.892 mS/cm uS/cm	6.93	-10.2	25.87
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

4/16/20

Start Time: 1035 Elapsed Time (min): 9 Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 1044 Average Purge Rate (mL/min): 300 Date Calibrated: 4/ 16 /2020

SAMPLING DATA

Sample Date: 4/ 16 /2020 Sample Time: 1050 Lab Analysis: VOC, SVOC, PAH

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

VOA Vials, No Headspace ☒ Initials: BB BH

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 2Q20 GW | PROJECT NUMBER: 60619901 - 1.03.002 | FIELD PERSONNEL: D. Dotson TJ Howell

DATE: 4/ 15 /2020 | WEATHER: Sunny 45°

MONITORING WELL ID: ROST-4-PZ(G) | SAMPLE ID: ROST4PZG-ROX- 041520

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): 44.53 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: 40.41 ft btoc
Depth to Water (btoc): 36.28 ft	
Depth to LNAPL/DNAPL (btoc): ft	
Depth to Top of Screen (btoc): 34.28 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): — ft btoc
Screen Length: 10 ft	
Water Column Height (not including NAPL): 8.25 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: — ft btoc
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): — ft btoc

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: 2.4 ppm

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C) (STABLE: over 3 readings; Monitor Temp.)	DO (mg/L) (+/-0.2 mg/L or +/-10%)	Spec. Cond. (+/-5% or +/-2 uS/cm)	pH (+/-0.2 mg/L)	ORP (mV) (+/-20 mV)	Turb (NTU) (Monitor Turb Readings (<50))
0	0930	36.33	Clear	Strong	15.7	0.69	1.159 mS/cm uS/cm	6.47	114.0	19.87
300	0931	36.33			16.7	0.50	1.151 mS/cm uS/cm	6.44	35.6	16.58
600	0932	36.33			17.4	0.36	1.164 mS/cm uS/cm	6.43	17.4	15.92
900	0933				17.8	0.26	1.177 mS/cm uS/cm	6.44	6.2	14.90
1200	0934				17.6	0.22	1.184 mS/cm uS/cm	6.44	-7.6	12.81
1500	0935				17.8	0.18	1.199 mS/cm uS/cm	6.45	-19.5	11.24
1800	0936				18.0	0.14	1.222 mS/cm uS/cm	6.46	-27.7	10.58
2100	0937				17.9	0.12	1.242 mS/cm uS/cm	6.46	-33.1	9.82
2400	0938				17.9	0.11	1.252 mS/cm uS/cm	6.47	-38.5	9.14
							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			

BB 4/15/20

Start Time: 0930 | Elapsed Time (min): 8 | Water Quality Meter ID & SN: YSI ProDSS -- 19D101603

Stop Time: 0938 | Average Purge Rate (mL/min): 300 | Date Calibrated: 4/ 15 /2020

SAMPLING DATA

Sample Date: 4/ 15 /2020 | Sample Time: 0945 | 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: TJ BB H

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 2Q20 GW PROJECT NUMBER: 60619901 - 1.03.002 FIELD PERSONNEL: Tony Jones, Joe Mayer

DATE: 4/17/2020 WEATHER: cloudy 45°F

MONITORING WELL ID: T-12 SAMPLE ID: T12-ROX-041720-55 T12-WRR-041720-55

INITIAL DATA

Well Diameter: 6 in	IF SCREEN ≤10 FT & WATER ABOVE TOP OF SCREEN – PUMP INTAKE AT MIDPOINT OF SCREEN: ft btoc	Volume of Flow Through Cell: 320* mL
Total Well Depth (btoc): 72.83 ft		Minimum Purge Volume = (3 x Flow Cell Volume): 960 mL
Depth to Water (btoc): 39.44 ft	IF SCREEN ≤10 FT & WATER WITHIN SCREEN – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	Ambient PID/FID Reading: 0.0 ppm
Depth to LNAPL/DNAPL (btoc): NE ft		
Depth to Top of Screen (btoc): 46.83 ft	IF SCREEN & WATER COLUMN >10 FT – PUMP INTAKE AT 5 FT BELOW TOP OF SCREEN OR TOP OF WATER (WHIEVER IS DEEPER): 51.83 ft btoc	Wellbore PID/FID Reading: 11.2 ppm
Screen Length: 26 ft		
Water Column Height (not including NAPL): 33.39 ft	IF SCREEN >10 FT & WATER COLUMN HEIGHT <10 FT – PUMP INTAKE AT MIDPOINT OF WATER COLUMN HEIGHT: ft btoc	
	IF SCREEN AND/OR WATER COLUMN HEIGHT <4 FT – PUMP INTAKE AT 1 FT BELOW TOP OF SCREEN OR WATER (WHICHEVER IS DEEPER): ft btoc	

PURGE DATA

Pump Type: Stainless Steel Submersible Pump

STABLE: (over 3 readings) | Monitor Temp. | +/-0.2 mg/L or +/-10% | +/-5% or +/-2 uS/cm | +/-0.2 mg/L | +/-20 mV | Monitor Turb Readings (<50)

Purge Volume (mL)	Time	Depth to Water (ft)	Color	Odor	Temp (°C)	DO (mg/L)	Spec. Cond.	pH	ORP (mV)	Turb (NTU)
0	0934	39.45	clear	slight	18.7	4.70	1.228 mS/cm uS/cm	6.99	-120.6	16.98
300	0935	39.45			20.3	2.30	1.319 mS/cm uS/cm	7.01	-129.7	12.18
600	0936	39.45			20.5	1.70	1.315 mS/cm uS/cm	7.02	-151.2	12.12
900	0937	39.46			20.6	1.55	1.314 mS/cm uS/cm	7.02	-152.5	12.96
1200	0938	39.46			19.6	1.25	1.307 mS/cm uS/cm	7.03	-152.6	11.81
1500	0939	39.46			19.7	1.17	1.305 mS/cm uS/cm	7.04	-152.8	11.46
1800	0940	39.46			19.5	1.09	1.309 mS/cm uS/cm	7.04	-153.5	11.52
2100	0941				19.2	1.00	1.307 mS/cm uS/cm	7.05	-153.3	11.36
2400	0942				19.2	0.94	1.305 mS/cm uS/cm	7.06	-153.5	11.27
2700	0943				19.4	0.87	1.305 mS/cm uS/cm	7.06	-153.8	11.44
3000	0944				19.5	0.84	1.306 mS/cm uS/cm	7.07	-153.9	12.44
3300	0945						mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			
							mS/cm uS/cm			

Start Time: 0934 Elapsed Time (min): 11 Water Quality Meter ID & SN: YSI ProDSS -- 18K101865

Stop Time: 0945 Average Purge Rate (mL/min): 300 Date Calibrated: 4/17/2020

SAMPLING DATA

Sample Date: 4/17/2020 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: NA

VOA Vials, No Headspace ☒ Initials: TJ, JM

COMMENTS:

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

Estimated Total Purge Volume: 3300 mL

Appendix C

Data Review Forms and Laboratory Analytical Reports

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186367-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/5/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-040620-8260	TB-ROX-040620-8011
MW4-ROX-040620-EB	MW4-ROX-040620
MW25-ROX-040620	MW8-ROX-040620
MW7-ROX-040620	MW7-ROX-040620-Dup

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, although not indicated in the laboratory case narrative, PAHs were detected in equipment blank MW4-ROX-040620-EB. The laboratory case narrative indicated several SVOCs and 1,2-dibromo-3-chloropropane LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several SVOC/PAH internal standard recoveries were outside criteria in field duplicate pair MW7-ROX-040620/MW7-ROX-040620-Dup. Several samples were diluted to bring VOCs into calibration range of the instrument; PAHs and/or SVOCs were diluted in field duplicate pair MW7-ROX-040620/MW7-ROX-040620-Dup due to the nature of the sample matrix. 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
P93C-ROX-010820-EB	PAHs	1-Methylnaphthalene	0.094 µg/L

Blank ID	Parameter	Analyte	Concentration/ Amount
P93C-ROX-010820-EB	PAHs	2-Methylnaphthalene	0.10 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 400-485314/2-A/3-A	SVOCs	bis(2-Ethylhexyl) phthalate	60/91	**42**	48-150/30
LCS/LCSD 400-485314/4-A/5-A	SVOCs	Benzenethiol	**7/4**	**54**	10-120/30
LCS/LCSD 400-485821/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-chloropropane	**214/217**	2	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS 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; benzenethiol has been identified as a poor performing analyte under Method 8270. Analytical data associated with RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW4-ROX-040620	SVOCs	Benzenethiol	**UJ**
MW25-ROX-040620	SVOCs	Benzenethiol	**UJ**
MW8-ROX-040620	SVOCs	Benzenethiol	**UJ**
MW7-ROX-040620	SVOCs	Benzenethiol	**UJ**
MW7-ROX-040620-Dup	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?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MW7-ROX-040620-Dup	SVOCs	Chrysene-d_{12}	**900757**	445071	222536-890142
MW7-ROX-040620-Dup	SVOCs	Perylene-d_{12}	**805916**	377663	188832-755326
MW7-ROX-040620	PAHs	Phenanthrene-d_{10}	**1148100**	541912	270956-1083824
MW7-ROX-040620-Dup	PAHs	Phenanthrene-d_{10}	**1160404**	541912	270956-1083824

Analytical data associated with internal standard recoveries outside evaluation criteria were non-detect and did not require qualification. Additionally, due to matrix interference, re-analysis of associated data was performed at a two times (2X) dilution and the associated internal standard recoveries were within evaluation criteria. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
MW7-ROX-040620	MW7-ROX-040620-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted; with the exception of non-detect VOCs, and several PAHs and/or SVOCs in field duplicate pair MW7-ROX-040620/MW7-ROX-040620-Dup, due to the nature of the sample matrix and to bring benzene into calibration range of the instrument. VOCs were non-detect in field duplicate pair MW7-ROX-040620/MW7-ROX-040620-Dup at a dilution factor of 1000X, with raised reporting limits of between 1000 and 25000 µg/L; SVOCs/PAHs were non-detect at a dilution factor of 2X, with a raised reporting limit of 0.40 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, analytes in field duplicate pair MW7-ROX-040620/MW7-ROX-040620-Dup were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
MW7-ROX-040620	VOCs	All non-detects	UJ
MW7-ROX-040620	PAHs	Anthracene	UJ
MW7-ROX-040620	PAHs	Fluoranthene	UJ
MW7-ROX-040620	PAHs	Phenanthrene	UJ
MW7-ROX-040620-Dup	VOCs	All non-detects	UJ
MW7-ROX-040620-Dup	PAHs	Anthracene	UJ
MW7-ROX-040620-Dup	PAHs	Fluoranthene	UJ
MW7-ROX-040620-Dup	PAHs	Phenanthrene	UJ
MW7-ROX-040620-Dup	SVOCs	bis(2-Ethylhexyl) phthalate	UJ
MW7-ROX-040620-Dup	SVOCs	Butyl benzyl phthalate	UJ
MW7-ROX-040620-Dup	SVOCs	Dibenz[a,h]acridine	UJ
MW7-ROX-040620-Dup	SVOCs	3,3'-Dichlorobenzidine	UJ
MW7-ROX-040620-Dup	SVOCs	Di-n-octyl phthalate	UJ

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-186367-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/21/2020 7:33:00 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
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Reviewed 5/5/2020 LR

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186367-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186367-1

Comments
No additional comments.

Receipt
The samples were received on 4/7/2020 8:34 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.4° C, 1.3° C and 4.2° C.

GC/MS VOA
Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW8-ROX-040620 (400-186367-6), MW7-ROX-040620 (400-186367-7) and MW7-ROX-040620-DUP (400-186367-8). Elevated reporting limits (RLs) are provided.

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-040620-8260 (400-186367-1), MW4-ROX-040620-EB (400-186367-3), MW4-ROX-040620 (400-186367-4), MW25-ROX-040620 (400-186367-5), MW8-ROX-040620 (400-186367-6), MW7-ROX-040620 (400-186367-7) and MW7-ROX-040620-DUP (400-186367-8). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-485314 and analytical batch 400-485783 recovered outside control limits for the following analytes: Bis(2-ethylhexyl) phthalate, Benzenethiol.

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-485314 and analytical batch 400-485783 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 sample was diluted due to the nature of the sample matrix: MW7-ROX-040620-DUP (400-186367-8). Elevated reporting limits (RLs) are provided.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-485778 recovered above the upper control limit for Fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: MW7-ROX-040620 (400-186367-7), MW7-ROX-040620-DUP (400-186367-8). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-485918 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-485821 and analytical batch 400-485918 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

Job ID: 400-186367-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

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

Sample Summary

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

Job ID: 400-186367-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186367-1	TB-ROX-040620-8260	Water	04/06/20 00:00	04/07/20 08:34	
400-186367-2	TB-ROX-040620-8011	Water	04/06/20 00:00	04/07/20 08:34	
400-186367-3	MW4-ROX-040620-EB	Water	04/06/20 07:30	04/07/20 08:34	
400-186367-4	MW4-ROX-040620	Water	04/06/20 09:50	04/07/20 08:34	
400-186367-5	MW25-ROX-040620	Water	04/06/20 11:00	04/07/20 08:34	
400-186367-6	MW8-ROX-040620	Water	04/06/20 12:30	04/07/20 08:34	
400-186367-7	MW7-ROX-040620	Water	04/06/20 13:25	04/07/20 08:34	
400-186367-8	MW7-ROX-040620-DUP	Water	04/06/20 13:25	04/07/20 08:34	

Detection Summary

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

Job ID: 400-186367-1

Client Sample ID: TB-ROX-040620-8260 — Lab Sample ID: 400-186367-1

No Detections.

Client Sample ID: TB-ROX-040620-8011 — Lab Sample ID: 400-186367-2

No Detections.

Client Sample ID: MW4-ROX-040620-EB — Lab Sample ID: 400-186367-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methylnaphthalene	0.078	J	0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.15	J	0.20	0.059	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW4-ROX-040620 — Lab Sample ID: 400-186367-4

No Detections.

Client Sample ID: MW25-ROX-040620 — Lab Sample ID: 400-186367-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	19		1.0	0.38	ug/L	1		8260B	Total/NA
Carbon disulfide	0.50	J	1.0	0.50	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.2		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: MW8-ROX-040620 — Lab Sample ID: 400-186367-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	49000		200	76	ug/L	200		8260B	Total/NA
Ethylbenzene	310		200	100	ug/L	200		8260B	Total/NA
o-Xylene	180	J	1000	120	ug/L	200		8260B	Total/NA
Xylenes, Total	490	J	2000	320	ug/L	200		8260B	Total/NA
1-Methylnaphthalene	7.6		0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.87		0.20	0.059	ug/L	1		8270D LL	Total/NA
Indene	2.6	J	9.8	0.98	ug/L	1		8270D	Total/NA
Phenol	91		9.8	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: MW7-ROX-040620 — Lab Sample ID: 400-186367-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	700000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	1.6		0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.6		0.20	0.060	ug/L	1		8270D LL	Total/NA
Benzoic acid	12	J	30	7.2	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.5	J	20	1.0	ug/L	1		8270D	Total/NA
Phenol	61		9.9	2.6	ug/L	1		8270D	Total/NA

Client Sample ID: MW7-ROX-040620-DUP — Lab Sample ID: 400-186367-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	700000		5000	1900	ug/L	5000		8260B	Total/NA
1-Methylnaphthalene	1.9		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	2.7		0.20	0.060	ug/L	1		8270D LL	Total/NA
Benzoic acid	12	J	30	7.3	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.6	J	20	1.0	ug/L	1		8270D	Total/NA
Phenol	67		9.9	2.6	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: 400-186367-1

Client Sample ID: TB-ROX-040620-8260
Date Collected: 04/06/20 00:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-1
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			04/13/20 16:46	1
Acrolein	ND		20	10	ug/L			04/13/20 16:46	1
Acrylonitrile	ND		10	2.8	ug/L			04/13/20 16:46	1
Benzene	ND		1.0	0.38	ug/L			04/13/20 16:46	1
Bromobenzene	ND		1.0	0.54	ug/L			04/13/20 16:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/13/20 16:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Bromoform	ND		5.0	0.71	ug/L			04/13/20 16:46	1
Bromomethane	ND		1.0	0.98	ug/L			04/13/20 16:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/13/20 16:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Chloroethane	ND		1.0	0.76	ug/L			04/13/20 16:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/13/20 16:46	1
Chloroform	ND		1.0	0.60	ug/L			04/13/20 16:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/13/20 16:46	1
Chloromethane	ND		1.0	0.83	ug/L			04/13/20 16:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/13/20 16:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/13/20 16:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/13/20 16:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/13/20 16:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/13/20 16:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/13/20 16:46	1
2-Hexanone	ND		25	3.1	ug/L			04/13/20 16:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/13/20 16:46	1
Methylene bromide	ND		5.0	0.59	ug/L			04/13/20 16:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/13/20 16:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/13/20 16:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/13/20 16:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/13/20 16:46	1
Naphthalene	ND		1.0	1.0	ug/L			04/13/20 16:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/13/20 16:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/13/20 16:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/13/20 16:46	1
o-Xylene	ND		5.0	0.60	ug/L			04/13/20 16:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/13/20 16:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/13/20 16:46	1

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

Job ID: 400-186367-1

Client Sample ID: TB-ROX-040620-8260
Date Collected: 04/06/20 00:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-1
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			04/13/20 16:46	1
Styrene	ND		1.0	1.0	ug/L			04/13/20 16:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/13/20 16:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/13/20 16:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/13/20 16:46	1
Toluene	ND		1.0	0.41	ug/L			04/13/20 16:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/13/20 16:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/13/20 16:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/13/20 16:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/13/20 16:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/13/20 16:46	1
Trichloroethene	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/13/20 16:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/13/20 16:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/13/20 16:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/13/20 16:46	1
Vinyl acetate	ND		25	2.0	ug/L			04/13/20 16:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/13/20 16:46	1
Xylenes, Total	ND		10	1.6	ug/L			04/13/20 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/13/20 16:46*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/13/20 16:46*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/13/20 16:46*	*1*

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

Job ID: 400-186367-1

Client Sample ID: TB-ROX-040620-8011
Date Collected: 04/06/20 00:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-2
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	*	0.043	0.0078	ug/L		04/13/20 14:58	04/14/20 14:12	1
1,2-Dibromoethane	ND		0.028	0.0071	ug/L		04/13/20 14:58	04/14/20 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*04/13/20 14:58*	*04/14/20 14:12*	*1*

Client Sample ID: MW4-ROX-040620-EB
Date Collected: 04/06/20 07:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-3
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			04/14/20 16:11	1
Acrolein	ND		20	10	ug/L			04/14/20 16:11	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 16:11	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 16:11	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 16:11	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 16:11	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 16:11	1
Bromomethane	ND		1.0	0.98	ug/L			04/14/20 16:11	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 16:11	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Chloroethane	ND		1.0	0.76	ug/L			04/14/20 16:11	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 16:11	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 16:11	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 16:11	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 16:11	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:11	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 16:11	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 16:11	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 16:11	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 16:11	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 16:11	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 16:11	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 16:11	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 16:11	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 16:11	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 16:11	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 16:11	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 16:11	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 16:11	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 16:11	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 16:11	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 16:11	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 16:11	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 16:11	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 16:11	1

Client Sample ID: MW4-ROX-040620-EB

Date Collected: 04/06/20 07:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-3
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			04/14/20 16:11	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 16:11	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 16:11	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 16:11	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 16:11	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 16:11	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:11	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 16:11	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:11	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 16:11	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 16:11	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 16:11	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 16:11	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 16:11	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 16:11	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 16:11	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/14/20 16:11*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/14/20 16:11*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/14/20 16:11*	*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	0.031	ug/L		04/08/20 11:13	04/13/20 17:07	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/08/20 11:13	04/13/20 17:07	1
Anthracene	ND		0.20	0.031	ug/L		04/08/20 11:13	04/13/20 17:07	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/08/20 11:13	04/13/20 17:07	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/08/20 11:13	04/13/20 17:07	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:13	04/13/20 17:07	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:13	04/13/20 17:07	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/08/20 11:13	04/13/20 17:07	1
Chrysene	ND		0.20	0.073	ug/L		04/08/20 11:13	04/13/20 17:07	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/08/20 11:13	04/13/20 17:07	1
Fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:13	04/13/20 17:07	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:13	04/13/20 17:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:13	04/13/20 17:07	1
Phenanthrene	ND		0.20	0.035	ug/L		04/08/20 11:13	04/13/20 17:07	1
Pyrene	ND		0.20	0.039	ug/L		04/08/20 11:13	04/13/20 17:07	1
1-Methylnaphthalene	**0.078**	**J**	0.20	0.073	ug/L		04/08/20 11:13	04/13/20 17:07	1
2-Methylnaphthalene	**0.15**	**J**	0.20	0.059	ug/L		04/08/20 11:13	04/13/20 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*81*		*33 - 138*	*04/08/20 11:13*	*04/13/20 17:07*	*1*
2-Fluorobiphenyl	*80*		*15 - 122*	*04/08/20 11:13*	*04/13/20 17:07*	*1*

Client Sample ID: MW4-ROX-040620-EB
Date Collected: 04/06/20 07:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	92		19 - 130	04/08/20 11:13	04/13/20 17:07	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		04/08/20 11:13	04/13/20 16:58	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		04/08/20 11:13	04/13/20 16:58	1
Benzoic acid	ND		30	7.2	ug/L		04/08/20 11:13	04/13/20 16:58	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/08/20 11:13	04/13/20 16:58	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		04/08/20 11:13	04/13/20 16:58	1
bis (2-chloroisopropyl) ether	ND		9.8	0.80	ug/L		04/08/20 11:13	04/13/20 16:58	1
Bis(2-ethylhexyl) phthalate	ND	*1	9.8	4.9	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/08/20 11:13	04/13/20 16:58	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/08/20 11:13	04/13/20 16:58	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/08/20 11:13	04/13/20 16:58	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
Dibenz[a,h]acridine	ND		9.8	3.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/08/20 11:13	04/13/20 16:58	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/08/20 11:13	04/13/20 16:58	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/08/20 11:13	04/13/20 16:58	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		04/08/20 11:13	04/13/20 16:58	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/08/20 11:13	04/13/20 16:58	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/08/20 11:13	04/13/20 16:58	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/08/20 11:13	04/13/20 16:58	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/08/20 11:13	04/13/20 16:58	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		04/08/20 11:13	04/13/20 16:58	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:13	04/13/20 16:58	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/08/20 11:13	04/13/20 16:58	1
Indene	ND		9.8	0.98	ug/L		04/08/20 11:13	04/13/20 16:58	1
Isophorone	ND		9.8	0.56	ug/L		04/08/20 11:13	04/13/20 16:58	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/08/20 11:13	04/13/20 16:58	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/08/20 11:13	04/13/20 16:58	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/08/20 11:13	04/13/20 16:58	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/08/20 11:13	04/13/20 16:58	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/08/20 11:13	04/13/20 16:58	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/08/20 11:13	04/13/20 16:58	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/08/20 11:13	04/13/20 16:58	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/08/20 11:13	04/13/20 16:58	1

Client Sample ID: MW4-ROX-040620-EB
Date Collected: 04/06/20 07:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-3
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		9.8	3.2	ug/L		04/08/20 11:13	04/13/20 16:58	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/08/20 11:13	04/13/20 16:58	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:13	04/13/20 16:58	1
Phenol	ND		9.8	2.6	ug/L		04/08/20 11:13	04/13/20 16:58	1
Pyridine	ND		9.8	3.1	ug/L		04/08/20 11:13	04/13/20 16:58	1
Quinoline	ND		9.8	5.9	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/08/20 11:13	04/13/20 16:58	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/08/20 11:13	04/13/20 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*65*		*34 - 120*	*04/08/20 11:13*	*04/13/20 16:58*	*1*
2-Fluorophenol	*56*		*10 - 120*	*04/08/20 11:13*	*04/13/20 16:58*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*04/08/20 11:13*	*04/13/20 16:58*	*1*
Phenol-d5	*68*		*10 - 120*	*04/08/20 11:13*	*04/13/20 16:58*	*1*
Terphenyl-d14	*77*		*53 - 125*	*04/08/20 11:13*	*04/13/20 16:58*	*1*
2,4,6-Tribromophenol	*62*		*15 - 135*	*04/08/20 11:13*	*04/13/20 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	*	0.036	0.0066	ug/L		04/13/20 14:58	04/14/20 14:32	1
1,2-Dibromoethane	ND		0.024	0.0060	ug/L		04/13/20 14:58	04/14/20 14:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/13/20 14:58*	*04/14/20 14:32*	*1*

Client Sample ID: MW4-ROX-040620
Date Collected: 04/06/20 09:50
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-4
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			04/14/20 16:32	1
Acrolein	ND		20	10	ug/L			04/14/20 16:32	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 16:32	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 16:32	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 16:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 16:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 16:32	1
Bromomethane	ND		1.0	0.98	ug/L			04/14/20 16:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 16:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Chloroethane	ND		1.0	0.76	ug/L			04/14/20 16:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 16:32	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 16:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 16:32	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 16:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 16:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 16:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 16:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 16:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 16:32	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 16:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 16:32	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 16:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 16:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 16:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 16:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 16:32	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 16:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 16:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 16:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 16:32	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 16:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 16:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 16:32	1

Client Sample ID: MW4-ROX-040620
Date Collected: 04/06/20 09:50
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-4
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			04/14/20 16:32	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 16:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 16:32	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 16:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 16:32	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 16:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 16:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 16:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 16:32	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 16:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 16:32	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/14/20 16:32*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/14/20 16:32*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/14/20 16:32*	*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		0.20	0.032	ug/L		04/08/20 11:13	04/13/20 17:24	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/08/20 11:13	04/13/20 17:24	1
Anthracene	ND		0.20	0.031	ug/L		04/08/20 11:13	04/13/20 17:24	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/08/20 11:13	04/13/20 17:24	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/08/20 11:13	04/13/20 17:24	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:13	04/13/20 17:24	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:13	04/13/20 17:24	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/08/20 11:13	04/13/20 17:24	1
Chrysene	ND		0.20	0.074	ug/L		04/08/20 11:13	04/13/20 17:24	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/08/20 11:13	04/13/20 17:24	1
Fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:13	04/13/20 17:24	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:13	04/13/20 17:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:13	04/13/20 17:24	1
Phenanthrene	ND		0.20	0.036	ug/L		04/08/20 11:13	04/13/20 17:24	1
Pyrene	ND		0.20	0.040	ug/L		04/08/20 11:13	04/13/20 17:24	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/08/20 11:13	04/13/20 17:24	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/08/20 11:13	04/13/20 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*56*		*33 - 138*	*04/08/20 11:13*	*04/13/20 17:24*	*1*
2-Fluorobiphenyl	*55*		*15 - 122*	*04/08/20 11:13*	*04/13/20 17:24*	*1*

Client Sample ID: MW4-ROX-040620
Date Collected: 04/06/20 09:50
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		19 - 130	04/08/20 11:13	04/13/20 17:24	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		04/08/20 11:13	04/13/20 17:19	1
Benzenethiol	ND	*1	10	1.7	ug/L		04/08/20 11:13	04/13/20 17:19	1
Benzoic acid	ND		30	7.3	ug/L		04/08/20 11:13	04/13/20 17:19	1
Benzyl alcohol	ND		10	2.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/08/20 11:13	04/13/20 17:19	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/08/20 11:13	04/13/20 17:19	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/08/20 11:13	04/13/20 17:19	1
Bis(2-ethylhexyl) phthalate	ND	*1	10	5.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/08/20 11:13	04/13/20 17:19	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Chloroaniline	ND		10	3.4	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/08/20 11:13	04/13/20 17:19	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/08/20 11:13	04/13/20 17:19	1
2-Chlorophenol	ND		10	2.2	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Dibenzofuran	ND		10	0.52	ug/L		04/08/20 11:13	04/13/20 17:19	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Diethyl phthalate	ND		10	0.70	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/08/20 11:13	04/13/20 17:19	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/08/20 11:13	04/13/20 17:19	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/08/20 11:13	04/13/20 17:19	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/08/20 11:13	04/13/20 17:19	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/08/20 11:13	04/13/20 17:19	1
1,4-Dioxane	ND		10	1.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/08/20 11:13	04/13/20 17:19	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:13	04/13/20 17:19	1
Hexachloroethane	ND		10	4.2	ug/L		04/08/20 11:13	04/13/20 17:19	1
Indene	ND		10	1.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
Isophorone	ND		10	0.57	ug/L		04/08/20 11:13	04/13/20 17:19	1
2-Methylphenol	ND		10	1.8	ug/L		04/08/20 11:13	04/13/20 17:19	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
2-Nitroaniline	ND		10	2.2	ug/L		04/08/20 11:13	04/13/20 17:19	1
3-Nitroaniline	ND		10	1.8	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Nitroaniline	ND		10	2.5	ug/L		04/08/20 11:13	04/13/20 17:19	1
Nitrobenzene	ND		10	0.55	ug/L		04/08/20 11:13	04/13/20 17:19	1
2-Nitrophenol	ND		10	0.65	ug/L		04/08/20 11:13	04/13/20 17:19	1
4-Nitrophenol	ND		10	2.1	ug/L		04/08/20 11:13	04/13/20 17:19	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/08/20 11:13	04/13/20 17:19	1

Client Sample ID: MW4-ROX-040620
Date Collected: 04/06/20 09:50
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-4
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		04/08/20 11:13	04/13/20 17:19	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/08/20 11:13	04/13/20 17:19	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:13	04/13/20 17:19	1
Phenol	ND		10	2.6	ug/L		04/08/20 11:13	04/13/20 17:19	1
Pyridine	ND		10	3.2	ug/L		04/08/20 11:13	04/13/20 17:19	1
Quinoline	ND		10	6.0	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/08/20 11:13	04/13/20 17:19	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/08/20 11:13	04/13/20 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*59*		*34 - 120*	*04/08/20 11:13*	*04/13/20 17:19*	*1*
2-Fluorophenol	*42*		*10 - 120*	*04/08/20 11:13*	*04/13/20 17:19*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*04/08/20 11:13*	*04/13/20 17:19*	*1*
Phenol-d5	*56*		*10 - 120*	*04/08/20 11:13*	*04/13/20 17:19*	*1*
Terphenyl-d14	*64*		*53 - 125*	*04/08/20 11:13*	*04/13/20 17:19*	*1*
2,4,6-Tribromophenol	*73*		*15 - 135*	*04/08/20 11:13*	*04/13/20 17:19*	*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	*	0.037	0.0068	ug/L		04/13/20 14:58	04/14/20 14:52	1
1,2-Dibromoethane	ND		0.025	0.0062	ug/L		04/13/20 14:58	04/14/20 14:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*110*	*p*	*51 - 149*	*04/13/20 14:58*	*04/14/20 14:52*	*1*

Client Sample ID: MW25-ROX-040620
Date Collected: 04/06/20 11:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-5
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			04/14/20 16:52	1
Acrolein	ND		20	10	ug/L			04/14/20 16:52	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 16:52	1
Benzene	**19**		1.0	0.38	ug/L			04/14/20 16:52	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 16:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 16:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 16:52	1
Bromomethane	ND		1.0	0.98	ug/L			04/14/20 16:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 16:52	1
Carbon disulfide	**0.50**	**J**	1.0	0.50	ug/L			04/14/20 16:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Chloroethane	ND		1.0	0.76	ug/L			04/14/20 16:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 16:52	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 16:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 16:52	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 16:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 16:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 16:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 16:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 16:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 16:52	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 16:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 16:52	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 16:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 16:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 16:52	1
Methyl tert-butyl ether	**1.2**		1.0	0.74	ug/L			04/14/20 16:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 16:52	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 16:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 16:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 16:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 16:52	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 16:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 16:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 16:52	1

Client Sample ID: MW25-ROX-040620
Date Collected: 04/06/20 11:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-5
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			04/14/20 16:52	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 16:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 16:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 16:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 16:52	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 16:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 16:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 16:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 16:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 16:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 16:52	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 16:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 16:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 16:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 16:52	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 16:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 16:52	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*04/14/20 16:52*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/14/20 16:52*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/14/20 16:52*	*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		04/08/20 11:19	04/13/20 17:42	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/08/20 11:19	04/13/20 17:42	1
Anthracene	ND		0.20	0.031	ug/L		04/08/20 11:19	04/13/20 17:42	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 17:42	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/08/20 11:19	04/13/20 17:42	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:19	04/13/20 17:42	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:19	04/13/20 17:42	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/08/20 11:19	04/13/20 17:42	1
Chrysene	ND		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 17:42	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 17:42	1
Fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:19	04/13/20 17:42	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:19	04/13/20 17:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:19	04/13/20 17:42	1
Phenanthrene	ND		0.20	0.035	ug/L		04/08/20 11:19	04/13/20 17:42	1
Pyrene	ND		0.20	0.039	ug/L		04/08/20 11:19	04/13/20 17:42	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 17:42	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/08/20 11:19	04/13/20 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*33 - 138*	*04/08/20 11:19*	*04/13/20 17:42*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*04/08/20 11:19*	*04/13/20 17:42*	*1*

Client Sample ID: MW25-ROX-040620
Date Collected: 04/06/20 11:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-5
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*80*		*19 - 130*	*04/08/20 11:19*	*04/13/20 17:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.7	ug/L		04/08/20 11:19	04/13/20 17:39	1
Benzenethiol	ND	*1 UJ	9.9	1.7	ug/L		04/08/20 11:19	04/13/20 17:39	1
Benzoic acid	ND		30	7.2	ug/L		04/08/20 11:19	04/13/20 17:39	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/08/20 11:19	04/13/20 17:39	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/08/20 11:19	04/13/20 17:39	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/08/20 11:19	04/13/20 17:39	1
Bis(2-ethylhexyl) phthalate	ND	*1	9.9	4.9	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/08/20 11:19	04/13/20 17:39	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Chloroaniline	ND		9.9	3.3	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Chloro-3-methylphenol	ND		9.9	3.7	ug/L		04/08/20 11:19	04/13/20 17:39	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/08/20 11:19	04/13/20 17:39	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/08/20 11:19	04/13/20 17:39	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4-Dimethylphenol	ND		9.9	3.4	ug/L		04/08/20 11:19	04/13/20 17:39	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/08/20 11:19	04/13/20 17:39	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/08/20 11:19	04/13/20 17:39	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 17:39	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/08/20 11:19	04/13/20 17:39	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 17:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 17:39	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/08/20 11:19	04/13/20 17:39	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:19	04/13/20 17:39	1
Hexachloroethane	ND		9.9	4.1	ug/L		04/08/20 11:19	04/13/20 17:39	1
Indene	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 17:39	1
Isophorone	ND		9.9	0.56	ug/L		04/08/20 11:19	04/13/20 17:39	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 17:39	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/08/20 11:19	04/13/20 17:39	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 17:39	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Nitroaniline	ND		9.9	2.4	ug/L		04/08/20 11:19	04/13/20 17:39	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/08/20 11:19	04/13/20 17:39	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/08/20 11:19	04/13/20 17:39	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/08/20 11:19	04/13/20 17:39	1
N-Nitrosodimethylamine	ND		9.9	3.4	ug/L		04/08/20 11:19	04/13/20 17:39	1

Client Sample ID: MW25-ROX-040620
Date Collected: 04/06/20 11:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-5
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		04/08/20 11:19	04/13/20 17:39	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/08/20 11:19	04/13/20 17:39	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:19	04/13/20 17:39	1
Phenol	ND		9.9	2.6	ug/L		04/08/20 11:19	04/13/20 17:39	1
Pyridine	ND		9.9	3.2	ug/L		04/08/20 11:19	04/13/20 17:39	1
Quinoline	ND		9.9	5.9	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4,5-Trichlorophenol	ND		9.9	3.6	ug/L		04/08/20 11:19	04/13/20 17:39	1
2,4,6-Trichlorophenol	ND		9.9	3.4	ug/L		04/08/20 11:19	04/13/20 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*04/08/20 11:19*	*04/13/20 17:39*	*1*
2-Fluorophenol	*62*		*10 - 120*	*04/08/20 11:19*	*04/13/20 17:39*	*1*
Nitrobenzene-d5	*82*		*27 - 120*	*04/08/20 11:19*	*04/13/20 17:39*	*1*
Phenol-d5	*75*		*10 - 120*	*04/08/20 11:19*	*04/13/20 17:39*	*1*
Terphenyl-d14	*83*		*53 - 125*	*04/08/20 11:19*	*04/13/20 17:39*	*1*
2,4,6-Tribromophenol	*106*		*15 - 135*	*04/08/20 11:19*	*04/13/20 17:39*	*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	*	0.041	0.0075	ug/L		04/13/20 14:58	04/14/20 15:13	1
1,2-Dibromoethane	ND		0.027	0.0068	ug/L		04/13/20 14:58	04/14/20 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*	*p*	*51 - 149*	*04/13/20 14:58*	*04/14/20 15:13*	*1*

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

Job ID: 400-186367-1

Client Sample ID: MW8-ROX-040620
Date Collected: 04/06/20 12:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-6
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			04/13/20 17:06	200
Acrolein	ND		4000	2000	ug/L			04/13/20 17:06	200
Acrylonitrile	ND		2000	560	ug/L			04/13/20 17:06	200
Benzene	**49000**		200	76	ug/L			04/13/20 17:06	200
Bromobenzene	ND		200	110	ug/L			04/13/20 17:06	200
Bromochloromethane	ND		200	100	ug/L			04/13/20 17:06	200
Bromodichloromethane	ND		200	100	ug/L			04/13/20 17:06	200
Bromoform	ND		1000	140	ug/L			04/13/20 17:06	200
Bromomethane	ND		200	200	ug/L			04/13/20 17:06	200
2-Butanone (MEK)	ND		5000	520	ug/L			04/13/20 17:06	200
Carbon disulfide	ND		200	100	ug/L			04/13/20 17:06	200
Carbon tetrachloride	ND		200	100	ug/L			04/13/20 17:06	200
Chlorobenzene	ND		200	100	ug/L			04/13/20 17:06	200
Dibromochloromethane	ND		200	100	ug/L			04/13/20 17:06	200
Chloroethane	ND		200	150	ug/L			04/13/20 17:06	200
2-Chloroethyl vinyl ether	ND		1000	400	ug/L			04/13/20 17:06	200
Chloroform	ND		200	120	ug/L			04/13/20 17:06	200
1-Chlorohexane	ND		200	140	ug/L			04/13/20 17:06	200
Chloromethane	ND		200	170	ug/L			04/13/20 17:06	200
cis-1,2-Dichloroethene	ND		200	100	ug/L			04/13/20 17:06	200
cis-1,3-Dichloropropene	ND		1000	100	ug/L			04/13/20 17:06	200
1,2-Dichlorobenzene	ND		200	100	ug/L			04/13/20 17:06	200
1,3-Dichlorobenzene	ND		200	110	ug/L			04/13/20 17:06	200
1,4-Dichlorobenzene	ND		200	130	ug/L			04/13/20 17:06	200
Dichlorodifluoromethane	ND		200	170	ug/L			04/13/20 17:06	200
1,1-Dichloroethane	ND		200	100	ug/L			04/13/20 17:06	200
1,2-Dichloroethane	ND		200	100	ug/L			04/13/20 17:06	200
1,1-Dichloroethene	ND		200	100	ug/L			04/13/20 17:06	200
1,2-Dichloropropane	ND		200	100	ug/L			04/13/20 17:06	200
1,3-Dichloropropane	ND		200	100	ug/L			04/13/20 17:06	200
2,2-Dichloropropane	ND		200	100	ug/L			04/13/20 17:06	200
1,1-Dichloropropene	ND		200	100	ug/L			04/13/20 17:06	200
Ethylbenzene	**310**		200	100	ug/L			04/13/20 17:06	200
Ethyl methacrylate	ND		200	120	ug/L			04/13/20 17:06	200
Hexachlorobutadiene	ND		1000	180	ug/L			04/13/20 17:06	200
2-Hexanone	ND		5000	620	ug/L			04/13/20 17:06	200
Isopropylbenzene	ND		200	110	ug/L			04/13/20 17:06	200
Methylene bromide	ND		1000	120	ug/L			04/13/20 17:06	200
Methylene Chloride	ND		1000	600	ug/L			04/13/20 17:06	200
4-Methyl-2-pentanone (MIBK)	ND		5000	360	ug/L			04/13/20 17:06	200
Methyl tert-butyl ether	ND		200	150	ug/L			04/13/20 17:06	200
m-Xylene & p-Xylene	ND		1000	320	ug/L			04/13/20 17:06	200
Naphthalene	ND		200	200	ug/L			04/13/20 17:06	200
n-Butylbenzene	ND		200	150	ug/L			04/13/20 17:06	200
N-Propylbenzene	ND		200	140	ug/L			04/13/20 17:06	200
o-Chlorotoluene	ND		200	110	ug/L			04/13/20 17:06	200
o-Xylene	**180**	J	1000	120	ug/L			04/13/20 17:06	200
p-Chlorotoluene	ND		200	110	ug/L			04/13/20 17:06	200
p-Isopropyltoluene	ND		200	140	ug/L			04/13/20 17:06	200

Client Sample ID: MW8-ROX-040620
Date Collected: 04/06/20 12:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		200	140	ug/L			04/13/20 17:06	200
Styrene	ND		200	200	ug/L			04/13/20 17:06	200
tert-Butylbenzene	ND		200	130	ug/L			04/13/20 17:06	200
1,1,1,2-Tetrachloroethane	ND		200	100	ug/L			04/13/20 17:06	200
1,1,2,2-Tetrachloroethane	ND		200	100	ug/L			04/13/20 17:06	200
Tetrachloroethene	ND		200	120	ug/L			04/13/20 17:06	200
Toluene	ND		200	82	ug/L			04/13/20 17:06	200
trans-1,2-Dichloroethene	ND		200	100	ug/L			04/13/20 17:06	200
trans-1,3-Dichloropropene	ND		1000	100	ug/L			04/13/20 17:06	200
1,2,3-Trichlorobenzene	ND		200	140	ug/L			04/13/20 17:06	200
1,2,4-Trichlorobenzene	ND		200	160	ug/L			04/13/20 17:06	200
1,1,1-Trichloroethane	ND		200	100	ug/L			04/13/20 17:06	200
1,1,2-Trichloroethane	ND		1000	100	ug/L			04/13/20 17:06	200
Trichloroethene	ND		200	100	ug/L			04/13/20 17:06	200
Trichlorofluoromethane	ND		200	100	ug/L			04/13/20 17:06	200
1,2,3-Trichloropropane	ND		1000	170	ug/L			04/13/20 17:06	200
1,2,4-Trimethylbenzene	ND		200	160	ug/L			04/13/20 17:06	200
1,3,5-Trimethylbenzene	ND		200	110	ug/L			04/13/20 17:06	200
Vinyl acetate	ND		5000	400	ug/L			04/13/20 17:06	200
Vinyl chloride	ND		200	100	ug/L			04/13/20 17:06	200
Xylenes, Total	**490**	**J**	2000	320	ug/L			04/13/20 17:06	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*04/13/20 17:06*	*200*
Dibromofluoromethane	*95*		*81 - 121*		*04/13/20 17:06*	*200*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/13/20 17:06*	*200*

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		04/08/20 11:19	04/13/20 18:00	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/08/20 11:19	04/13/20 18:00	1
Anthracene	ND		0.20	0.030	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/08/20 11:19	04/13/20 18:00	1
Chrysene	ND		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 18:00	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 18:00	1
Fluoranthene	ND		0.20	0.067	ug/L		04/08/20 11:19	04/13/20 18:00	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:19	04/13/20 18:00	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:19	04/13/20 18:00	1
Phenanthrene	ND		0.20	0.035	ug/L		04/08/20 11:19	04/13/20 18:00	1
Pyrene	ND		0.20	0.039	ug/L		04/08/20 11:19	04/13/20 18:00	1
1-Methylnaphthalene	**7.6**		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Methylnaphthalene	**0.87**		0.20	0.059	ug/L		04/08/20 11:19	04/13/20 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
2-Fluorobiphenyl	*51*		*15 - 122*	*04/08/20 11:19*	*04/13/20 18:00*	*1*

Client Sample ID: MW8-ROX-040620

Date Collected: 04/06/20 12:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-6
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*75*		*19 - 130*	*04/08/20 11:19*	*04/13/20 18:00*	*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		04/08/20 11:19	04/13/20 18:00	1
Benzenethiol	ND	*1	9.8	1.7	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzoic acid	ND		29	7.2	ug/L		04/08/20 11:19	04/13/20 18:00	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/08/20 11:19	04/13/20 18:00	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/08/20 11:19	04/13/20 18:00	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		04/08/20 11:19	04/13/20 18:00	1
bis (2-chloroisopropyl) ether	ND		9.8	0.80	ug/L		04/08/20 11:19	04/13/20 18:00	1
Bis(2-ethylhexyl) phthalate	ND	*1	9.8	4.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/08/20 11:19	04/13/20 18:00	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/08/20 11:19	04/13/20 18:00	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/08/20 11:19	04/13/20 18:00	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/08/20 11:19	04/13/20 18:00	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/08/20 11:19	04/13/20 18:00	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		04/08/20 11:19	04/13/20 18:00	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/08/20 11:19	04/13/20 18:00	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/08/20 11:19	04/13/20 18:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/08/20 11:19	04/13/20 18:00	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		04/08/20 11:19	04/13/20 18:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:19	04/13/20 18:00	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/08/20 11:19	04/13/20 18:00	1
Indene	**2.6**	**J**	9.8	0.98	ug/L		04/08/20 11:19	04/13/20 18:00	1
Isophorone	ND		9.8	0.56	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/08/20 11:19	04/13/20 18:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/08/20 11:19	04/13/20 18:00	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/08/20 11:19	04/13/20 18:00	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/08/20 11:19	04/13/20 18:00	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/08/20 11:19	04/13/20 18:00	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/08/20 11:19	04/13/20 18:00	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/08/20 11:19	04/13/20 18:00	1

Client Sample ID: MW8-ROX-040620
Date Collected: 04/06/20 12:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-6
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		9.8	3.2	ug/L		04/08/20 11:19	04/13/20 18:00	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/08/20 11:19	04/13/20 18:00	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:19	04/13/20 18:00	1
Phenol	**91**		9.8	2.6	ug/L		04/08/20 11:19	04/13/20 18:00	1
Pyridine	ND		9.8	3.1	ug/L		04/08/20 11:19	04/13/20 18:00	1
Quinoline	ND		9.8	5.9	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/08/20 11:19	04/13/20 18:00	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/08/20 11:19	04/13/20 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
2-Fluorophenol	*43*		*10 - 120*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
Nitrobenzene-d5	*77*		*27 - 120*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
Phenol-d5	*63*		*10 - 120*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
Terphenyl-d14	*70*		*53 - 125*	*04/08/20 11:19*	*04/13/20 18:00*	*1*
2,4,6-Tribromophenol	*106*		*15 - 135*	*04/08/20 11:19*	*04/13/20 18:00*	*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	*	0.041	0.0076	ug/L		04/13/20 14:58	04/14/20 15:33	1
1,2-Dibromoethane	ND		0.028	0.0069	ug/L		04/13/20 14:58	04/14/20 15:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*	*p*	*51 - 149*	*04/13/20 14:58*	*04/14/20 15:33*	*1*

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

Job ID: 400-186367-1

Client Sample ID: MW7-ROX-040620
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	U	25000	10000	ug/L			04/13/20 17:27	1000
Acrolein	ND		20000	10000	ug/L			04/13/20 17:27	1000
Acrylonitrile	ND		10000	2800	ug/L			04/13/20 17:27	1000
Bromobenzene	ND		1000	540	ug/L			04/13/20 17:27	1000
Bromochloromethane	ND		1000	520	ug/L			04/13/20 17:27	1000
Bromodichloromethane	ND		1000	500	ug/L			04/13/20 17:27	1000
Bromoform	ND		5000	710	ug/L			04/13/20 17:27	1000
Bromomethane	ND		1000	980	ug/L			04/13/20 17:27	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			04/13/20 17:27	1000
Carbon disulfide	ND		1000	500	ug/L			04/13/20 17:27	1000
Carbon tetrachloride	ND		1000	500	ug/L			04/13/20 17:27	1000
Chlorobenzene	ND		1000	500	ug/L			04/13/20 17:27	1000
Dibromochloromethane	ND		1000	500	ug/L			04/13/20 17:27	1000
Chloroethane	ND		1000	760	ug/L			04/13/20 17:27	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			04/13/20 17:27	1000
Chloroform	ND		1000	600	ug/L			04/13/20 17:27	1000
1-Chlorohexane	ND		1000	700	ug/L			04/13/20 17:27	1000
Chloromethane	ND		1000	830	ug/L			04/13/20 17:27	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:27	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			04/13/20 17:27	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			04/13/20 17:27	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			04/13/20 17:27	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			04/13/20 17:27	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			04/13/20 17:27	1000
1,1-Dichloroethane	ND		1000	500	ug/L			04/13/20 17:27	1000
1,2-Dichloroethane	ND		1000	500	ug/L			04/13/20 17:27	1000
1,1-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:27	1000
1,2-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:27	1000
1,3-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:27	1000
2,2-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:27	1000
1,1-Dichloropropene	ND		1000	500	ug/L			04/13/20 17:27	1000
Ethylbenzene	ND		1000	500	ug/L			04/13/20 17:27	1000
Ethyl methacrylate	ND		1000	600	ug/L			04/13/20 17:27	1000
Hexachlorobutadiene	ND		5000	900	ug/L			04/13/20 17:27	1000
2-Hexanone	ND		25000	3100	ug/L			04/13/20 17:27	1000
Isopropylbenzene	ND		1000	530	ug/L			04/13/20 17:27	1000
Methylene bromide	ND		5000	590	ug/L			04/13/20 17:27	1000
Methylene Chloride	ND		5000	3000	ug/L			04/13/20 17:27	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			04/13/20 17:27	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			04/13/20 17:27	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			04/13/20 17:27	1000
Naphthalene	ND		1000	1000	ug/L			04/13/20 17:27	1000
n-Butylbenzene	ND		1000	760	ug/L			04/13/20 17:27	1000
N-Propylbenzene	ND		1000	690	ug/L			04/13/20 17:27	1000
o-Chlorotoluene	ND		1000	570	ug/L			04/13/20 17:27	1000
o-Xylene	ND		5000	600	ug/L			04/13/20 17:27	1000
p-Chlorotoluene	ND		1000	560	ug/L			04/13/20 17:27	1000
p-Isopropyltoluene	ND		1000	710	ug/L			04/13/20 17:27	1000
sec-Butylbenzene	ND		1000	700	ug/L			04/13/20 17:27	1000

Client Sample ID: MW7-ROX-040620
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	U5	1000	1000	ug/L			04/13/20 17:27	1000
tert-Butylbenzene	ND		1000	630	ug/L			04/13/20 17:27	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			04/13/20 17:27	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			04/13/20 17:27	1000
Tetrachloroethene	ND		1000	580	ug/L			04/13/20 17:27	1000
Toluene	ND		1000	410	ug/L			04/13/20 17:27	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:27	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			04/13/20 17:27	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			04/13/20 17:27	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			04/13/20 17:27	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			04/13/20 17:27	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			04/13/20 17:27	1000
Trichloroethene	ND		1000	500	ug/L			04/13/20 17:27	1000
Trichlorofluoromethane	ND		1000	520	ug/L			04/13/20 17:27	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			04/13/20 17:27	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			04/13/20 17:27	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			04/13/20 17:27	1000
Vinyl acetate	ND		25000	2000	ug/L			04/13/20 17:27	1000
Vinyl chloride	ND		1000	500	ug/L			04/13/20 17:27	1000
Xylenes, Total	ND		10000	1600	ug/L			04/13/20 17:27	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/13/20 17:27*	*1000*
Dibromofluoromethane	*94*		*81 - 121*		*04/13/20 17:27*	*1000*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/13/20 17:27*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**700000**		5000	1900	ug/L			04/14/20 17:13	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/14/20 17:13*	*5000*
Dibromofluoromethane	*96*		*81 - 121*		*04/14/20 17:13*	*5000*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/14/20 17:13*	*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	0.032	ug/L		04/08/20 11:19	04/13/20 18:17	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 18:17	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/08/20 11:19	04/13/20 18:17	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/08/20 11:19	04/13/20 18:17	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:19	04/13/20 18:17	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:19	04/13/20 18:17	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/08/20 11:19	04/13/20 18:17	1
Chrysene	ND		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 18:17	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/08/20 11:19	04/13/20 18:17	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:19	04/13/20 18:17	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:19	04/13/20 18:17	1
Pyrene	ND		0.20	0.040	ug/L		04/08/20 11:19	04/13/20 18:17	1
1-Methylnaphthalene	**1.6**		0.20	0.073	ug/L		04/08/20 11:19	04/13/20 18:17	1

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

Job ID: 400-186367-1

Client Sample ID: MW7-ROX-040620
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-7
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	2.6		0.20	0.060	ug/L		04/08/20 11:19	04/13/20 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*51*		*33 - 138*	*04/08/20 11:19*	*04/13/20 18:17*	*1*
2-Fluorobiphenyl	*50*		*15 - 122*	*04/08/20 11:19*	*04/13/20 18:17*	*1*
Nitrobenzene-d5	*58*		*19 - 130*	*04/08/20 11:19*	*04/13/20 18:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND	UJ	0.40	0.062	ug/L		04/08/20 11:19	04/14/20 11:41	2
Fluoranthene	ND	UJ	0.40	0.14	ug/L		04/08/20 11:19	04/14/20 11:41	2
Phenanthrene	ND	UJ	0.40	0.071	ug/L		04/08/20 11:19	04/14/20 11:41	2

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		04/08/20 11:19	04/13/20 18:21	1
Benzenethiol	ND	**1 UJ	9.9	1.7	ug/L		04/08/20 11:19	04/13/20 18:21	1
Benzoic acid	**12**	**J**	30	7.2	ug/L		04/08/20 11:19	04/13/20 18:21	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/08/20 11:19	04/13/20 18:21	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/08/20 11:19	04/13/20 18:21	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/08/20 11:19	04/13/20 18:21	1
Bis(2-ethylhexyl) phthalate	ND	*1	9.9	5.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/08/20 11:19	04/13/20 18:21	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/08/20 11:19	04/13/20 18:21	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/08/20 11:19	04/13/20 18:21	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/08/20 11:19	04/13/20 18:21	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:21	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/08/20 11:19	04/13/20 18:21	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/08/20 11:19	04/13/20 18:21	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 18:21	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/08/20 11:19	04/13/20 18:21	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:21	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:21	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/08/20 11:19	04/13/20 18:21	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:19	04/13/20 18:21	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/08/20 11:19	04/13/20 18:21	1
Indene	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:21	1

Client Sample ID: MW7-ROX-040620
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		9.9	0.57	ug/L		04/08/20 11:19	04/13/20 18:21	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 18:21	1
3 & 4 Methylphenol	**1.5**	J	20	1.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 18:21	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/08/20 11:19	04/13/20 18:21	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/08/20 11:19	04/13/20 18:21	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/08/20 11:19	04/13/20 18:21	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/08/20 11:19	04/13/20 18:21	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:21	1
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		04/08/20 11:19	04/13/20 18:21	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/08/20 11:19	04/13/20 18:21	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:19	04/13/20 18:21	1
Phenol	**61**		9.9	2.6	ug/L		04/08/20 11:19	04/13/20 18:21	1
Pyridine	ND		9.9	3.2	ug/L		04/08/20 11:19	04/13/20 18:21	1
Quinoline	ND		9.9	6.0	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/08/20 11:19	04/13/20 18:21	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*04/08/20 11:19*	*04/13/20 18:21*	*1*
2-Fluorophenol	*42*		*10 - 120*	*04/08/20 11:19*	*04/13/20 18:21*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*04/08/20 11:19*	*04/13/20 18:21*	*1*
Phenol-d5	*60*		*10 - 120*	*04/08/20 11:19*	*04/13/20 18:21*	*1*
Terphenyl-d14	*59*		*53 - 125*	*04/08/20 11:19*	*04/13/20 18:21*	*1*
2,4,6-Tribromophenol	*99*		*15 - 135*	*04/08/20 11:19*	*04/13/20 18:21*	*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	*	0.033	0.0061	ug/L		04/13/20 14:58	04/14/20 15:53	1
1,2-Dibromoethane	ND		0.022	0.0055	ug/L		04/13/20 14:58	04/14/20 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*	*p*	*51 - 149*	*04/13/20 14:58*	*04/14/20 15:53*	*1*

Client Sample ID: MW7-ROX-040620-DUP
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-8
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			04/13/20 17:47	1000
Acrolein	ND		20000	10000	ug/L			04/13/20 17:47	1000
Acrylonitrile	ND		10000	2800	ug/L			04/13/20 17:47	1000
Bromobenzene	ND		1000	540	ug/L			04/13/20 17:47	1000
Bromochloromethane	ND		1000	520	ug/L			04/13/20 17:47	1000
Bromodichloromethane	ND		1000	500	ug/L			04/13/20 17:47	1000
Bromoform	ND		5000	710	ug/L			04/13/20 17:47	1000
Bromomethane	ND		1000	980	ug/L			04/13/20 17:47	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			04/13/20 17:47	1000
Carbon disulfide	ND		1000	500	ug/L			04/13/20 17:47	1000
Carbon tetrachloride	ND		1000	500	ug/L			04/13/20 17:47	1000
Chlorobenzene	ND		1000	500	ug/L			04/13/20 17:47	1000
Dibromochloromethane	ND		1000	500	ug/L			04/13/20 17:47	1000
Chloroethane	ND		1000	760	ug/L			04/13/20 17:47	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			04/13/20 17:47	1000
Chloroform	ND		1000	600	ug/L			04/13/20 17:47	1000
1-Chlorohexane	ND		1000	700	ug/L			04/13/20 17:47	1000
Chloromethane	ND		1000	830	ug/L			04/13/20 17:47	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:47	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			04/13/20 17:47	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			04/13/20 17:47	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			04/13/20 17:47	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			04/13/20 17:47	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			04/13/20 17:47	1000
1,1-Dichloroethane	ND		1000	500	ug/L			04/13/20 17:47	1000
1,2-Dichloroethane	ND		1000	500	ug/L			04/13/20 17:47	1000
1,1-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:47	1000
1,2-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:47	1000
1,3-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:47	1000
2,2-Dichloropropane	ND		1000	500	ug/L			04/13/20 17:47	1000
1,1-Dichloropropene	ND		1000	500	ug/L			04/13/20 17:47	1000
Ethylbenzene	ND		1000	500	ug/L			04/13/20 17:47	1000
Ethyl methacrylate	ND		1000	600	ug/L			04/13/20 17:47	1000
Hexachlorobutadiene	ND		5000	900	ug/L			04/13/20 17:47	1000
2-Hexanone	ND		25000	3100	ug/L			04/13/20 17:47	1000
Isopropylbenzene	ND		1000	530	ug/L			04/13/20 17:47	1000
Methylene bromide	ND		5000	590	ug/L			04/13/20 17:47	1000
Methylene Chloride	ND		5000	3000	ug/L			04/13/20 17:47	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			04/13/20 17:47	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			04/13/20 17:47	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			04/13/20 17:47	1000
Naphthalene	ND		1000	1000	ug/L			04/13/20 17:47	1000
n-Butylbenzene	ND		1000	760	ug/L			04/13/20 17:47	1000
N-Propylbenzene	ND		1000	690	ug/L			04/13/20 17:47	1000
o-Chlorotoluene	ND		1000	570	ug/L			04/13/20 17:47	1000
o-Xylene	ND		5000	600	ug/L			04/13/20 17:47	1000
p-Chlorotoluene	ND		1000	560	ug/L			04/13/20 17:47	1000
p-Isopropyltoluene	ND		1000	710	ug/L			04/13/20 17:47	1000
sec-Butylbenzene	ND		1000	700	ug/L			04/13/20 17:47	1000

Client Sample ID: MW7-ROX-040620-DUP
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND	UJ	1000	1000	ug/L			04/13/20 17:47	1000
tert-Butylbenzene	ND		1000	630	ug/L			04/13/20 17:47	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			04/13/20 17:47	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			04/13/20 17:47	1000
Tetrachloroethene	ND		1000	580	ug/L			04/13/20 17:47	1000
Toluene	ND		1000	410	ug/L			04/13/20 17:47	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			04/13/20 17:47	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			04/13/20 17:47	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			04/13/20 17:47	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			04/13/20 17:47	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			04/13/20 17:47	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			04/13/20 17:47	1000
Trichloroethene	ND		1000	500	ug/L			04/13/20 17:47	1000
Trichlorofluoromethane	ND		1000	520	ug/L			04/13/20 17:47	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			04/13/20 17:47	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			04/13/20 17:47	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			04/13/20 17:47	1000
Vinyl acetate	ND		25000	2000	ug/L			04/13/20 17:47	1000
Vinyl chloride	ND		1000	500	ug/L			04/13/20 17:47	1000
Xylenes, Total	ND		10000	1600	ug/L			04/13/20 17:47	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*04/13/20 17:47*	*1000*
Dibromofluoromethane	*93*		*81 - 121*		*04/13/20 17:47*	*1000*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/13/20 17:47*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**700000**		5000	1900	ug/L			04/14/20 17:33	5000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/14/20 17:33*	*5000*
Dibromofluoromethane	*95*		*81 - 121*		*04/14/20 17:33*	*5000*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/14/20 17:33*	*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	0.032	ug/L		04/08/20 11:19	04/13/20 18:35	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/08/20 11:19	04/13/20 18:35	1
Anthracene	ND	UJ	0.40	0.062	ug/L		04/08/20 11:19	04/15/20 13:46	2
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/08/20 11:19	04/13/20 18:35	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/08/20 11:19	04/13/20 18:35	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:19	04/13/20 18:35	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:19	04/13/20 18:35	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/08/20 11:19	04/13/20 18:35	1
Chrysene	ND		0.20	0.074	ug/L		04/08/20 11:19	04/13/20 18:35	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/08/20 11:19	04/13/20 18:35	1
Fluoranthene	ND	UJ	0.40	0.14	ug/L		04/08/20 11:19	04/15/20 13:46	2
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:19	04/13/20 18:35	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:19	04/13/20 18:35	1

Client Sample ID: MW7-ROX-040620-DUP
Date Collected: 04/06/20 13:25
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Lab Sample ID: 400-186367-8
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
Phenanthrene	ND	UJ	0.40	0.072	ug/L		04/08/20 11:19	04/15/20 13:46	2
Pyrene	ND		0.20	0.040	ug/L		04/08/20 11:19	04/13/20 18:35	1
1-Methylnaphthalene	**1.9**		0.20	0.074	ug/L		04/08/20 11:19	04/13/20 18:35	1
2-Methylnaphthalene	**2.7**		0.20	0.060	ug/L		04/08/20 11:19	04/13/20 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*33 - 138*	*04/08/20 11:19*	*04/13/20 18:35*	*1*
2-Fluorobiphenyl	*52*		*15 - 122*	*04/08/20 11:19*	*04/13/20 18:35*	*1*
Nitrobenzene-d5	*61*		*19 - 130*	*04/08/20 11:19*	*04/13/20 18:35*	*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		04/08/20 11:19	04/13/20 18:41	1
Benzenethiol	ND	*1 UJ	9.9	1.7	ug/L		04/08/20 11:19	04/13/20 18:41	1
Benzoic acid	**12**	**J**	30	7.3	ug/L		04/08/20 11:19	04/13/20 18:41	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/08/20 11:19	04/13/20 18:41	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/08/20 11:19	04/13/20 18:41	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/08/20 11:19	04/13/20 18:41	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/08/20 11:19	04/13/20 18:41	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/08/20 11:19	04/13/20 18:41	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/08/20 11:19	04/13/20 18:41	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/08/20 11:19	04/13/20 18:41	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 18:41	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:41	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/08/20 11:19	04/13/20 18:41	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/08/20 11:19	04/13/20 18:41	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/08/20 11:19	04/13/20 18:41	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:41	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/08/20 11:19	04/13/20 18:41	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:19	04/13/20 18:41	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/08/20 11:19	04/13/20 18:41	1
Indene	ND		9.9	0.99	ug/L		04/08/20 11:19	04/13/20 18:41	1
Isophorone	ND		9.9	0.57	ug/L		04/08/20 11:19	04/13/20 18:41	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 18:41	1
3 & 4 Methylphenol	**1.6**	**J**	20	1.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/08/20 11:19	04/13/20 18:41	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/08/20 11:19	04/13/20 18:41	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/08/20 11:19	04/13/20 18:41	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/08/20 11:19	04/13/20 18:41	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/08/20 11:19	04/13/20 18:41	1

Client Sample ID: MW7-ROX-040620-DUP
Date Collected: 04/06/20 13:25
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	ND		9.9	2.1	ug/L		04/08/20 11:19	04/13/20 18:41	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:41	1
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		04/08/20 11:19	04/13/20 18:41	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/08/20 11:19	04/13/20 18:41	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:19	04/13/20 18:41	1
Phenol	**67**		9.9	2.6	ug/L		04/08/20 11:19	04/13/20 18:41	1
Pyridine	ND		9.9	3.2	ug/L		04/08/20 11:19	04/13/20 18:41	1
Quinoline	ND		9.9	6.0	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/08/20 11:19	04/13/20 18:41	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/08/20 11:19	04/13/20 18:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND	*1	20	9.9	ug/L		04/08/20 11:19	04/15/20 15:05	2
Butyl benzyl phthalate	ND		20	1.4	ug/L		04/08/20 11:19	04/15/20 15:05	2
Dibenz[a,h]acridine	ND		20	6.0	ug/L		04/08/20 11:19	04/15/20 15:05	2
3,3'-Dichlorobenzidine	ND		20	5.2	ug/L		04/08/20 11:19	04/15/20 15:05	2
Di-n-octyl phthalate	ND		20	0.87	ug/L		04/08/20 11:19	04/15/20 15:05	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*04/08/20 11:19*	*04/15/20 15:05*	*2*
2-Fluorophenol	*50*		*10 - 120*	*04/08/20 11:19*	*04/15/20 15:05*	*2*
Nitrobenzene-d5	*75*		*27 - 120*	*04/08/20 11:19*	*04/15/20 15:05*	*2*
Phenol-d5	*71*		*10 - 120*	*04/08/20 11:19*	*04/15/20 15:05*	*2*
Terphenyl-d14	*76*		*53 - 125*	*04/08/20 11:19*	*04/15/20 15:05*	*2*
2,4,6-Tribromophenol	*100*		*15 - 135*	*04/08/20 11:19*	*04/15/20 15:05*	*2*

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	*	0.036	0.0066	ug/L		04/13/20 14:58	04/14/20 16:33	1
1,2-Dibromoethane	ND		0.024	0.0060	ug/L		04/13/20 14:58	04/14/20 16:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*	*p*	*51 - 149*	*04/13/20 14:58*	*04/14/20 16:33*	*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 or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
p	The %RPD between the primary and confirmation column/detector is >40%. The lower value has been reported.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186367-1

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	(78-118)	(81-121)	(80-120)
400-186367-1	TB-ROX-040620-8260	92	96	96
400-186367-3	MW4-ROX-040620-EB	92	95	98
400-186367-4	MW4-ROX-040620	93	95	97
400-186367-5	MW25-ROX-040620	94	95	97
400-186367-6	MW8-ROX-040620	90	95	96
400-186367-7	MW7-ROX-040620	93	94	96
400-186367-7 - DL	MW7-ROX-040620	93	96	98
400-186367-8	MW7-ROX-040620-DUP	91	93	96
400-186367-8 - DL	MW7-ROX-040620-DUP	93	95	98
LCS 400-485728/1002	Lab Control Sample	91	103	96
LCS 400-485850/1002	Lab Control Sample	91	103	96
MB 400-485728/19	Method Blank	92	98	96
MB 400-485850/5	Method Blank	92	96	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186367-3	MW4-ROX-040620-EB	65	56	74	68	77	62
400-186367-4	MW4-ROX-040620	59	42	66	56	64	73
400-186367-5	MW25-ROX-040620	73	62	82	75	83	106
400-186367-6	MW8-ROX-040620	66	43	77	63	70	106
400-186367-7	MW7-ROX-040620	58	42	66	60	59	99
400-186367-8 - DL	MW7-ROX-040620-DUP	67	50	75	71	76	100
LCS 400-485314/2-A	Lab Control Sample	54	49	65	58	57	68
LCS 400-485314/4-A	Lab Control Sample	56	13	64	42	61	43
LCSD 400-485314/3-A	Lab Control Sample Dup	66	59	75	70	78	85
LCSD 400-485314/5-A	Lab Control Sample Dup	61	11	69	40	66	44
MB 400-485314/1-A	Method Blank	60	47	64	59	64	39

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: 400-186367-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186367-3	MW4-ROX-040620-EB	81	80	92
400-186367-4	MW4-ROX-040620	56	55	66
400-186367-5	MW25-ROX-040620	83	74	80
400-186367-6	MW8-ROX-040620	68	51	75
400-186367-7	MW7-ROX-040620	51	50	58
400-186367-8	MW7-ROX-040620-DUP	60	52	61
LCS 400-485314/2-A	Lab Control Sample	78	78	104
LCSD 400-485314/3-A	Lab Control Sample Dup	79	92	113
MB 400-485314/1-A	Method Blank	68	67	80

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186367-2	TB-ROX-040620-8011	113
400-186367-3	MW4-ROX-040620-EB	108
400-186367-4	MW4-ROX-040620	110 p
400-186367-5	MW25-ROX-040620	109 p
400-186367-6	MW8-ROX-040620	100 p
400-186367-7	MW7-ROX-040620	98 p
400-186367-8	MW7-ROX-040620-DUP	104 p
LCS 400-485821/2-A	Lab Control Sample	58
LCSD 400-485821/3-A	Lab Control Sample Dup	59
MB 400-485821/1-A	Method Blank	102

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186367-1

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 TestAmerica, 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: 400-186367-1

Client Sample ID: TB-ROX-040620-8260

Date Collected: 04/06/20 00:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-1
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	485728	04/13/20 16:46	RS	TAL PEN

Client Sample ID: TB-ROX-040620-8011

Date Collected: 04/06/20 00:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-2
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			24.6 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 14:12	DS	TAL PEN

Client Sample ID: MW4-ROX-040620-EB

Date Collected: 04/06/20 07:30
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-3
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	485850	04/14/20 16:11	RS	TAL PEN
Total/NA	Prep	3520C			1016 mL	1 mL	485314	04/08/20 11:13	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 16:58	VC1	TAL PEN
Total/NA	Prep	3520C			1016 mL	1 mL	485314	04/08/20 11:13	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 17:07	PP1	TAL PEN
Total/NA	Prep	8011			29.1 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 14:32	DS	TAL PEN

Client Sample ID: MW4-ROX-040620

Date Collected: 04/06/20 09:50
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-4
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	485850	04/14/20 16:32	RS	TAL PEN
Total/NA	Prep	3520C			996.6 mL	1 mL	485314	04/08/20 11:13	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 17:19	VC1	TAL PEN
Total/NA	Prep	3520C			996.6 mL	1 mL	485314	04/08/20 11:13	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 17:24	PP1	TAL PEN
Total/NA	Prep	8011			28.4 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 14:52	DS	TAL PEN

Client Sample ID: MW25-ROX-040620

Date Collected: 04/06/20 11:00
Date Received: 04/07/20 08:34

Lab Sample ID: 400-186367-5
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	485850	04/14/20 16:52	RS	TAL PEN
Total/NA	Prep	3520C			1015.2 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 17:39	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186367-1

Client Sample ID: MW25-ROX-040620

Lab Sample ID: 400-186367-5

Date Collected: 04/06/20 11:00
Matrix: Water
Date Received: 04/07/20 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1015.2 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 17:42	PP1	TAL PEN
Total/NA	Prep	8011			25.6 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 15:13	DS	TAL PEN

Client Sample ID: MW8-ROX-040620

Lab Sample ID: 400-186367-6

Date Collected: 04/06/20 12:30
Matrix: Water
Date Received: 04/07/20 08:34

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	485728	04/13/20 17:06	RS	TAL PEN
Total/NA	Prep	3520C			1017 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 18:00	VC1	TAL PEN
Total/NA	Prep	3520C			1017 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 18:00	PP1	TAL PEN
Total/NA	Prep	8011			25.4 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 15:33	DS	TAL PEN

Client Sample ID: MW7-ROX-040620

Lab Sample ID: 400-186367-7

Date Collected: 04/06/20 13:25
Matrix: Water
Date Received: 04/07/20 08:34

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	485728	04/13/20 17:27	RS	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	485850	04/14/20 17:13	RS	TAL PEN
Total/NA	Prep	3520C			1007.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 18:21	VC1	TAL PEN
Total/NA	Prep	3520C			1007.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 18:17	PP1	TAL PEN
Total/NA	Prep	3520C	DL		1007.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL	DL	2			485871	04/14/20 11:41	TAJ	TAL PEN
Total/NA	Prep	8011			31.8 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 15:53	DS	TAL PEN

Client Sample ID: MW7-ROX-040620-DUP

Lab Sample ID: 400-186367-8

Date Collected: 04/06/20 13:25
Matrix: Water
Date Received: 04/07/20 08:34

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	485728	04/13/20 17:47	RS	TAL PEN
Total/NA	Analysis	8260B	DL	5000	5 mL	5 mL	485850	04/14/20 17:33	RS	TAL PEN
Total/NA	Prep	3520C			1006.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 18:41	VC1	TAL PEN
Total/NA	Prep	3520C	DL		1006.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D	DL	2			486030	04/15/20 15:05	VC1	TAL PEN

Client Sample ID: MW7-ROX-040620-DUP — **Lab Sample ID: 400-186367-8**
Date Collected: 04/06/20 13:25 — **Matrix: Water**
Date Received: 04/07/20 08:34

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1006.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 18:35	PP1	TAL PEN
Total/NA	Prep	3520C			1006.4 mL	1 mL	485314	04/08/20 11:19	NTH	TAL PEN
Total/NA	Analysis	8270D LL		2			486044	04/15/20 13:46	DS	TAL PEN
Total/NA	Prep	8011			29.2 mL	35 mL	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 16:33	DS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-485314/1-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 14:54	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485778	04/13/20 16:14	PP1	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-485728/19**
Date Collected: N/A — **Matrix: Water**
Date Received: 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	485728	04/13/20 09:45	RS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-485821/1-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	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 12:52	DS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-485850/5**
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	485850	04/14/20 09:39	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-485314/2-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 15:14	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186367-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485314/2-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			485778	04/13/20 16:32	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485314/4-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	485783	04/13/20 15:56	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485728/1002
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	485728	04/13/20 08:53	RS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485821/2-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	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 13:12	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485850/1002
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	485850	04/14/20 08:46	RS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-485314/3-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485783	04/13/20 15:35	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			485778	04/13/20 16:49	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-186367-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-485314/5-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			1000 mL	1 mL	485314	04/08/20 11:12	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	485783	04/13/20 16:16	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-485821/3-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	485821	04/13/20 14:58	DHJ	TAL PEN
Total/NA	Analysis	8011		1			485918	04/14/20 13:32	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 485728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-1	TB-ROX-040620-8260	Total/NA	Water	8260B	
400-186367-6	MW8-ROX-040620	Total/NA	Water	8260B	
400-186367-7	MW7-ROX-040620	Total/NA	Water	8260B	
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8260B	
MB 400-485728/19	Method Blank	Total/NA	Water	8260B	
LCS 400-485728/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 485850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	8260B	
400-186367-4	MW4-ROX-040620	Total/NA	Water	8260B	
400-186367-5	MW25-ROX-040620	Total/NA	Water	8260B	
400-186367-7 - DL	MW7-ROX-040620	Total/NA	Water	8260B	
400-186367-8 - DL	MW7-ROX-040620-DUP	Total/NA	Water	8260B	
MB 400-485850/5	Method Blank	Total/NA	Water	8260B	
LCS 400-485850/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 485314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	3520C	
400-186367-4	MW4-ROX-040620	Total/NA	Water	3520C	
400-186367-5	MW25-ROX-040620	Total/NA	Water	3520C	
400-186367-6	MW8-ROX-040620	Total/NA	Water	3520C	
400-186367-7 - DL	MW7-ROX-040620	Total/NA	Water	3520C	
400-186367-7	MW7-ROX-040620	Total/NA	Water	3520C	
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	3520C	
400-186367-8 - DL	MW7-ROX-040620-DUP	Total/NA	Water	3520C	
MB 400-485314/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485314/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-485314/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485314/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-485314/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 485778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	8270D LL	485314
400-186367-4	MW4-ROX-040620	Total/NA	Water	8270D LL	485314
400-186367-5	MW25-ROX-040620	Total/NA	Water	8270D LL	485314
400-186367-6	MW8-ROX-040620	Total/NA	Water	8270D LL	485314
400-186367-7	MW7-ROX-040620	Total/NA	Water	8270D LL	485314
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8270D LL	485314
MB 400-485314/1-A	Method Blank	Total/NA	Water	8270D LL	485314
LCS 400-485314/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485314
LCSD 400-485314/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	485314

Analysis Batch: 485783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	8270D	485314
400-186367-4	MW4-ROX-040620	Total/NA	Water	8270D	485314

GC/MS Semi VOA (Continued)

Analysis Batch: 485783 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-5	MW25-ROX-040620	Total/NA	Water	8270D	485314
400-186367-6	MW8-ROX-040620	Total/NA	Water	8270D	485314
400-186367-7	MW7-ROX-040620	Total/NA	Water	8270D	485314
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8270D	485314
MB 400-485314/1-A	Method Blank	Total/NA	Water	8270D	485314
LCS 400-485314/2-A	Lab Control Sample	Total/NA	Water	8270D	485314
LCS 400-485314/4-A	Lab Control Sample	Total/NA	Water	8270D	485314
LCSD 400-485314/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	485314
LCSD 400-485314/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	485314

Analysis Batch: 485871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-7 - DL	MW7-ROX-040620	Total/NA	Water	8270D LL	485314

Analysis Batch: 486030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-8 - DL	MW7-ROX-040620-DUP	Total/NA	Water	8270D	485314

Analysis Batch: 486044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8270D LL	485314

GC Semi VOA

Prep Batch: 485821

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-2	TB-ROX-040620-8011	Total/NA	Water	8011	
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	8011	
400-186367-4	MW4-ROX-040620	Total/NA	Water	8011	
400-186367-5	MW25-ROX-040620	Total/NA	Water	8011	
400-186367-6	MW8-ROX-040620	Total/NA	Water	8011	
400-186367-7	MW7-ROX-040620	Total/NA	Water	8011	
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8011	
MB 400-485821/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-485821/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-485821/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 485918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186367-2	TB-ROX-040620-8011	Total/NA	Water	8011	485821
400-186367-3	MW4-ROX-040620-EB	Total/NA	Water	8011	485821
400-186367-4	MW4-ROX-040620	Total/NA	Water	8011	485821
400-186367-5	MW25-ROX-040620	Total/NA	Water	8011	485821
400-186367-6	MW8-ROX-040620	Total/NA	Water	8011	485821
400-186367-7	MW7-ROX-040620	Total/NA	Water	8011	485821
400-186367-8	MW7-ROX-040620-DUP	Total/NA	Water	8011	485821
MB 400-485821/1-A	Method Blank	Total/NA	Water	8011	485821
LCS 400-485821/2-A	Lab Control Sample	Total/NA	Water	8011	485821
LCSD 400-485821/3-A	Lab Control Sample Dup	Total/NA	Water	8011	485821

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

Lab Sample ID: MB 400-485728/19
Matrix: Water
Analysis Batch: 485728

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			04/13/20 09:45	1
Acrolein	ND		20	10	ug/L			04/13/20 09:45	1
Acrylonitrile	ND		10	2.8	ug/L			04/13/20 09:45	1
Benzene	ND		1.0	0.38	ug/L			04/13/20 09:45	1
Bromobenzene	ND		1.0	0.54	ug/L			04/13/20 09:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/13/20 09:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Bromoform	ND		5.0	0.71	ug/L			04/13/20 09:45	1
Bromomethane	ND		1.0	0.98	ug/L			04/13/20 09:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/13/20 09:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Chloroethane	ND		1.0	0.76	ug/L			04/13/20 09:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/13/20 09:45	1
Chloroform	ND		1.0	0.60	ug/L			04/13/20 09:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/13/20 09:45	1
Chloromethane	ND		1.0	0.83	ug/L			04/13/20 09:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/13/20 09:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/13/20 09:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/13/20 09:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/13/20 09:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/13/20 09:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/13/20 09:45	1
2-Hexanone	ND		25	3.1	ug/L			04/13/20 09:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/13/20 09:45	1
Methylene bromide	ND		5.0	0.59	ug/L			04/13/20 09:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/13/20 09:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/13/20 09:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/13/20 09:45	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/13/20 09:45	1
Naphthalene	ND		1.0	1.0	ug/L			04/13/20 09:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/13/20 09:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/13/20 09:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/13/20 09:45	1
o-Xylene	ND		5.0	0.60	ug/L			04/13/20 09:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/13/20 09:45	1

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

Lab Sample ID: MB 400-485728/19
Matrix: Water
Analysis Batch: 485728

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			04/13/20 09:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/13/20 09:45	1
Styrene	ND		1.0	1.0	ug/L			04/13/20 09:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/13/20 09:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/13/20 09:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/13/20 09:45	1
Toluene	ND		1.0	0.41	ug/L			04/13/20 09:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/13/20 09:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/13/20 09:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/13/20 09:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/13/20 09:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/13/20 09:45	1
Trichloroethene	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/13/20 09:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/13/20 09:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/13/20 09:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/13/20 09:45	1
Vinyl acetate	ND		25	2.0	ug/L			04/13/20 09:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/13/20 09:45	1
Xylenes, Total	ND		10	1.6	ug/L			04/13/20 09:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/13/20 09:45*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*04/13/20 09:45*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/13/20 09:45*	*1*

Lab Sample ID: LCS 400-485728/1002
Matrix: Water
Analysis Batch: 485728

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	210		ug/L		105	43 - 160
Acrolein	500	531		ug/L		106	38 - 160
Acrylonitrile	500	516		ug/L		103	64 - 142
Benzene	50.0	49.4		ug/L		99	70 - 130
Bromobenzene	50.0	53.6		ug/L		107	70 - 132
Bromochloromethane	50.0	52.1		ug/L		104	70 - 130
Bromodichloromethane	50.0	48.2		ug/L		96	67 - 133
Bromoform	50.0	48.8		ug/L		98	57 - 140
Bromomethane	50.0	56.1		ug/L		112	10 - 160
2-Butanone (MEK)	200	220		ug/L		110	61 - 145
Carbon disulfide	50.0	42.4		ug/L		85	61 - 137
Carbon tetrachloride	50.0	52.9		ug/L		106	61 - 137
Chlorobenzene	50.0	49.2		ug/L		98	70 - 130
Dibromochloromethane	50.0	50.4		ug/L		101	67 - 135
Chloroethane	50.0	48.1		ug/L		96	55 - 141

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

Lab Sample ID: LCS 400-485728/1002
Matrix: Water
Analysis Batch: 485728

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	49.5		ug/L		99	10 - 160
Chloroform	50.0	50.1		ug/L		100	69 - 130
1-Chlorohexane	50.0	52.1		ug/L		104	69 - 130
Chloromethane	50.0	46.2		ug/L		92	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	50.4		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	50.0		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	51.6		ug/L		103	70 - 130
1,4-Dichlorobenzene	50.0	49.5		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	50.0		ug/L		100	41 - 146
1,1-Dichloroethane	50.0	49.8		ug/L		100	70 - 130
1,2-Dichloroethane	50.0	48.6		ug/L		97	69 - 130
1,1-Dichloroethene	50.0	55.1		ug/L		110	63 - 134
1,2-Dichloropropane	50.0	48.3		ug/L		97	70 - 130
1,3-Dichloropropane	50.0	48.4		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	48.4		ug/L		97	52 - 135
1,1-Dichloropropene	50.0	51.6		ug/L		103	70 - 130
Ethylbenzene	50.0	49.6		ug/L		99	70 - 130
Ethyl methacrylate	50.0	51.3		ug/L		103	68 - 130
Hexachlorobutadiene	50.0	62.3		ug/L		125	53 - 140
2-Hexanone	200	205		ug/L		102	65 - 137
Isopropylbenzene	50.0	51.3		ug/L		103	70 - 130
Methylene bromide	50.0	50.6		ug/L		101	70 - 130
Methylene Chloride	50.0	51.8		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	48.7		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	49.2		ug/L		98	70 - 130
Naphthalene	50.0	53.0		ug/L		106	47 - 149
n-Butylbenzene	50.0	49.0		ug/L		98	67 - 130
N-Propylbenzene	50.0	51.2		ug/L		102	70 - 130
o-Chlorotoluene	50.0	47.0		ug/L		94	70 - 130
o-Xylene	50.0	49.1		ug/L		98	70 - 130
p-Chlorotoluene	50.0	46.7		ug/L		93	70 - 130
p-Isopropyltoluene	50.0	51.3		ug/L		103	65 - 130
sec-Butylbenzene	50.0	50.1		ug/L		100	66 - 130
Styrene	50.0	50.4		ug/L		101	70 - 130
tert-Butylbenzene	50.0	47.4		ug/L		95	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/L		107	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.2		ug/L		98	70 - 131
Tetrachloroethene	50.0	54.0		ug/L		108	65 - 130
Toluene	50.0	47.6		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	52.4		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	49.6		ug/L		99	63 - 130
1,2,3-Trichlorobenzene	50.0	56.1		ug/L		112	60 - 138
1,2,4-Trichlorobenzene	50.0	57.1		ug/L		114	60 - 140
1,1,1-Trichloroethane	50.0	51.5		ug/L		103	68 - 130
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	70 - 130
Trichloroethene	50.0	55.5		ug/L		111	70 - 130
Trichlorofluoromethane	50.0	50.2		ug/L		100	65 - 138

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

Lab Sample ID: LCS 400-485728/1002
Matrix: Water
Analysis Batch: 485728

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	48.6		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	49.2		ug/L		98	69 - 130
Vinyl acetate	100	106		ug/L		106	26 - 160
Vinyl chloride	50.0	47.8		ug/L		96	59 - 136
Xylenes, Total	100	98.3		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: MB 400-485850/5
Matrix: Water
Analysis Batch: 485850

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			04/14/20 09:39	1
Acrolein	ND		20	10	ug/L			04/14/20 09:39	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 09:39	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 09:39	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 09:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 09:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 09:39	1
Bromomethane	ND		1.0	0.98	ug/L			04/14/20 09:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 09:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Chloroethane	ND		1.0	0.76	ug/L			04/14/20 09:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 09:39	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 09:39	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 09:39	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 09:39	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 09:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 09:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 09:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 09:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 09:39	1

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

Lab Sample ID: MB 400-485850/5
Matrix: Water
Analysis Batch: 485850

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 09:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 09:39	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 09:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 09:39	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 09:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 09:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 09:39	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 09:39	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 09:39	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 09:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 09:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 09:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 09:39	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 09:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 09:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 09:39	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/14/20 09:39	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 09:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 09:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 09:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 09:39	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 09:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 09:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 09:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 09:39	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 09:39	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 09:39	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 09:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 09:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 09:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 09:39	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 09:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 09:39	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 09:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/14/20 09:39*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/14/20 09:39*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/14/20 09:39*	*1*

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

Lab Sample ID: LCS 400-485850/1002
Matrix: Water
Analysis Batch: 485850

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	219		ug/L		110	43 - 160
Acrolein	500	517		ug/L		103	38 - 160
Acrylonitrile	500	531		ug/L		106	64 - 142
Benzene	50.0	48.6		ug/L		97	70 - 130
Bromobenzene	50.0	53.0		ug/L		106	70 - 132
Bromochloromethane	50.0	51.3		ug/L		103	70 - 130
Bromodichloromethane	50.0	47.6		ug/L		95	67 - 133
Bromoform	50.0	49.7		ug/L		99	57 - 140
Bromomethane	50.0	61.0		ug/L		122	10 - 160
2-Butanone (MEK)	200	228		ug/L		114	61 - 145
Carbon disulfide	50.0	41.5		ug/L		83	61 - 137
Carbon tetrachloride	50.0	51.5		ug/L		103	61 - 137
Chlorobenzene	50.0	48.8		ug/L		98	70 - 130
Dibromochloromethane	50.0	49.9		ug/L		100	67 - 135
Chloroethane	50.0	50.0		ug/L		100	55 - 141
2-Chloroethyl vinyl ether	50.0	52.8		ug/L		106	10 - 160
Chloroform	50.0	49.1		ug/L		98	69 - 130
1-Chlorohexane	50.0	52.5		ug/L		105	69 - 130
Chloromethane	50.0	48.3		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	68 - 130
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	69 - 132
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	70 - 130
Dichlorodifluoromethane	50.0	49.7		ug/L		99	41 - 146
1,1-Dichloroethane	50.0	49.6		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	48.4		ug/L		97	69 - 130
1,1-Dichloroethene	50.0	53.1		ug/L		106	63 - 134
1,2-Dichloropropane	50.0	47.5		ug/L		95	70 - 130
1,3-Dichloropropane	50.0	49.1		ug/L		98	70 - 130
2,2-Dichloropropane	50.0	46.9		ug/L		94	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	49.4		ug/L		99	70 - 130
Ethyl methacrylate	50.0	52.2		ug/L		104	68 - 130
Hexachlorobutadiene	50.0	62.9		ug/L		126	53 - 140
2-Hexanone	200	217		ug/L		109	65 - 137
Isopropylbenzene	50.0	50.4		ug/L		101	70 - 130
Methylene bromide	50.0	50.7		ug/L		101	70 - 130
Methylene Chloride	50.0	50.8		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	217		ug/L		108	69 - 138
Methyl tert-butyl ether	50.0	48.5		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	48.5		ug/L		97	70 - 130
Naphthalene	50.0	55.1		ug/L		110	47 - 149
n-Butylbenzene	50.0	49.5		ug/L		99	67 - 130
N-Propylbenzene	50.0	51.2		ug/L		102	70 - 130
o-Chlorotoluene	50.0	46.2		ug/L		92	70 - 130
o-Xylene	50.0	49.1		ug/L		98	70 - 130
p-Chlorotoluene	50.0	46.9		ug/L		94	70 - 130

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

Lab Sample ID: LCS 400-485850/1002
Matrix: Water
Analysis Batch: 485850

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	50.5		ug/L		101	65 - 130
sec-Butylbenzene	50.0	49.7		ug/L		99	66 - 130
Styrene	50.0	49.9		ug/L		100	70 - 130
tert-Butylbenzene	50.0	46.5		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.9		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.2		ug/L		102	70 - 131
Tetrachloroethene	50.0	52.1		ug/L		104	65 - 130
Toluene	50.0	47.0		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	51.1		ug/L		102	70 - 130
trans-1,3-Dichloropropene	50.0	49.9		ug/L		100	63 - 130
1,2,3-Trichlorobenzene	50.0	57.2		ug/L		114	60 - 138
1,2,4-Trichlorobenzene	50.0	57.7		ug/L		115	60 - 140
1,1,1-Trichloroethane	50.0	50.3		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	50.3		ug/L		101	70 - 130
Trichloroethene	50.0	53.8		ug/L		108	70 - 130
Trichlorofluoromethane	50.0	49.0		ug/L		98	65 - 138
1,2,3-Trichloropropane	50.0	53.1		ug/L		106	70 - 130
1,2,4-Trimethylbenzene	50.0	48.3		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	49.1		ug/L		98	69 - 130
Vinyl acetate	100	111		ug/L		111	26 - 160
Vinyl chloride	50.0	48.9		ug/L		98	59 - 136
Xylenes, Total	100	97.6		ug/L		98	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*103*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

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

Lab Sample ID: MB 400-485314/1-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/08/20 11:12	04/13/20 14:54	1
Benzenethiol	ND		10	1.7	ug/L		04/08/20 11:12	04/13/20 14:54	1
Benzoic acid	ND		30	7.3	ug/L		04/08/20 11:12	04/13/20 14:54	1
Benzyl alcohol	ND		10	2.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/08/20 11:12	04/13/20 14:54	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/08/20 11:12	04/13/20 14:54	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/08/20 11:12	04/13/20 14:54	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/08/20 11:12	04/13/20 14:54	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/08/20 11:12	04/13/20 14:54	1
4-Chloroaniline	ND		10	3.4	ug/L		04/08/20 11:12	04/13/20 14:54	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/08/20 11:12	04/13/20 14:54	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/08/20 11:12	04/13/20 14:54	1
2-Chlorophenol	ND		10	2.2	ug/L		04/08/20 11:12	04/13/20 14:54	1

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

Lab Sample ID: MB 400-485314/1-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Dibenzofuran	ND		10	0.52	ug/L		04/08/20 11:12	04/13/20 14:54	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Diethyl phthalate	ND		10	0.70	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/08/20 11:12	04/13/20 14:54	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/08/20 11:12	04/13/20 14:54	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/08/20 11:12	04/13/20 14:54	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/08/20 11:12	04/13/20 14:54	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/08/20 11:12	04/13/20 14:54	1
1,4-Dioxane	ND		10	1.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/08/20 11:12	04/13/20 14:54	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/08/20 11:12	04/13/20 14:54	1
Hexachloroethane	ND		10	4.2	ug/L		04/08/20 11:12	04/13/20 14:54	1
Indene	ND		10	1.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
Isophorone	ND		10	0.57	ug/L		04/08/20 11:12	04/13/20 14:54	1
2-Methylphenol	ND		10	1.8	ug/L		04/08/20 11:12	04/13/20 14:54	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
2-Nitroaniline	ND		10	2.2	ug/L		04/08/20 11:12	04/13/20 14:54	1
3-Nitroaniline	ND		10	1.8	ug/L		04/08/20 11:12	04/13/20 14:54	1
4-Nitroaniline	ND		10	2.5	ug/L		04/08/20 11:12	04/13/20 14:54	1
Nitrobenzene	ND		10	0.55	ug/L		04/08/20 11:12	04/13/20 14:54	1
2-Nitrophenol	ND		10	0.65	ug/L		04/08/20 11:12	04/13/20 14:54	1
4-Nitrophenol	ND		10	2.1	ug/L		04/08/20 11:12	04/13/20 14:54	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/08/20 11:12	04/13/20 14:54	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/08/20 11:12	04/13/20 14:54	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/08/20 11:12	04/13/20 14:54	1
Pentachlorophenol	ND		20	1.8	ug/L		04/08/20 11:12	04/13/20 14:54	1
Phenol	ND		10	2.6	ug/L		04/08/20 11:12	04/13/20 14:54	1
Pyridine	ND		10	3.2	ug/L		04/08/20 11:12	04/13/20 14:54	1
Quinoline	ND		10	6.0	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/08/20 11:12	04/13/20 14:54	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/08/20 11:12	04/13/20 14:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*34 - 120*	*04/08/20 11:12*	*04/13/20 14:54*	*1*
2-Fluorophenol	*47*		*10 - 120*	*04/08/20 11:12*	*04/13/20 14:54*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*04/08/20 11:12*	*04/13/20 14:54*	*1*
Phenol-d5	*59*		*10 - 120*	*04/08/20 11:12*	*04/13/20 14:54*	*1*
Terphenyl-d14	*64*		*53 - 125*	*04/08/20 11:12*	*04/13/20 14:54*	*1*
2,4,6-Tribromophenol	*39*		*15 - 135*	*04/08/20 11:12*	*04/13/20 14:54*	*1*

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

Lab Sample ID: LCS 400-485314/2-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	16.6		ug/L		55	29 - 120
Benzoic acid	116	83.6		ug/L		72	10 - 150
Benzyl alcohol	30.0	18.5		ug/L		62	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.8		ug/L		56	45 - 120
Bis(2-chloroethyl)ether	30.0	15.7		ug/L		52	48 - 120
bis (2-chloroisopropyl) ether	30.0	17.3		ug/L		58	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	17.9		ug/L		60	48 - 150
4-Bromophenyl phenyl ether	30.0	19.3		ug/L		64	55 - 122
Butyl benzyl phthalate	30.0	18.0		ug/L		60	46 - 145
4-Chloroaniline	30.0	14.0		ug/L		47	30 - 120
4-Chloro-3-methylphenol	30.0	21.0		ug/L		70	39 - 140
2-Chloronaphthalene	30.0	16.9		ug/L		56	52 - 120
2-Chlorophenol	30.0	17.8		ug/L		59	34 - 120
4-Chlorophenyl phenyl ether	30.0	19.0		ug/L		63	58 - 124
Dibenz[a,h]acridine	29.6	14.0		ug/L		47	46 - 149
Dibenzofuran	30.0	18.8		ug/L		63	58 - 123
3,3'-Dichlorobenzidine	40.0	29.0		ug/L		72	39 - 135
2,4-Dichlorophenol	30.0	20.2		ug/L		67	39 - 128
Diethyl phthalate	30.0	19.4		ug/L		65	44 - 146
2,4-Dimethylphenol	30.0	18.5		ug/L		62	44 - 120
Dimethyl phthalate	30.0	19.5		ug/L		65	50 - 131
Di-n-butyl phthalate	30.0	17.0		ug/L		57	55 - 131
4,6-Dinitro-ortho-cresol	60.0	44.8		ug/L		75	10 - 150
2,4-Dinitrophenol	60.0	49.8		ug/L		83	10 - 150
2,4-Dinitrotoluene	30.0	20.3		ug/L		68	58 - 140
2,6-Dinitrotoluene	30.0	19.5		ug/L		65	57 - 130
Di-n-octyl phthalate	30.0	18.3		ug/L		61	50 - 150
1,4-Dioxane	30.0	13.2		ug/L		44	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	16.7		ug/L		56	47 - 123
Hexachlorobenzene	30.0	18.1		ug/L		60	52 - 131
Hexachlorocyclopentadiene	30.0	10.2	J	ug/L		34	10 - 129
Hexachloroethane	30.0	13.6		ug/L		45	20 - 120
Indene	30.0	16.9		ug/L		56	47 - 120
Isophorone	30.0	18.9		ug/L		63	49 - 120
2-Methylphenol	30.0	18.3		ug/L		61	39 - 123
3 & 4 Methylphenol	30.0	18.2	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	19.5		ug/L		65	47 - 150
3-Nitroaniline	30.0	17.8		ug/L		59	34 - 132
4-Nitroaniline	30.0	20.3		ug/L		68	41 - 135
Nitrobenzene	30.0	18.0		ug/L		60	47 - 120
2-Nitrophenol	30.0	17.9		ug/L		60	28 - 136
4-Nitrophenol	60.0	34.3		ug/L		57	10 - 150
N-Nitrosodimethylamine	30.0	16.2		ug/L		54	22 - 148
N-Nitrosodi-n-propylamine	30.0	18.3		ug/L		61	44 - 120
N-Nitrosodiphenylamine	29.8	19.2		ug/L		65	56 - 120
Pentachlorophenol	60.0	37.2		ug/L		62	15 - 141
Phenol	30.0	17.6		ug/L		59	33 - 120
Pyridine	60.0	27.1		ug/L		45	26 - 120

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

Lab Sample ID: LCS 400-485314/2-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	19.7		ug/L		66	51 - 129
2,4,5-Trichlorophenol	30.0	20.6		ug/L		69	38 - 147
2,4,6-Trichlorophenol	30.0	20.3		ug/L		68	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*34 - 120*
2-Fluorophenol	*49*		*10 - 120*
Nitrobenzene-d5	*65*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*57*		*53 - 125*
2,4,6-Tribromophenol	*68*		*15 - 135*

Lab Sample ID: LCS 400-485314/4-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	2.19	J *	ug/L		7	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*56*		*34 - 120*
2-Fluorophenol	*13*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*42*		*10 - 120*
Terphenyl-d14	*61*		*53 - 125*
2,4,6-Tribromophenol	*43*		*15 - 135*

Lab Sample ID: LCSD 400-485314/3-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	20.6		ug/L		69	29 - 120	21	30
Benzoic acid	116	92.1		ug/L		79	10 - 150	10	30
Benzyl alcohol	30.0	22.7		ug/L		76	19 - 125	20	30
Bis(2-chloroethoxy)methane	30.0	19.7		ug/L		66	45 - 120	16	30
Bis(2-chloroethyl)ether	30.0	18.2		ug/L		61	48 - 120	15	30
bis (2-chloroisopropyl) ether	30.0	20.7		ug/L		69	30 - 125	18	30
Bis(2-ethylhexyl) phthalate	30.0	27.4	*1	ug/L		91	48 - 150	42	30
4-Bromophenyl phenyl ether	30.0	23.8		ug/L		79	55 - 122	21	30
Butyl benzyl phthalate	30.0	23.9		ug/L		80	46 - 145	28	30
4-Chloroaniline	30.0	17.2		ug/L		57	30 - 120	20	30
4-Chloro-3-methylphenol	30.0	25.4		ug/L		85	39 - 140	19	30
2-Chloronaphthalene	30.0	20.8		ug/L		69	52 - 120	21	30
2-Chlorophenol	30.0	21.6		ug/L		72	34 - 120	19	30
4-Chlorophenyl phenyl ether	30.0	23.3		ug/L		78	58 - 124	21	30
Dibenz[a,h]acridine	29.6	17.7		ug/L		60	46 - 149	24	30
Dibenzofuran	30.0	23.3		ug/L		78	58 - 123	21	30

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

Lab Sample ID: LCSD 400-485314/3-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	37.0		ug/L		93	39 - 135	24	30
2,4-Dichlorophenol	30.0	23.7		ug/L		79	39 - 128	16	30
Diethyl phthalate	30.0	24.0		ug/L		80	44 - 146	21	30
2,4-Dimethylphenol	30.0	22.0		ug/L		73	44 - 120	17	30
Dimethyl phthalate	30.0	23.6		ug/L		79	50 - 131	19	30
Di-n-butyl phthalate	30.0	20.6		ug/L		69	55 - 131	19	30
4,6-Dinitro-ortho-cresol	60.0	55.5		ug/L		92	10 - 150	21	30
2,4-Dinitrophenol	60.0	65.8		ug/L		110	10 - 150	28	30
2,4-Dinitrotoluene	30.0	25.2		ug/L		84	58 - 140	22	30
2,6-Dinitrotoluene	30.0	23.7		ug/L		79	57 - 130	19	30
Di-n-octyl phthalate	30.0	24.0		ug/L		80	50 - 150	27	30
1,4-Dioxane	30.0	15.3		ug/L		51	25 - 120	15	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	20.9		ug/L		70	47 - 123	23	30
Hexachlorobenzene	30.0	22.7		ug/L		76	52 - 131	23	30
Hexachlorocyclopentadiene	30.0	11.3	J	ug/L		38	10 - 129	10	30
Hexachloroethane	30.0	15.9		ug/L		53	20 - 120	16	30
Indene	30.0	20.2		ug/L		67	47 - 120	18	30
Isophorone	30.0	21.7		ug/L		72	49 - 120	14	30
2-Methylphenol	30.0	22.3		ug/L		74	39 - 123	20	30
3 & 4 Methylphenol	30.0	22.1		ug/L		74	38 - 121	19	30
2-Nitroaniline	30.0	23.6		ug/L		79	47 - 150	19	30
3-Nitroaniline	30.0	21.7		ug/L		72	34 - 132	20	30
4-Nitroaniline	30.0	24.5		ug/L		82	41 - 135	18	30
Nitrobenzene	30.0	21.0		ug/L		70	47 - 120	15	30
2-Nitrophenol	30.0	21.2		ug/L		71	28 - 136	17	30
4-Nitrophenol	60.0	41.9		ug/L		70	10 - 150	20	30
N-Nitrosodimethylamine	30.0	19.6		ug/L		65	22 - 148	19	30
N-Nitrosodi-n-propylamine	30.0	22.2		ug/L		74	44 - 120	19	30
N-Nitrosodiphenylamine	29.8	23.3		ug/L		78	56 - 120	19	30
Pentachlorophenol	60.0	45.2		ug/L		75	15 - 141	19	30
Phenol	30.0	21.1		ug/L		70	33 - 120	18	30
Pyridine	60.0	29.8		ug/L		50	26 - 120	9	30
Quinoline	29.6	23.7		ug/L		80	51 - 129	19	30
2,4,5-Trichlorophenol	30.0	25.5		ug/L		85	38 - 147	21	30
2,4,6-Trichlorophenol	30.0	24.9		ug/L		83	36 - 139	20	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*34 - 120*
2-Fluorophenol	*59*		*10 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
Phenol-d5	*70*		*10 - 120*
Terphenyl-d14	*78*		*53 - 125*
2,4,6-Tribromophenol	*85*		*15 - 135*

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

Lab Sample ID: LCSD 400-485314/5-A
Matrix: Water
Analysis Batch: 485783

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	* *1	ug/L		4	10 - 120	54	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*11*		*10 - 120*
Nitrobenzene-d5	*69*		*27 - 120*
Phenol-d5	*40*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*44*		*15 - 135*

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

Lab Sample ID: MB 400-485314/1-A
Matrix: Water
Analysis Batch: 485778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/08/20 11:12	04/13/20 16:14	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/08/20 11:12	04/13/20 16:14	1
Anthracene	ND		0.20	0.031	ug/L		04/08/20 11:12	04/13/20 16:14	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/08/20 11:12	04/13/20 16:14	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/08/20 11:12	04/13/20 16:14	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:12	04/13/20 16:14	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/08/20 11:12	04/13/20 16:14	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/08/20 11:12	04/13/20 16:14	1
Chrysene	ND		0.20	0.074	ug/L		04/08/20 11:12	04/13/20 16:14	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/08/20 11:12	04/13/20 16:14	1
Fluoranthene	ND		0.20	0.068	ug/L		04/08/20 11:12	04/13/20 16:14	1
Fluorene	ND		0.20	0.11	ug/L		04/08/20 11:12	04/13/20 16:14	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/08/20 11:12	04/13/20 16:14	1
Phenanthrene	ND		0.20	0.036	ug/L		04/08/20 11:12	04/13/20 16:14	1
Pyrene	ND		0.20	0.040	ug/L		04/08/20 11:12	04/13/20 16:14	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/08/20 11:12	04/13/20 16:14	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/08/20 11:12	04/13/20 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*04/08/20 11:12*	*04/13/20 16:14*	*1*
2-Fluorobiphenyl	*67*		*15 - 122*	*04/08/20 11:12*	*04/13/20 16:14*	*1*
Nitrobenzene-d5	*80*		*19 - 130*	*04/08/20 11:12*	*04/13/20 16:14*	*1*

Lab Sample ID: LCS 400-485314/2-A
Matrix: Water
Analysis Batch: 485778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.6		ug/L		85	41 - 120
Acenaphthylene	30.0	25.2		ug/L		84	44 - 120
Anthracene	30.0	26.7		ug/L		89	49 - 120

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

Lab Sample ID: LCS 400-485314/2-A
Matrix: Water
Analysis Batch: 485778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	30.0	24.1		ug/L		80	61 - 135
Benzo[a]pyrene	30.0	24.6		ug/L		82	52 - 120
Benzo[b]fluoranthene	30.0	25.5		ug/L		85	53 - 134
Benzo[g,h,i]perylene	30.0	24.7		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	27.6		ug/L		92	57 - 134
Chrysene	30.0	24.9		ug/L		83	55 - 122
Dibenz(a,h)anthracene	30.0	25.3		ug/L		84	48 - 146
Fluoranthene	30.0	30.1		ug/L		100	54 - 128
Fluorene	30.0	26.2		ug/L		87	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.9		ug/L		83	43 - 142
Phenanthrene	30.0	27.0		ug/L		90	48 - 120
Pyrene	30.0	22.4		ug/L		75	48 - 132
1-Methylnaphthalene	30.0	22.4		ug/L		75	41 - 120
2-Methylnaphthalene	30.0	24.9		ug/L		83	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*78*		*33 - 138*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5	*104*		*19 - 130*

Lab Sample ID: LCSD 400-485314/3-A
Matrix: Water
Analysis Batch: 485778

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485314

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	29.0		ug/L		97	41 - 120	12	56
Acenaphthylene	30.0	29.9		ug/L		100	44 - 120	17	56
Anthracene	30.0	30.3		ug/L		101	49 - 120	13	51
Benzo[a]anthracene	30.0	27.3		ug/L		91	61 - 135	12	49
Benzo[a]pyrene	30.0	31.1		ug/L		104	52 - 120	23	50
Benzo[b]fluoranthene	30.0	29.2		ug/L		97	53 - 134	14	54
Benzo[g,h,i]perylene	30.0	28.9		ug/L		96	47 - 133	16	50
Benzo[k]fluoranthene	30.0	30.3		ug/L		101	57 - 134	9	52
Chrysene	30.0	29.1		ug/L		97	55 - 122	16	50
Dibenz(a,h)anthracene	30.0	30.9		ug/L		103	48 - 146	20	50
Fluoranthene	30.0	32.4		ug/L		108	54 - 128	7	52
Fluorene	30.0	32.9		ug/L		110	45 - 125	23	56
Indeno[1,2,3-cd]pyrene	30.0	28.1		ug/L		94	43 - 142	12	51
Phenanthrene	30.0	29.3		ug/L		98	48 - 120	8	56
Pyrene	30.0	25.7		ug/L		86	48 - 132	13	52
1-Methylnaphthalene	30.0	26.3		ug/L		88	41 - 120	16	55
2-Methylnaphthalene	30.0	26.0		ug/L		87	32 - 124	4	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*79*		*33 - 138*
2-Fluorobiphenyl	*92*		*15 - 122*
Nitrobenzene-d5	*113*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-485821/1-A
Matrix: Water
Analysis Batch: 485918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485821

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/13/20 14:58	04/14/20 12:52	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/13/20 14:58	04/14/20 12:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*04/13/20 14:58*	*04/14/20 12:52*	*1*

Lab Sample ID: LCS 400-485821/2-A
Matrix: Water
Analysis Batch: 485918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485821

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.215	*	ug/L		214	60 - 140
1,2-Dibromoethane	0.101	0.120		ug/L		119	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*58*		*51 - 149*

Lab Sample ID: LCSD 400-485821/3-A
Matrix: Water
Analysis Batch: 485918

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485821

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.218	*	ug/L		217	60 - 140	2	30
1,2-Dibromoethane	0.101	0.123		ug/L		122	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*59*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1564500 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/6/20

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 | 60619901 - 1.03.002 | 60619901 - 1.03.0022

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AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B. Bolson / B. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002: VOC 8260, SVOC 8270

UNIT COST 60619901 - 1.03.0022: VOC 8011, PAH 8270LL

400-186367 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-ROX-040620-8260	4/6/20	0000	Water	2					2	X			
	TB-ROX-040620-8011		0000		2					2			X	
	MW-4-ROX-040620-EB		0730		6			2		8	X	X	X	X
	MW-4-ROX-040620		0950		6			2		8	X	X	X	X
	MW-25-ROX-040620		1100		6			2		8	X	X	X	X
	MW-8-ROX-040620		1230		6			2		8	X	X	X	X
	MW-7-ROX-040620		1325		6			2		8	X	X	X	X
	MW-7-ROX-040620-DUP		1325		6			2		8	X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	Fedex: 1680 3500 9468, 1680 3500 9457, 1680 3500 9446	4/6/20	1600
	[signature]	4.7.20	8:34

Version: 14Dec15

Custody Seal #: 1318022, 1318021, 1318019, 1318023, 1318020, 1318018

0.4°, 4.2°, 1.3° IR8

Page 50 of 69

4/21/2020

Klingensmith, Leah

From: Kunkel, Elizabeth <elizabeth.kunkel@aecom.com>
Sent: Monday, April 13, 2020 3:34 PM
To: Klingensmith, Leah
Cc: Remiger, Melissa
Subject: FW: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 400-186367 ROXANA QUARTERLY GW
Attachments: Std_Tal_Login_Ack for 400-186367-1.pdf; Std_Tal_Login_CheckList_Receipt for 400-186367-1.pdf; COC 400-186367 (202004071505).pdf; Std_Tal_Login_Limits for 400-186367-1.pdf

EXTERNAL EMAIL*

Leah,

If it's not too late and isn't a hassle, could you please correct the sample IDs in this SDG so that:

MW-4-ROX-040620-EB is reported without the dash between "MW" and "4" and likewise for all of the samples in this SDG, remove the dash following "MW"?

We had this denoted incorrectly on the COC with those extra dashes, and I apologize for not noticing this sooner (samples in the SDGs following this one are all correctly denoted).

Thank you,
Elizabeth
elizabeth.kunkel@aecom.com

From: Eric Abernathy <eric.abernathy@testamericainc.com>
Sent: Wednesday, April 08, 2020 10:00 AM
To: Billman, Bob <bob.billman@aecom.com>; Kunkel, Elizabeth <elizabeth.kunkel@aecom.com>; Remiger, Melissa <melissa.remiger@aecom.com>; Pennington, Wendy <wendy.pennington@aecom.com>
Subject: [EXTERNAL] Eurofins TestAmerica Sample Login Confirmation files from 400-186367 ROXANA QUARTERLY GW

Hello,

Attached, please find the Sample Confirmation files for job 400-186367; ROXANA QUARTERLY GW

Please feel free to contact me or your PM, Leah Klingensmith, if you have any questions.

Thank you.

Eric Abernathy
Service Manager

TestAmerica Laboratories, Inc
Phone: 615-726-0177

E-mail: eric.abernathy@testamericainc.com
www.eurofinsus.com | www.testamericainc.com

Reference: [400-494359]
Attachments: 4

Please let us know if we met your expectations by rating the service you received from Eurofins TestAmerica on this project by visiting our website at: Project Feedback

* WARNING - EXTERNAL: This email originated from outside of Eurofins TestAmerica. Do not click any links or open any attachments unless you trust the sender and know that the content is safe!

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186367-1

Login Number: 186367
List Number: 1
Creator: Klingensmith, Leah

List Source: Eurofins TestAmerica, 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	1318023,1318021,1318018
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.4 °C, 4.2 °C, 1.3 °C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186367-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186433-1-Rev. 2

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/26/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-040720-8260	TB-ROX-040720-8011
P114R-ROX-040720-EB	P114R-ROX-040720

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 SVOCs were re-extracted outside of the extraction holding time criteria. Several VOC and SVOC LCS/LCD recoveries were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in several quality control samples. Several PAH internal standard recoveries were outside criteria in sample P114R-ROX-040720. Several PAHs in sample P114R-ROX-040720 were diluted due to the nature of the sample matrix. These issues are addressed further in the appropriate sections of this data review. Additionally, the laboratory report was revised to correct analytical batch references, and to include secondary results for 8270 analysis.

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, several SVOCs were re-extracted 3 days outside of the extraction holding time criteria (7 days) in samples due to initial failing associated LCS recoveries. Professional judgement was used to qualify as estimated (**UJ**), however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-040720 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
P114R-ROX-040720 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
P114R-ROX-040720 – RERA	SVOCs	Diethyl phthalate	**UJ**
P114R-ROX-040720 – RERA	SVOCs	Dimethyl phthalate	**UJ**

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-040720 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**
P114R-ROX-040720 – RERA	SVOCs	Pentachlorophenol	**UJ**

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-485864/1002	VOCs	Bromomethane	**175**	NA	10-160
LCS 400-485864/1002	VOCs	Chloroethane	**182**	NA	55-141
LCS 400-485894/2-A	SVOCs	Butyl benzyl phthalate	**25**	NA	46-145
LCS 400-485894/2-A	SVOCs	Dibenz[a,h]acridine	**37**	NA	46-149
LCS 400-485894/2-A	SVOCs	Diethyl phthalate	**17**	NA	44-146
LCS 400-485894/2-A	SVOCs	Dimethyl phthalate	**10**	NA	50-131
LCS 400-485894/2-A	SVOCs	Di-n-butyl phthalate	**30**	NA	55-131
LCS/LCSD 400-485894/3-A/4-A	SVOCs	Benzenethiol	**3/2**	14	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; benzenethiol has been identified as a poor performing analyte under Method 8270. Several SVOCs were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-040720	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P114R-ROX-040720-EB	SVOCs	Terphenyl-d_{14}	**141**	33-138
P114R-ROX-040720-EB – RERA	SVOCs	2-Fluorophenol	**8**	10-120
MB 400-485894/1-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
MB 400-485894/3-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
MB 400-485894/1-A	PAHs	Terphenyl-d_{14}	**142**	33-138
MB 400-485510/1-A	PAHs	Terphenyl-d_{14}	**140**	33-138

Method blanks and equipment blanks are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
P114R-ROX-040720	PAHs	Chrysene-d_{12}	**1320018**	656624	328312-1313248
P114R-ROX-040720	PAHs	Perylene-d_{12}	**1209322**	563122	281561-1126244

Analytical data associated with internal standard recoveries outside evaluation criteria are qualified as summarized in the table below. Additionally, due to matrix interference, re-analysis of associated data was performed at a five times (5X) dilution and internal standard recoveries were within evaluation criteria.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-040720	PAHs	Chrysene	**J**
P114R-ROX-040720	PAHs	Benzo[k]fluoranthene	**J**
P114R-ROX-040720	PAHs	Dibenz(a,h)anthracene	**J**
P114R-ROX-040720	PAHs	Indeno[1,2,3-cd]pyrene	**J**

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, with the exception of several non-detect PAHs in sample P114R-ROX-040720, due to the nature of the sample matrix. PAHs were non-detect at a dilution factor of 5X, with a raised reporting limit of 1.2 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, several PAHs in sample P114R-ROX-040720 were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P114R-ROX-040720 – DL	PAHs	Benzo[a]anthracene	**UJ**
P114R-ROX-040720 – DL	PAHs	Benzo[a]pyrene	**UJ**
P114R-ROX-040720 – DL	PAHs	Benzo[b]fluoranthene	**UJ**
P114R-ROX-040720 – DL	PAHs	Benzo[g,h,i]perylene	**UJ**
P114R-ROX-040720 – DL	PAHs	Benzo[k]fluoranthene	**UJ**
P114R-ROX-040720 – DL	PAHs	Chrysene	**UJ**
P114R-ROX-040720 – DL	PAHs	Dibenz(a,h)anthracene	**UJ**
P114R-ROX-040720 – DL	PAHs	Indeno[1,2,3-cd]pyrene	**UJ**
P114R-ROX-040720 – DL	PAHs	Pyrene	**UJ**

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186433-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 2

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/26/2020 7:09:32 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/26/2020 MR

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186433-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186433-1

Comments
Revised Report 5/12/2020 to include secondary results for 8270 analysis per client request.

Report revised to correct batch reference. LVI method batch was incorrectly referenced.
Supersedes report dated 4-22-2020.

Receipt
The samples were received on 4/8/2020 8:59 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 5 coolers at receipt time were 0.0° C, 1.9° C, 3.2° C, 3.4° C and 3.6° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-485864 recovered above the upper control limit for Bromomethane, Chloroethane 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 400-485864 recovered outside control limits for the following analytes: Bromomethane and Chloroethane. 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 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-040720-8260 (400-186433-1), P114R-ROX-040720-EB (400-186433-3) and P114R-ROX-040720 (400-186433-4). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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 the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-485894 and analytical batch 400-486452 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: 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: (LCS 400-485894/3-A) and (MB 400-485894/1-A). These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) for preparation batch 400-485894 and analytical batch 400-486452 recovered outside control limits for the following analytes: Butyl benzyl phthalate, Dibenz[a,h]acridine, Diethyl phthalate, Dimethyl phthalate and Di-n-butyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487529 recovered above the upper control limit for Di-n-octyl phthalate and N-Nitrosodimethylamine. 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 400-487529 recovered outside acceptance criteria, low biased, for Hexachloroethane, N-Nitrosodi-n-propylamine, 1,4-Dioxane and 3 & 4 Methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been 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: P114R-ROX-040720-EB (400-186433-3). These results have been reported and qualified.

Job ID: 400-186433-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The following sample was diluted due to the nature of the sample matrix: P114R-ROX-040720 (400-186433-4). Elevated reporting limits (RLs) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486452 recovered above the upper control limit for 4-Bromophenyl 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 (LCS) for preparation batch 400-485894 and analytical batch 400-486485 recovered outside control limits for the following analytes: Dimethyl phthalate, Diethyl phthalate, Pentachlorophenol, Di-n-butyl phthalate, Dibenz[a,h]acridine and Butyl benzyl phthalate. The associated sample(s) was re-prepared and re-analyzed in preparation batch 400-486237 and analytical batch 400-487529 outside holding time. Both sets of data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-485804 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-485894/1-A). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486425 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-487532 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following sample: P114R-ROX-040720 (400-186433-4).

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-486697 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 400-486697/40).

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: 400-186433-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186433-1	TB-ROX-040720-8260	Water	04/07/20 00:00	04/08/20 08:59	
400-186433-2	TB-ROX-040720-8011	Water	04/07/20 00:00	04/08/20 08:59	
400-186433-3	P114R-ROX-040720-EB	Water	04/07/20 07:30	04/08/20 08:59	
400-186433-4	P114R-ROX-040720	Water	04/07/20 10:50	04/08/20 08:59	

Detection Summary

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

Job ID: 400-186433-1

Client Sample ID: TB-ROX-040720-8260 — Lab Sample ID: 400-186433-1

No Detections.

Client Sample ID: TB-ROX-040720-8011 — Lab Sample ID: 400-186433-2

No Detections.

Client Sample ID: P114R-ROX-040720-EB — Lab Sample ID: 400-186433-3

No Detections.

Client Sample ID: P114R-ROX-040720 — Lab Sample ID: 400-186433-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	4.8		1.0	0.74	ug/L	1		8260B	Total/NA
Benzo[k]fluoranthene	0.49	J	0.92	0.46	ug/L	1		8270D LL	Total/NA
Chrysene	0.36	J	0.92	0.34	ug/L	1		8270D LL	Total/NA
Dibenz(a,h)anthracene	0.87	J	0.92	0.21	ug/L	1		8270D LL	Total/NA
Indeno[1,2,3-cd]pyrene	0.60	J	0.92	0.55	ug/L	1		8270D LL	Total/NA
Di-n-octyl phthalate	3.5	J	24	1.1	ug/L	2		8270D	Total/NA
Pentachlorophenol	15	J	48	4.3	ug/L	2		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 400-186433-1

Client Sample ID: TB-ROX-040720-8260
Date Collected: 04/07/20 00:00
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-1
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			04/14/20 13:21	1
Acrolein	ND		20	10	ug/L			04/14/20 13:21	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 13:21	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 13:21	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 13:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 13:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 13:21	1
Bromomethane	ND	*	1.0	0.98	ug/L			04/14/20 13:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 13:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Chloroethane	ND	*	1.0	0.76	ug/L			04/14/20 13:21	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 13:21	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 13:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 13:21	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 13:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 13:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 13:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 13:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 13:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 13:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 13:21	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 13:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 13:21	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 13:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 13:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 13:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 13:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 13:21	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 13:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 13:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 13:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 13:21	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 13:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 13:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 13:21	1

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

Job ID: 400-186433-1

Client Sample ID: TB-ROX-040720-8260
Date Collected: 04/07/20 00:00
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-1
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			04/14/20 13:21	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 13:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 13:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 13:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 13:21	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 13:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 13:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 13:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 13:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 13:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 13:21	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 13:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 13:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 13:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 13:21	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 13:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 13:21	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*04/14/20 13:21*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*04/14/20 13:21*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/14/20 13:21*	*1*

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

Job ID: 400-186433-1

Client Sample ID: TB-ROX-040720-8011
Date Collected: 04/07/20 00:00
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-2
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	0.0055	ug/L		04/20/20 09:04	04/22/20 14:05	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/20/20 09:04	04/22/20 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*04/20/20 09:04*	*04/22/20 14:05*	*1*

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

Job ID: 400-186433-1

Client Sample ID: P114R-ROX-040720-EB

Lab Sample ID: 400-186433-3

Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

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			04/14/20 17:57	1
Acrolein	ND		20	10	ug/L			04/14/20 17:57	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 17:57	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 17:57	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 17:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 17:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 17:57	1
Bromomethane	ND	*	1.0	0.98	ug/L			04/14/20 17:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 17:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Chloroethane	ND	*	1.0	0.76	ug/L			04/14/20 17:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 17:57	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 17:57	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 17:57	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 17:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 17:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 17:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 17:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 17:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 17:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 17:57	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 17:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 17:57	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 17:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 17:57	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 17:57	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 17:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 17:57	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 17:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 17:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 17:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 17:57	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 17:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 17:57	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 17:57	1

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

Job ID: 400-186433-1

Client Sample ID: P114R-ROX-040720-EB
Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-3
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			04/14/20 17:57	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 17:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 17:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 17:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 17:57	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 17:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 17:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 17:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 17:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 17:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 17:57	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 17:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 17:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 17:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 17:57	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 17:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 17:57	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*04/14/20 17:57*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*04/14/20 17:57*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/14/20 17:57*	*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		0.98	0.16	ug/L		04/09/20 13:23	04/13/20 19:48	1
Acenaphthene	ND		0.24	0.038	ug/L		04/14/20 11:12	04/30/20 10:51	1
Acenaphthylene	ND		0.98	0.22	ug/L		04/09/20 13:23	04/13/20 19:48	1
Acenaphthylene	ND		0.24	0.053	ug/L		04/14/20 11:12	04/30/20 10:51	1
Anthracene	ND		0.98	0.15	ug/L		04/09/20 13:23	04/13/20 19:48	1
Anthracene	ND		0.24	0.037	ug/L		04/14/20 11:12	04/30/20 10:51	1
Benzo[a]anthracene	ND		0.98	0.22	ug/L		04/09/20 13:23	04/13/20 19:48	1
Benzo[a]anthracene	ND		0.24	0.054	ug/L		04/14/20 11:12	04/30/20 10:51	1
Benzo[a]pyrene	ND		0.98	0.21	ug/L		04/09/20 13:23	04/13/20 19:48	1
Benzo[a]pyrene	ND		0.24	0.050	ug/L		04/14/20 11:12	04/30/20 10:51	1
Benzo[b]fluoranthene	ND		0.98	0.33	ug/L		04/09/20 13:23	04/13/20 19:48	1
Benzo[b]fluoranthene	ND		0.24	0.081	ug/L		04/14/20 11:12	04/30/20 10:51	1
Benzo[g,h,i]perylene	ND		0.98	0.63	ug/L		04/09/20 13:23	04/13/20 19:48	1
Benzo[g,h,i]perylene	ND		0.24	0.15	ug/L		04/14/20 11:12	04/30/20 10:51	1
Benzo[k]fluoranthene	ND		0.98	0.49	ug/L		04/09/20 13:23	04/13/20 19:48	1
Benzo[k]fluoranthene	ND		0.24	0.12	ug/L		04/14/20 11:12	04/30/20 10:51	1
Chrysene	ND		0.98	0.36	ug/L		04/09/20 13:23	04/13/20 19:48	1
Chrysene	ND		0.24	0.088	ug/L		04/14/20 11:12	04/30/20 10:51	1
Dibenz(a,h)anthracene	ND		0.98	0.22	ug/L		04/09/20 13:23	04/13/20 19:48	1
Dibenz(a,h)anthracene	ND		0.24	0.054	ug/L		04/14/20 11:12	04/30/20 10:51	1
Fluoranthene	ND		0.98	0.33	ug/L		04/09/20 13:23	04/13/20 19:48	1

Client Sample ID: P114R-ROX-040720-EB
Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-3
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
Fluoranthene	ND		0.24	0.081	ug/L		04/14/20 11:12	04/30/20 10:51	1
Fluorene	ND		0.98	0.54	ug/L		04/09/20 13:23	04/13/20 19:48	1
Fluorene	ND		0.24	0.13	ug/L		04/14/20 11:12	04/30/20 10:51	1
Indeno[1,2,3-cd]pyrene	ND		0.98	0.59	ug/L		04/09/20 13:23	04/13/20 19:48	1
Indeno[1,2,3-cd]pyrene	ND		0.24	0.14	ug/L		04/14/20 11:12	04/30/20 10:51	1
Phenanthrene	ND		0.98	0.18	ug/L		04/09/20 13:23	04/13/20 19:48	1
Phenanthrene	ND		0.24	0.043	ug/L		04/14/20 11:12	04/30/20 10:51	1
Pyrene	ND		0.98	0.20	ug/L		04/09/20 13:23	04/13/20 19:48	1
Pyrene	ND		0.24	0.047	ug/L		04/14/20 11:12	04/30/20 10:51	1
1-Methylnaphthalene	ND		0.98	0.36	ug/L		04/09/20 13:23	04/13/20 19:48	1
1-Methylnaphthalene	ND		0.24	0.088	ug/L		04/14/20 11:12	04/30/20 10:51	1
2-Methylnaphthalene	ND		0.98	0.29	ug/L		04/09/20 13:23	04/13/20 19:48	1
2-Methylnaphthalene	ND		0.24	0.071	ug/L		04/14/20 11:12	04/30/20 10:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*141*	*X*	*33 - 138*	*04/09/20 13:23*	*04/13/20 19:48*	*1*
Terphenyl-d14	*119*		*33 - 138*	*04/14/20 11:12*	*04/30/20 10:51*	*1*
2-Fluorobiphenyl	*92*		*15 - 122*	*04/09/20 13:23*	*04/13/20 19:48*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*04/14/20 11:12*	*04/30/20 10:51*	*1*
Nitrobenzene-d5	*87*		*19 - 130*	*04/09/20 13:23*	*04/13/20 19:48*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*04/14/20 11:12*	*04/30/20 10:51*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		49	19	ug/L		04/09/20 13:23	04/13/20 15:40	1
Aniline	ND		12	4.5	ug/L		04/14/20 11:12	04/30/20 12:13	1
Benzenethiol	ND		49	8.3	ug/L		04/09/20 13:23	04/13/20 15:40	1
Benzenethiol	ND	*	12	2.0	ug/L		04/14/20 11:12	04/30/20 12:13	1
Benzoic acid	ND		150	36	ug/L		04/09/20 13:23	04/13/20 15:40	1
Benzoic acid	ND		36	8.6	ug/L		04/14/20 11:12	04/30/20 12:13	1
Benzyl alcohol	ND		49	9.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
Benzyl alcohol	ND		12	2.4	ug/L		04/14/20 11:12	04/30/20 12:13	1
Bis(2-chloroethoxy)methane	ND		49	3.4	ug/L		04/09/20 13:23	04/13/20 15:40	1
Bis(2-chloroethoxy)methane	ND		12	0.82	ug/L		04/14/20 11:12	04/30/20 12:13	1
Bis(2-chloroethyl)ether	ND		49	3.6	ug/L		04/09/20 13:23	04/13/20 15:40	1
Bis(2-chloroethyl)ether	ND		12	0.88	ug/L		04/14/20 11:12	04/30/20 12:13	1
bis (2-chloroisopropyl) ether	ND		49	4.0	ug/L		04/09/20 13:23	04/13/20 15:40	1
bis (2-chloroisopropyl) ether	ND		12	0.96	ug/L		04/14/20 11:12	04/30/20 12:13	1
Bis(2-ethylhexyl) phthalate	ND		49	24	ug/L		04/09/20 13:23	04/13/20 15:40	1
Bis(2-ethylhexyl) phthalate	ND		12	5.9	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Bromophenyl phenyl ether	ND		49	1.6	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Bromophenyl phenyl ether	ND		12	0.38	ug/L		04/14/20 11:12	04/30/20 12:13	1
Butyl benzyl phthalate	ND		49	3.4	ug/L		04/09/20 13:23	04/13/20 15:40	1
Butyl benzyl phthalate	ND	*	12	0.82	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Chloroaniline	ND		49	17	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Chloroaniline	ND		12	4.0	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Chloro-3-methylphenol	ND		49	19	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Chloro-3-methylphenol	ND		12	4.5	ug/L		04/14/20 11:12	04/30/20 12:13	1
2-Chloronaphthalene	ND		49	2.5	ug/L		04/09/20 13:23	04/13/20 15:40	1
2-Chloronaphthalene	ND		12	0.62	ug/L		04/14/20 11:12	04/30/20 12:13	1

Client Sample ID: P114R-ROX-040720-EB
Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		49	11	ug/L		04/09/20 13:23	04/13/20 15:40	1
2-Chlorophenol	ND		12	2.6	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Chlorophenyl phenyl ether	ND		49	9.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Chlorophenyl phenyl ether	ND		12	2.4	ug/L		04/14/20 11:12	04/30/20 12:13	1
Dibenz[a,h]acridine	ND		49	15	ug/L		04/09/20 13:23	04/13/20 15:40	1
Dibenz[a,h]acridine	ND	*	12	3.6	ug/L		04/14/20 11:12	04/30/20 12:13	1
Dibenzofuran	ND		49	2.5	ug/L		04/09/20 13:23	04/13/20 15:40	1
Dibenzofuran	ND		12	0.62	ug/L		04/14/20 11:12	04/30/20 12:13	1
3,3'-Dichlorobenzidine	ND		49	13	ug/L		04/09/20 13:23	04/13/20 15:40	1
3,3'-Dichlorobenzidine	ND		12	3.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4-Dichlorophenol	ND		49	15	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4-Dichlorophenol	ND		12	3.6	ug/L		04/14/20 11:12	04/30/20 12:13	1
Diethyl phthalate	ND		49	3.4	ug/L		04/09/20 13:23	04/13/20 15:40	1
Diethyl phthalate	ND	*	12	0.83	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4-Dimethylphenol	ND		49	17	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4-Dimethylphenol	ND		12	4.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
Dimethyl phthalate	ND		49	2.9	ug/L		04/09/20 13:23	04/13/20 15:40	1
Dimethyl phthalate	ND	*	12	0.71	ug/L		04/14/20 11:12	04/30/20 12:13	1
Di-n-butyl phthalate	ND		49	13	ug/L		04/09/20 13:23	04/13/20 15:40	1
Di-n-butyl phthalate	ND	*	12	3.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
4,6-Dinitro-ortho-cresol	ND		49	9.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
4,6-Dinitro-ortho-cresol	ND		12	2.4	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4-Dinitrophenol	ND		150	17	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4-Dinitrophenol	ND		36	4.0	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4-Dinitrotoluene	ND		49	9.3	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4-Dinitrotoluene	ND		12	2.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,6-Dinitrotoluene	ND		49	9.3	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,6-Dinitrotoluene	ND		12	2.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
Di-n-octyl phthalate	ND		49	2.1	ug/L		04/09/20 13:23	04/13/20 15:40	1
Di-n-octyl phthalate	ND		12	0.52	ug/L		04/14/20 11:12	04/30/20 12:13	1
1,4-Dioxane	ND		49	4.9	ug/L		04/09/20 13:23	04/13/20 15:40	1
1,4-Dioxane	ND		12	1.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		49	4.9	ug/L		04/09/20 13:23	04/13/20 15:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		12	1.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
Hexachlorobenzene	ND		49	1.2	ug/L		04/09/20 13:23	04/13/20 15:40	1
Hexachlorobenzene	ND		12	0.30	ug/L		04/14/20 11:12	04/30/20 12:13	1
Hexachlorocyclopentadiene	ND		98	13	ug/L		04/09/20 13:23	04/13/20 15:40	1
Hexachlorocyclopentadiene	ND		24	3.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
Hexachloroethane	ND		49	21	ug/L		04/09/20 13:23	04/13/20 15:40	1
Hexachloroethane	ND		12	5.0	ug/L		04/14/20 11:12	04/30/20 12:13	1
Indene	ND		49	4.9	ug/L		04/09/20 13:23	04/13/20 15:40	1
Indene	ND		12	1.2	ug/L		04/14/20 11:12	04/30/20 12:13	1
Isophorone	ND		49	2.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
Isophorone	ND		12	0.67	ug/L		04/14/20 11:12	04/30/20 12:13	1
2-Methylphenol	ND		49	8.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
2-Methylphenol	ND		12	2.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
3 & 4 Methylphenol	ND		98	5.1	ug/L		04/09/20 13:23	04/13/20 15:40	1
3 & 4 Methylphenol	ND		24	1.2	ug/L		04/14/20 11:12	04/30/20 12:13	1

Client Sample ID: P114R-ROX-040720-EB

Lab Sample ID: 400-186433-3

Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		49	11	ug/L		04/09/20 13:23	04/13/20 15:40	1
2-Nitroaniline	ND		12	2.6	ug/L		04/14/20 11:12	04/30/20 12:13	1
3-Nitroaniline	ND		49	8.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
3-Nitroaniline	ND		12	2.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Nitroaniline	ND		49	12	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Nitroaniline	ND		12	2.9	ug/L		04/14/20 11:12	04/30/20 12:13	1
Nitrobenzene	ND		49	2.7	ug/L		04/09/20 13:23	04/13/20 15:40	1
Nitrobenzene	ND		12	0.65	ug/L		04/14/20 11:12	04/30/20 12:13	1
2-Nitrophenol	ND		49	3.2	ug/L		04/09/20 13:23	04/13/20 15:40	1
2-Nitrophenol	ND		12	0.77	ug/L		04/14/20 11:12	04/30/20 12:13	1
4-Nitrophenol	ND		49	10	ug/L		04/09/20 13:23	04/13/20 15:40	1
4-Nitrophenol	ND		12	2.5	ug/L		04/14/20 11:12	04/30/20 12:13	1
N-Nitrosodimethylamine	ND		49	17	ug/L		04/09/20 13:23	04/13/20 15:40	1
N-Nitrosodimethylamine	ND		12	4.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
N-Nitrosodi-n-propylamine	ND		49	16	ug/L		04/09/20 13:23	04/13/20 15:40	1
N-Nitrosodi-n-propylamine	ND		12	3.9	ug/L		04/14/20 11:12	04/30/20 12:13	1
N-Nitrosodiphenylamine	ND		49	2.3	ug/L		04/09/20 13:23	04/13/20 15:40	1
N-Nitrosodiphenylamine	ND		12	0.56	ug/L		04/14/20 11:12	04/30/20 12:13	1
Pentachlorophenol	ND		98	8.8	ug/L		04/09/20 13:23	04/13/20 15:40	1
Pentachlorophenol	ND		24	2.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
Phenol	ND		49	13	ug/L		04/09/20 13:23	04/13/20 15:40	1
Phenol	ND		12	3.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
Pyridine	ND		49	16	ug/L		04/09/20 13:23	04/13/20 15:40	1
Pyridine	ND		12	3.8	ug/L		04/14/20 11:12	04/30/20 12:13	1
Quinoline	ND		49	29	ug/L		04/09/20 13:23	04/13/20 15:40	1
Quinoline	ND		12	7.1	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4,5-Trichlorophenol	ND		49	18	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4,5-Trichlorophenol	ND		12	4.4	ug/L		04/14/20 11:12	04/30/20 12:13	1
2,4,6-Trichlorophenol	ND		49	17	ug/L		04/09/20 13:23	04/13/20 15:40	1
2,4,6-Trichlorophenol	ND		12	4.1	ug/L		04/14/20 11:12	04/30/20 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
2-Fluorobiphenyl	*50*		*34 - 120*	*04/14/20 11:12*	*04/30/20 12:13*	*1*
2-Fluorophenol	*34*		*10 - 120*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
2-Fluorophenol	*52*		*10 - 120*	*04/14/20 11:12*	*04/30/20 12:13*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
Nitrobenzene-d5	*61*		*27 - 120*	*04/14/20 11:12*	*04/30/20 12:13*	*1*
Phenol-d5	*52*		*10 - 120*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
Phenol-d5	*55*		*10 - 120*	*04/14/20 11:12*	*04/30/20 12:13*	*1*
Terphenyl-d14	*66*		*53 - 125*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
Terphenyl-d14	*81*		*53 - 125*	*04/14/20 11:12*	*04/30/20 12:13*	*1*
2,4,6-Tribromophenol	*55*		*15 - 135*	*04/09/20 13:23*	*04/13/20 15:40*	*1*
2,4,6-Tribromophenol	*58*		*15 - 135*	*04/14/20 11:12*	*04/30/20 12:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H	9.8	0.68	ug/L		04/17/20 09:17	04/30/20 12:54	1
Dibenz[a,h]acridine	ND	H	9.8	3.0	ug/L		04/17/20 09:17	04/30/20 12:54	1
Diethyl phthalate	ND	H	9.8	0.69	ug/L		04/17/20 09:17	04/30/20 12:54	1

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

Job ID: 400-186433-1

Client Sample ID: P114R-ROX-040720-EB
Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND	H	9.8	0.59	ug/L		04/17/20 09:17	04/30/20 12:54	1
Di-n-butyl phthalate	ND	H	9.8	2.7	ug/L		04/17/20 09:17	04/30/20 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*48*		*34 - 120*	*04/17/20 09:17*	*04/30/20 12:54*	*1*
2-Fluorophenol	*8*	*X*	*10 - 120*	*04/17/20 09:17*	*04/30/20 12:54*	*1*
Nitrobenzene-d5	*54*		*27 - 120*	*04/17/20 09:17*	*04/30/20 12:54*	*1*
Phenol-d5	*34*		*10 - 120*	*04/17/20 09:17*	*04/30/20 12:54*	*1*
Terphenyl-d14	*59*		*53 - 125*	*04/17/20 09:17*	*04/30/20 12:54*	*1*
2,4,6-Tribromophenol	*55*		*15 - 135*	*04/17/20 09:17*	*04/30/20 12:54*	*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	0.0055	ug/L		04/20/20 09:04	04/22/20 14:25	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/20/20 09:04	04/22/20 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*04/20/20 09:04*	*04/22/20 14:25*	*1*

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

Job ID: 400-186433-1

Client Sample ID: P114R-ROX-040720
Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-4
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			04/14/20 18:22	1
Acrolein	ND		20	10	ug/L			04/14/20 18:22	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 18:22	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 18:22	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 18:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 18:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 18:22	1
Bromomethane	ND	*	1.0	0.98	ug/L			04/14/20 18:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 18:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Chloroethane	ND	*	1.0	0.76	ug/L			04/14/20 18:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 18:22	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 18:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 18:22	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 18:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 18:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 18:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 18:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 18:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 18:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 18:22	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 18:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 18:22	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 18:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 18:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 18:22	1
Methyl tert-butyl ether	4.8		1.0	0.74	ug/L			04/14/20 18:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 18:22	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 18:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 18:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 18:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 18:22	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 18:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 18:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/14/20 18:22	1

Client Sample ID: P114R-ROX-040720

Lab Sample ID: 400-186433-4

Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

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			04/14/20 18:22	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 18:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 18:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 18:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 18:22	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 18:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 18:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 18:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 18:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 18:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 18:22	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 18:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 18:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 18:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 18:22	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 18:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 18:22	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 18:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*04/14/20 18:22*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*04/14/20 18:22*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/14/20 18:22*	*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		0.92	0.15	ug/L		04/09/20 13:23	04/13/20 20:04	1
Acenaphthene	ND		0.24	0.038	ug/L		04/14/20 11:12	04/30/20 11:06	1
Acenaphthylene	ND		0.92	0.21	ug/L		04/09/20 13:23	04/13/20 20:04	1
Acenaphthylene	ND		0.24	0.054	ug/L		04/14/20 11:12	04/30/20 11:06	1
Anthracene	ND		0.92	0.14	ug/L		04/09/20 13:23	04/13/20 20:04	1
Anthracene	ND		0.24	0.037	ug/L		04/14/20 11:12	04/30/20 11:06	1
Benzo[a]anthracene	ND		0.92	0.21	ug/L		04/09/20 13:23	04/13/20 20:04	1
Benzo[a]pyrene	ND		0.92	0.19	ug/L		04/09/20 13:23	04/13/20 20:04	1
Benzo[b]fluoranthene	ND		0.92	0.31	ug/L		04/09/20 13:23	04/13/20 20:04	1
Benzo[g,h,i]perylene	ND		0.92	0.60	ug/L		04/09/20 13:23	04/13/20 20:04	1
Benzo[k]fluoranthene	0.49	J	0.92	0.46	ug/L		04/09/20 13:23	04/13/20 20:04	1
Chrysene	0.36	J	0.92	0.34	ug/L		04/09/20 13:23	04/13/20 20:04	1
Dibenz(a,h)anthracene	0.87	J	0.92	0.21	ug/L		04/09/20 13:23	04/13/20 20:04	1
Fluoranthene	ND		0.92	0.31	ug/L		04/09/20 13:23	04/13/20 20:04	1
Fluoranthene	ND		0.24	0.082	ug/L		04/14/20 11:12	04/30/20 11:06	1
Fluorene	ND		0.92	0.51	ug/L		04/09/20 13:23	04/13/20 20:04	1
Fluorene	ND		0.24	0.13	ug/L		04/14/20 11:12	04/30/20 11:06	1
Indeno[1,2,3-cd]pyrene	0.60	J	0.92	0.55	ug/L		04/09/20 13:23	04/13/20 20:04	1
Phenanthrene	ND		0.92	0.17	ug/L		04/09/20 13:23	04/13/20 20:04	1
Phenanthrene	ND		0.24	0.043	ug/L		04/14/20 11:12	04/30/20 11:06	1
Pyrene	ND		0.92	0.18	ug/L		04/09/20 13:23	04/13/20 20:04	1

Client Sample ID: P114R-ROX-040720

Lab Sample ID: 400-186433-4

Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

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		0.92	0.34	ug/L		04/09/20 13:23	04/13/20 20:04	1
1-Methylnaphthalene	ND		0.24	0.089	ug/L		04/14/20 11:12	04/30/20 11:06	1
2-Methylnaphthalene	ND		0.92	0.28	ug/L		04/09/20 13:23	04/13/20 20:04	1
2-Methylnaphthalene	ND		0.24	0.072	ug/L		04/14/20 11:12	04/30/20 11:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*111*		*33 - 138*	*04/09/20 13:23*	*04/13/20 20:04*	*1*
2-Fluorobiphenyl	*78*		*15 - 122*	*04/09/20 13:23*	*04/13/20 20:04*	*1*
Nitrobenzene-d5	*72*		*19 - 130*	*04/09/20 13:23*	*04/13/20 20:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	1.2	0.28	ug/L		04/14/20 11:12	04/30/20 11:35	5
Benzo[a]pyrene	ND		1.2	0.25	ug/L		04/14/20 11:12	04/30/20 11:35	5
Benzo[b]fluoranthene	ND		1.2	0.41	ug/L		04/14/20 11:12	04/30/20 11:35	5
Benzo[g,h,i]perylene	ND		1.2	0.78	ug/L		04/14/20 11:12	04/30/20 11:35	5
Benzo[k]fluoranthene	ND		1.2	0.60	ug/L		04/14/20 11:12	04/30/20 11:35	5
Chrysene	ND		1.2	0.44	ug/L		04/14/20 11:12	04/30/20 11:35	5
Dibenz(a,h)anthracene	ND		1.2	0.28	ug/L		04/14/20 11:12	04/30/20 11:35	5
Indeno[1,2,3-cd]pyrene	ND		1.2	0.72	ug/L		04/14/20 11:12	04/30/20 11:35	5
Pyrene	ND		1.2	0.24	ug/L		04/14/20 11:12	04/30/20 11:35	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*33 - 138*	*04/14/20 11:12*	*04/30/20 11:35*	*5*
2-Fluorobiphenyl	*107*		*15 - 122*	*04/14/20 11:12*	*04/30/20 11:35*	*5*
Nitrobenzene-d5	*91*		*19 - 130*	*04/14/20 11:12*	*04/30/20 11:35*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		46	17	ug/L		04/09/20 13:23	04/13/20 16:02	1
Aniline	ND		24	9.1	ug/L		04/14/20 11:12	04/30/20 12:34	2
Benzenethiol	ND	UJ	46	7.8	ug/L		04/09/20 13:23	04/13/20 16:02	1
Benzenethiol	ND	*	24	4.1	ug/L		04/14/20 11:12	04/30/20 12:34	2
Benzoic acid	ND		140	34	ug/L		04/09/20 13:23	04/13/20 16:02	1
Benzoic acid	ND		72	18	ug/L		04/14/20 11:12	04/30/20 12:34	2
Benzyl alcohol	ND		46	9.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
Benzyl alcohol	ND		24	4.8	ug/L		04/14/20 11:12	04/30/20 12:34	2
Bis(2-chloroethoxy)methane	ND		46	3.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
Bis(2-chloroethoxy)methane	ND		24	1.7	ug/L		04/14/20 11:12	04/30/20 12:34	2
Bis(2-chloroethyl)ether	ND		46	3.4	ug/L		04/09/20 13:23	04/13/20 16:02	1
Bis(2-chloroethyl)ether	ND		24	1.8	ug/L		04/14/20 11:12	04/30/20 12:34	2
bis (2-chloroisopropyl) ether	ND		46	3.7	ug/L		04/09/20 13:23	04/13/20 16:02	1
bis (2-chloroisopropyl) ether	ND		24	1.9	ug/L		04/14/20 11:12	04/30/20 12:34	2
Bis(2-ethylhexyl) phthalate	ND		46	23	ug/L		04/09/20 13:23	04/13/20 16:02	1
Bis(2-ethylhexyl) phthalate	ND		24	12	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Bromophenyl phenyl ether	ND		46	1.5	ug/L		04/09/20 13:23	04/13/20 16:02	1
4-Bromophenyl phenyl ether	ND		24	0.77	ug/L		04/14/20 11:12	04/30/20 12:34	2
Butyl benzyl phthalate	ND		46	3.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
Butyl benzyl phthalate	ND	*	24	1.7	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Chloroaniline	ND		46	16	ug/L		04/09/20 13:23	04/13/20 16:02	1

Client Sample ID: P114R-ROX-040720
Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		24	8.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Chloro-3-methylphenol	ND		46	17	ug/L		04/09/20 13:23	04/13/20 16:02	1
4-Chloro-3-methylphenol	ND		24	9.1	ug/L		04/14/20 11:12	04/30/20 12:34	2
2-Chloronaphthalene	ND		46	2.4	ug/L		04/09/20 13:23	04/13/20 16:02	1
2-Chloronaphthalene	ND		24	1.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
2-Chlorophenol	ND		46	10	ug/L		04/09/20 13:23	04/13/20 16:02	1
2-Chlorophenol	ND		24	5.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Chlorophenyl phenyl ether	ND		46	9.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
4-Chlorophenyl phenyl ether	ND		24	4.8	ug/L		04/14/20 11:12	04/30/20 12:34	2
Dibenz[a,h]acridine	ND		46	14	ug/L		04/09/20 13:23	04/13/20 16:02	1
Dibenz[a,h]acridine	ND	*	24	7.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
Dibenzofuran	ND		46	2.4	ug/L		04/09/20 13:23	04/13/20 16:02	1
Dibenzofuran	ND		24	1.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
3,3'-Dichlorobenzidine	ND		46	12	ug/L		04/09/20 13:23	04/13/20 16:02	1
3,3'-Dichlorobenzidine	ND		24	6.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4-Dichlorophenol	ND		46	14	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4-Dichlorophenol	ND		24	7.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
Diethyl phthalate	ND		46	3.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
Diethyl phthalate	ND	*	24	1.7	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4-Dimethylphenol	ND		46	16	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4-Dimethylphenol	ND		24	8.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
Dimethyl phthalate	ND		46	2.8	ug/L		04/09/20 13:23	04/13/20 16:02	1
Dimethyl phthalate	ND	*	24	1.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
Di-n-butyl phthalate	ND		46	12	ug/L		04/09/20 13:23	04/13/20 16:02	1
Di-n-butyl phthalate	ND	*	24	6.5	ug/L		04/14/20 11:12	04/30/20 12:34	2
4,6-Dinitro-ortho-cresol	ND		46	9.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
4,6-Dinitro-ortho-cresol	ND		24	4.8	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4-Dinitrophenol	ND		140	16	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4-Dinitrophenol	ND		72	8.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4-Dinitrotoluene	ND		46	8.7	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4-Dinitrotoluene	ND		24	4.6	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,6-Dinitrotoluene	ND		46	8.7	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,6-Dinitrotoluene	ND		24	4.6	ug/L		04/14/20 11:12	04/30/20 12:34	2
Di-n-octyl phthalate	ND		46	2.0	ug/L		04/09/20 13:23	04/13/20 16:02	1
Di-n-octyl phthalate	3.5	J	24	1.1	ug/L		04/14/20 11:12	04/30/20 12:34	2
1,4-Dioxane	ND		46	4.6	ug/L		04/09/20 13:23	04/13/20 16:02	1
1,4-Dioxane	ND		24	2.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
1,2-Diphenylhydrazine (as Azobenzene)	ND		46	4.6	ug/L		04/09/20 13:23	04/13/20 16:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		24	2.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
Hexachlorobenzene	ND		46	1.1	ug/L		04/09/20 13:23	04/13/20 16:02	1
Hexachlorobenzene	ND		24	0.60	ug/L		04/14/20 11:12	04/30/20 12:34	2
Hexachlorocyclopentadiene	ND		92	12	ug/L		04/09/20 13:23	04/13/20 16:02	1
Hexachlorocyclopentadiene	ND		48	6.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
Hexachloroethane	ND		46	19	ug/L		04/09/20 13:23	04/13/20 16:02	1
Hexachloroethane	ND		24	10	ug/L		04/14/20 11:12	04/30/20 12:34	2
Indene	ND		46	4.6	ug/L		04/09/20 13:23	04/13/20 16:02	1
Indene	ND		24	2.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
Isophorone	ND		46	2.6	ug/L		04/09/20 13:23	04/13/20 16:02	1

Client Sample ID: P114R-ROX-040720
Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

Lab Sample ID: 400-186433-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		24	1.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
2-Methylphenol	ND		46	8.3	ug/L		04/09/20 13:23	04/13/20 16:02	1
2-Methylphenol	ND		24	4.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
3 & 4 Methylphenol	ND		92	4.8	ug/L		04/09/20 13:23	04/13/20 16:02	1
3 & 4 Methylphenol	ND		48	2.5	ug/L		04/14/20 11:12	04/30/20 12:34	2
2-Nitroaniline	ND		46	10	ug/L		04/09/20 13:23	04/13/20 16:02	1
2-Nitroaniline	ND		24	5.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
3-Nitroaniline	ND		46	8.3	ug/L		04/09/20 13:23	04/13/20 16:02	1
3-Nitroaniline	ND		24	4.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Nitroaniline	ND		46	11	ug/L		04/09/20 13:23	04/13/20 16:02	1
4-Nitroaniline	ND		24	6.0	ug/L		04/14/20 11:12	04/30/20 12:34	2
Nitrobenzene	ND		46	2.5	ug/L		04/09/20 13:23	04/13/20 16:02	1
Nitrobenzene	ND		24	1.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
2-Nitrophenol	ND		46	3.0	ug/L		04/09/20 13:23	04/13/20 16:02	1
2-Nitrophenol	ND		24	1.6	ug/L		04/14/20 11:12	04/30/20 12:34	2
4-Nitrophenol	ND		46	9.7	ug/L		04/09/20 13:23	04/13/20 16:02	1
4-Nitrophenol	ND		24	5.0	ug/L		04/14/20 11:12	04/30/20 12:34	2
N-Nitrosodimethylamine	ND		46	16	ug/L		04/09/20 13:23	04/13/20 16:02	1
N-Nitrosodimethylamine	ND		24	8.4	ug/L		04/14/20 11:12	04/30/20 12:34	2
N-Nitrosodi-n-propylamine	ND		46	15	ug/L		04/09/20 13:23	04/13/20 16:02	1
N-Nitrosodi-n-propylamine	ND		24	7.9	ug/L		04/14/20 11:12	04/30/20 12:34	2
N-Nitrosodiphenylamine	ND		46	2.2	ug/L		04/09/20 13:23	04/13/20 16:02	1
N-Nitrosodiphenylamine	ND		24	1.1	ug/L		04/14/20 11:12	04/30/20 12:34	2
Pentachlorophenol	ND		92	8.3	ug/L		04/09/20 13:23	04/13/20 16:02	1
Pentachlorophenol	15	J	48	4.3	ug/L		04/14/20 11:12	04/30/20 12:34	2
Phenol	ND		46	12	ug/L		04/09/20 13:23	04/13/20 16:02	1
Phenol	ND		24	6.2	ug/L		04/14/20 11:12	04/30/20 12:34	2
Pyridine	ND		46	15	ug/L		04/09/20 13:23	04/13/20 16:02	1
Pyridine	ND		24	7.7	ug/L		04/14/20 11:12	04/30/20 12:34	2
Quinoline	ND		46	28	ug/L		04/09/20 13:23	04/13/20 16:02	1
Quinoline	ND		24	14	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4,5-Trichlorophenol	ND		46	17	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4,5-Trichlorophenol	ND		24	8.9	ug/L		04/14/20 11:12	04/30/20 12:34	2
2,4,6-Trichlorophenol	ND		46	16	ug/L		04/09/20 13:23	04/13/20 16:02	1
2,4,6-Trichlorophenol	ND		24	8.4	ug/L		04/14/20 11:12	04/30/20 12:34	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*60*		*34 - 120*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
2-Fluorobiphenyl	*95*		*34 - 120*	*04/14/20 11:12*	*04/30/20 12:34*	*2*
2-Fluorophenol	*45*		*10 - 120*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
2-Fluorophenol	*68*		*10 - 120*	*04/14/20 11:12*	*04/30/20 12:34*	*2*
Nitrobenzene-d5	*55*		*27 - 120*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
Nitrobenzene-d5	*106*		*27 - 120*	*04/14/20 11:12*	*04/30/20 12:34*	*2*
Phenol-d5	*54*		*10 - 120*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
Phenol-d5	*76*		*10 - 120*	*04/14/20 11:12*	*04/30/20 12:34*	*2*
Terphenyl-d14	*63*		*53 - 125*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
Terphenyl-d14	*110*		*53 - 125*	*04/14/20 11:12*	*04/30/20 12:34*	*2*
2,4,6-Tribromophenol	*71*		*15 - 135*	*04/09/20 13:23*	*04/13/20 16:02*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*04/14/20 11:12*	*04/30/20 12:34*	*2*

Client Sample ID: P114R-ROX-040720

Lab Sample ID: 400-186433-4

Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H UJ	19	1.3	ug/L		04/17/20 09:17	04/30/20 13:15	2
Dibenz[a,h]acridine	ND	H	19	5.8	ug/L		04/17/20 09:17	04/30/20 13:15	2
Diethyl phthalate	ND	H	19	1.4	ug/L		04/17/20 09:17	04/30/20 13:15	2
Dimethyl phthalate	ND	H	19	1.2	ug/L		04/17/20 09:17	04/30/20 13:15	2
Di-n-butyl phthalate	ND	H	19	5.2	ug/L		04/17/20 09:17	04/30/20 13:15	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*04/17/20 09:17*	*04/30/20 13:15*	*2*
2-Fluorophenol	*24*		*10 - 120*	*04/17/20 09:17*	*04/30/20 13:15*	*2*
Nitrobenzene-d5	*84*		*27 - 120*	*04/17/20 09:17*	*04/30/20 13:15*	*2*
Phenol-d5	*66*		*10 - 120*	*04/17/20 09:17*	*04/30/20 13:15*	*2*
Terphenyl-d14	*104*		*53 - 125*	*04/17/20 09:17*	*04/30/20 13:15*	*2*
2,4,6-Tribromophenol	*119*		*15 - 135*	*04/17/20 09:17*	*04/30/20 13:15*	*2*

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	0.0053	ug/L		04/20/20 09:04	04/22/20 14:45	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/20/20 09:04	04/22/20 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/20/20 09:04*	*04/22/20 14:45*	*1*

Definitions/Glossary

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

Job ID: 400-186433-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance 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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186433-1

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	(78-118)	(81-121)	(80-120)
400-186433-1	TB-ROX-040720-8260	100	103	99
400-186433-3	P114R-ROX-040720-EB	100	102	98
400-186433-4	P114R-ROX-040720	103	103	99
LCS 400-485864/1002	Lab Control Sample	102	105	102
MB 400-485864/4	Method Blank	101	103	100

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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186433-3	P114R-ROX-040720-EB	63	34	59	52	66	55
400-186433-3 - RERA	P114R-ROX-040720-EB	48	8 X	54	34	59	55
400-186433-3	P114R-ROX-040720-EB	50	52	61	55	81	58
400-186433-4	P114R-ROX-040720	60	45	55	54	63	71
400-186433-4	P114R-ROX-040720	95	68	106	76	110	85
400-186433-4 - RERA	P114R-ROX-040720	74	24	84	66	104	119
LCS 400-485894/2-A	Lab Control Sample	60	50	61	49	72	64
LCS 400-485894/3-A	Lab Control Sample	112	90	102	99	136 X	81
LCS 400-486237/2-A - RERA	Lab Control Sample	58	23	73	54	73	79
LCSD 400-485894/4-A	Lab Control Sample Dup	95	77	90	79	121	66
LCSD 400-486237/3-A - RERA	Lab Control Sample Dup	61	14	72	46	82	81
MB 400-485894/1-A	Method Blank	108	94	103	92	136 X	92
MB 400-486237/1-A - RERA	Method Blank	55	26	67	53	81	46

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186433-3	P114R-ROX-040720-EB	141 X	92	87
400-186433-3	P114R-ROX-040720-EB	119	74	63
400-186433-4	P114R-ROX-040720	111	78	72
400-186433-4 - DL	P114R-ROX-040720	90	107	91
LCS 400-485510/2-A	Lab Control Sample	119	83	77

Surrogate Summary

Client: AECOM Technical Services Inc.
Job ID: 400-186433-1
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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
LCS 400-485894/2-A	Lab Control Sample	107	78	52
LCSD 400-485510/3-A	Lab Control Sample Dup	117	83	66
MB 400-485510/1-A	Method Blank	140 X	88	85
MB 400-485894/1-A	Method Blank	142 X	89	82

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water
Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186433-2	TB-ROX-040720-8011	106
400-186433-3	P114R-ROX-040720-EB	107
400-186433-4	P114R-ROX-040720	108
LCS 400-486391/2-A	Lab Control Sample	132
LCSD 400-486391/3-A	Lab Control Sample Dup	109
MB 400-486391/1-A	Method Blank	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186433-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-040720-8260

Lab Sample ID: 400-186433-1
Matrix: Water

Date Collected: 04/07/20 00:00
Date Received: 04/08/20 08:59

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	485864	04/14/20 13:21	RS	TAL PEN

Client Sample ID: TB-ROX-040720-8011

Lab Sample ID: 400-186433-2
Matrix: Water

Date Collected: 04/07/20 00:00
Date Received: 04/08/20 08:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.9 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 14:05	DS	TAL PEN

Client Sample ID: P114R-ROX-040720-EB

Lab Sample ID: 400-186433-3
Matrix: Water

Date Collected: 04/07/20 07:30
Date Received: 04/08/20 08:59

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	485864	04/14/20 17:57	RS	TAL PEN
Total/NA	Prep	3520C			204.8 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D		1			485763	04/13/20 15:40	S1B	TAL PEN
Total/NA	Prep	3520C			844.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487529	04/30/20 12:13	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1015.6 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			487529	04/30/20 12:54	VC1	TAL PEN
Total/NA	Prep	3520C			204.8 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485804	04/13/20 19:48	KJA	TAL PEN
Total/NA	Prep	3520C			844.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			487532	04/30/20 10:51	KJA	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 14:25	DS	TAL PEN

Client Sample ID: P114R-ROX-040720

Lab Sample ID: 400-186433-4
Matrix: Water

Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

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	485864	04/14/20 18:22	RS	TAL PEN
Total/NA	Prep	3520C			217.6 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	485763	04/13/20 16:02	S1B	TAL PEN
Total/NA	Prep	3520C			832.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		2			487529	04/30/20 12:34	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1029.6 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	2			487529	04/30/20 13:15	VC1	TAL PEN
Total/NA	Prep	3520C			217.6 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485804	04/13/20 20:04	KJA	TAL PEN
Total/NA	Prep	3520C			832.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			487532	04/30/20 11:06	KJA	TAL PEN

Lab Chronicle

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

Job ID: 400-186433-1

Client Sample ID: P114R-ROX-040720

Lab Sample ID: 400-186433-4

Date Collected: 04/07/20 10:50
Date Received: 04/08/20 08:59

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	DL		832.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			487532	04/30/20 11:35	KJA	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 14:45	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-485510/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			250 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			485804	04/13/20 19:01	KJA	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-485864/4

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	485864	04/14/20 10:26	RS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-485894/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 16:55	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 13:10	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486237/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	RERA		1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486534	04/21/20 17:06	VC1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486391/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 13:45	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-485510/2-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			250 mL	1 mL	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			485804	04/13/20 19:17	KJA	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-485864/1002**
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	485864	04/14/20 09:27	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-485894/2-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:25	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-485894/3-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486237/2-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	RERA		1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1	0.4 mL	1.0 mL	486534	04/21/20 17:27	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486391/2-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	8011			35 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486454	04/20/20 16:05	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-485510/3-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	485510	04/09/20 13:23	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			485804	04/13/20 19:33	KJA	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-485894/4-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:59	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486237/3-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	RERA		1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486534	04/21/20 17:47	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486391/3-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	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486454	04/20/20 16:24	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186433-1

GC/MS VOA

Analysis Batch: 485864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-1	TB-ROX-040720-8260	Total/NA	Water	8260B	
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8260B	
400-186433-4	P114R-ROX-040720	Total/NA	Water	8260B	
MB 400-485864/4	Method Blank	Total/NA	Water	8260B	
LCS 400-485864/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 485510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	3520C	
400-186433-4	P114R-ROX-040720	Total/NA	Water	3520C	
MB 400-485510/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485510/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485510/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 485763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8270D	485510
400-186433-4	P114R-ROX-040720	Total/NA	Water	8270D	485510

Analysis Batch: 485804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8270D LL	485510
400-186433-4	P114R-ROX-040720	Total/NA	Water	8270D LL	485510
MB 400-485510/1-A	Method Blank	Total/NA	Water	8270D LL	485510
LCS 400-485510/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485510
LCSD 400-485510/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	485510

Prep Batch: 485894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	3520C	
400-186433-4 - DL	P114R-ROX-040720	Total/NA	Water	3520C	
400-186433-4	P114R-ROX-040720	Total/NA	Water	3520C	
MB 400-485894/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Prep Batch: 486237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3 - RERA	P114R-ROX-040720-EB	Total/NA	Water	3520C	
400-186433-4 - RERA	P114R-ROX-040720	Total/NA	Water	3520C	
MB 400-486237/1-A - RERA	Method Blank	Total/NA	Water	3520C	
LCS 400-486237/2-A - RERA	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486237/3-A - REF	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D LL	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485894

QC Association Summary

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

Job ID: 400-186433-1

GC/MS Semi VOA

Analysis Batch: 486452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	485894

Analysis Batch: 486534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-486237/1-A - RERA	Method Blank	Total/NA	Water	8270D	486237
LCS 400-486237/2-A - RER/	Lab Control Sample	Total/NA	Water	8270D	486237
LCSD 400-486237/3-A - REF	Lab Control Sample Dup	Total/NA	Water	8270D	486237

Analysis Batch: 487529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8270D	485894
400-186433-3 - RERA	P114R-ROX-040720-EB	Total/NA	Water	8270D	486237
400-186433-4	P114R-ROX-040720	Total/NA	Water	8270D	485894
400-186433-4 - RERA	P114R-ROX-040720	Total/NA	Water	8270D	486237

Analysis Batch: 487532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8270D LL	485894
400-186433-4	P114R-ROX-040720	Total/NA	Water	8270D LL	485894
400-186433-4 - DL	P114R-ROX-040720	Total/NA	Water	8270D LL	485894

GC Semi VOA

Prep Batch: 486391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-2	TB-ROX-040720-8011	Total/NA	Water	8011	
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8011	
400-186433-4	P114R-ROX-040720	Total/NA	Water	8011	
MB 400-486391/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486391/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486391/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 486454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-486391/2-A	Lab Control Sample	Total/NA	Water	8011	486391
LCSD 400-486391/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486391

Analysis Batch: 486697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186433-2	TB-ROX-040720-8011	Total/NA	Water	8011	486391
400-186433-3	P114R-ROX-040720-EB	Total/NA	Water	8011	486391
400-186433-4	P114R-ROX-040720	Total/NA	Water	8011	486391
MB 400-486391/1-A	Method Blank	Total/NA	Water	8011	486391

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

Lab Sample ID: MB 400-485864/4
Matrix: Water
Analysis Batch: 485864

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			04/14/20 10:26	1
Acrolein	ND		20	10	ug/L			04/14/20 10:26	1
Acrylonitrile	ND		10	2.8	ug/L			04/14/20 10:26	1
Benzene	ND		1.0	0.38	ug/L			04/14/20 10:26	1
Bromobenzene	ND		1.0	0.54	ug/L			04/14/20 10:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/14/20 10:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Bromoform	ND		5.0	0.71	ug/L			04/14/20 10:26	1
Bromomethane	ND		1.0	0.98	ug/L			04/14/20 10:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/14/20 10:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Chloroethane	ND		1.0	0.76	ug/L			04/14/20 10:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/14/20 10:26	1
Chloroform	ND		1.0	0.60	ug/L			04/14/20 10:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/14/20 10:26	1
Chloromethane	ND		1.0	0.83	ug/L			04/14/20 10:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 10:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/14/20 10:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/14/20 10:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/14/20 10:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/14/20 10:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/14/20 10:26	1
2-Hexanone	ND		25	3.1	ug/L			04/14/20 10:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/14/20 10:26	1
Methylene bromide	ND		5.0	0.59	ug/L			04/14/20 10:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/14/20 10:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/14/20 10:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/14/20 10:26	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/14/20 10:26	1
Naphthalene	ND		1.0	1.0	ug/L			04/14/20 10:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/14/20 10:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/14/20 10:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/14/20 10:26	1
o-Xylene	ND		5.0	0.60	ug/L			04/14/20 10:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/14/20 10:26	1

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

Lab Sample ID: MB 400-485864/4
Matrix: Water
Analysis Batch: 485864

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			04/14/20 10:26	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/14/20 10:26	1
Styrene	ND		1.0	1.0	ug/L			04/14/20 10:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/14/20 10:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/14/20 10:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/14/20 10:26	1
Toluene	ND		1.0	0.41	ug/L			04/14/20 10:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/14/20 10:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/14/20 10:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/14/20 10:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/14/20 10:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/14/20 10:26	1
Trichloroethene	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/14/20 10:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/14/20 10:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/14/20 10:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/14/20 10:26	1
Vinyl acetate	ND		25	2.0	ug/L			04/14/20 10:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/14/20 10:26	1
Xylenes, Total	ND		10	1.6	ug/L			04/14/20 10:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*04/14/20 10:26*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*04/14/20 10:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/14/20 10:26*	*1*

Lab Sample ID: LCS 400-485864/1002
Matrix: Water
Analysis Batch: 485864

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	177		ug/L		88	43 - 160
Acrolein	500	507		ug/L		101	38 - 160
Acrylonitrile	500	471		ug/L		94	64 - 142
Benzene	50.0	48.2		ug/L		96	70 - 130
Bromobenzene	50.0	51.5		ug/L		103	70 - 132
Bromochloromethane	50.0	48.3		ug/L		97	70 - 130
Bromodichloromethane	50.0	48.5		ug/L		97	67 - 133
Bromoform	50.0	57.6		ug/L		115	57 - 140
Bromomethane	50.0	87.6	*	ug/L		175	10 - 160
2-Butanone (MEK)	200	182		ug/L		91	61 - 145
Carbon disulfide	50.0	40.5		ug/L		81	61 - 137
Carbon tetrachloride	50.0	50.6		ug/L		101	61 - 137
Chlorobenzene	50.0	50.6		ug/L		101	70 - 130
Dibromochloromethane	50.0	54.6		ug/L		109	67 - 135
Chloroethane	50.0	91.0	*	ug/L		182	55 - 141

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

Lab Sample ID: LCS 400-485864/1002
Matrix: Water
Analysis Batch: 485864

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	42.9		ug/L		86	10 - 160
Chloroform	50.0	47.3		ug/L		95	69 - 130
1-Chlorohexane	50.0	47.7		ug/L		95	69 - 130
Chloromethane	50.0	37.1		ug/L		74	58 - 137
cis-1,2-Dichloroethene	50.0	50.5		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	47.6		ug/L		95	69 - 132
1,2-Dichlorobenzene	50.0	50.5		ug/L		101	67 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	57.2		ug/L		114	41 - 146
1,1-Dichloroethane	50.0	50.7		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	50.0		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	47.2		ug/L		94	63 - 134
1,2-Dichloropropane	50.0	46.2		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	49.7		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	53.7		ug/L		107	52 - 135
1,1-Dichloropropene	50.0	49.9		ug/L		100	70 - 130
Ethylbenzene	50.0	50.3		ug/L		101	70 - 130
Ethyl methacrylate	50.0	49.1		ug/L		98	68 - 130
Hexachlorobutadiene	50.0	53.9		ug/L		108	53 - 140
2-Hexanone	200	193		ug/L		96	65 - 137
Isopropylbenzene	50.0	52.4		ug/L		105	70 - 130
Methylene bromide	50.0	47.4		ug/L		95	70 - 130
Methylene Chloride	50.0	38.7		ug/L		77	66 - 135
4-Methyl-2-pentanone (MIBK)	200	175		ug/L		87	69 - 138
Methyl tert-butyl ether	50.0	49.1		ug/L		98	66 - 130
m-Xylene & p-Xylene	50.0	51.2		ug/L		102	70 - 130
Naphthalene	50.0	45.3		ug/L		91	47 - 149
n-Butylbenzene	50.0	52.4		ug/L		105	67 - 130
N-Propylbenzene	50.0	53.2		ug/L		106	70 - 130
o-Chlorotoluene	50.0	51.3		ug/L		103	70 - 130
o-Xylene	50.0	51.3		ug/L		103	70 - 130
p-Chlorotoluene	50.0	52.0		ug/L		104	70 - 130
p-Isopropyltoluene	50.0	52.6		ug/L		105	65 - 130
sec-Butylbenzene	50.0	53.0		ug/L		106	66 - 130
Styrene	50.0	50.1		ug/L		100	70 - 130
tert-Butylbenzene	50.0	60.0		ug/L		120	64 - 139
1,1,1,2-Tetrachloroethane	50.0	53.0		ug/L		106	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/L		101	70 - 131
Tetrachloroethene	50.0	48.8		ug/L		98	65 - 130
Toluene	50.0	51.1		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	47.8		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	54.0		ug/L		108	63 - 130
1,2,3-Trichlorobenzene	50.0	48.7		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	50.5		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	49.6		ug/L		99	68 - 130
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	70 - 130
Trichloroethene	50.0	47.3		ug/L		95	70 - 130
Trichlorofluoromethane	50.0	63.5		ug/L		127	65 - 138

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

Lab Sample ID: LCS 400-485864/1002
Matrix: Water
Analysis Batch: 485864

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.9		ug/L		102	70 - 130
1,2,4-Trimethylbenzene	50.0	51.8		ug/L		104	70 - 130
1,3,5-Trimethylbenzene	50.0	52.5		ug/L		105	69 - 130
Vinyl acetate	100	109		ug/L		109	26 - 160
Vinyl chloride	50.0	61.1		ug/L		122	59 - 136
Xylenes, Total	100	103		ug/L		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzenethiol	ND		10	1.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzoic acid	ND		30	7.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzyl alcohol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/14/20 11:11	04/20/20 16:55	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/14/20 11:11	04/20/20 16:55	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloroaniline	ND		10	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chlorophenol	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenzofuran	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Diethyl phthalate	ND		10	0.70	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,4-Dioxane	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachloroethane	ND		10	4.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Indene	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Isophorone	ND		10	0.57	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Methylphenol	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitroaniline	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
3-Nitroaniline	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitroaniline	ND		10	2.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Nitrobenzene	ND		10	0.55	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitrophenol	ND		10	0.65	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitrophenol	ND		10	2.1	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pentachlorophenol	ND		20	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Phenol	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pyridine	ND		10	3.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Quinoline	ND		10	6.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*34 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2-Fluorophenol	*94*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Nitrobenzene-d5	*103*		*27 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Phenol-d5	*92*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Terphenyl-d14	*136*	*X*	*53 - 125*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*04/14/20 11:11*	*04/20/20 16:55*	*1*

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	20.0		ug/L		67	29 - 120
Benzoic acid	116	74.9		ug/L		64	10 - 150
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.8		ug/L		66	45 - 120
Bis(2-chloroethyl)ether	30.0	17.8		ug/L		59	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.1		ug/L		50	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.5		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	7.38	J *	ug/L		25	46 - 145
4-Chloroaniline	30.0	19.4		ug/L		65	30 - 120
4-Chloro-3-methylphenol	30.0	21.8		ug/L		73	39 - 140

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	20.4		ug/L		68	52 - 120
2-Chlorophenol	30.0	19.8		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.1		ug/L		70	58 - 124
Dibenz[a,h]acridine	29.6	11.0	*	ug/L		37	46 - 149
Dibenzofuran	30.0	20.9		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	38.9		ug/L		97	39 - 135
2,4-Dichlorophenol	30.0	21.2		ug/L		71	39 - 128
Diethyl phthalate	30.0	5.08	J *	ug/L		17	44 - 146
2,4-Dimethylphenol	30.0	23.0		ug/L		77	44 - 120
Dimethyl phthalate	30.0	2.99	J *	ug/L		10	50 - 131
Di-n-butyl phthalate	30.0	9.02	J *	ug/L		30	55 - 131
4,6-Dinitro-ortho-cresol	60.0	37.4		ug/L		62	10 - 150
2,4-Dinitrophenol	60.0	42.6		ug/L		71	10 - 150
2,4-Dinitrotoluene	30.0	23.8		ug/L		79	58 - 140
2,6-Dinitrotoluene	30.0	25.2		ug/L		84	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	12.0		ug/L		40	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.0		ug/L		57	47 - 123
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131
Hexachlorocyclopentadiene	30.0	7.05	J	ug/L		24	10 - 129
Hexachloroethane	30.0	15.8		ug/L		53	20 - 120
Indene	30.0	21.3		ug/L		71	47 - 120
Isophorone	30.0	20.3		ug/L		68	49 - 120
2-Methylphenol	30.0	19.3		ug/L		64	39 - 123
3 & 4 Methylphenol	30.0	18.3	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	20.3		ug/L		68	47 - 150
3-Nitroaniline	30.0	19.2		ug/L		64	34 - 132
4-Nitroaniline	30.0	18.6		ug/L		62	41 - 135
Nitrobenzene	30.0	20.6		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.0		ug/L		60	28 - 136
4-Nitrophenol	60.0	37.2		ug/L		62	10 - 150
N-Nitrosodimethylamine	30.0	19.2		ug/L		64	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.2		ug/L		64	44 - 120
N-Nitrosodiphenylamine	29.8	21.9		ug/L		74	56 - 120
Pentachlorophenol	60.0	37.6		ug/L		63	15 - 141
Phenol	30.0	17.0		ug/L		57	33 - 120
Pyridine	60.0	23.0		ug/L		38	26 - 120
Quinoline	29.6	23.6		ug/L		80	51 - 129
2,4,5-Trichlorophenol	30.0	20.4		ug/L		68	38 - 147
2,4,6-Trichlorophenol	30.0	20.9		ug/L		70	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*61*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*72*		*53 - 125*

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	64		15 - 135

Lab Sample ID: LCS 400-485894/3-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	112		34 - 120
2-Fluorophenol	90		10 - 120
Nitrobenzene-d5	102		27 - 120
Phenol-d5	99		10 - 120
Terphenyl-d14	136	X	53 - 125
2,4,6-Tribromophenol	81		15 - 135

Lab Sample ID: LCSD 400-485894/4-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	14	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	95		34 - 120
2-Fluorophenol	77		10 - 120
Nitrobenzene-d5	90		27 - 120
Phenol-d5	79		10 - 120
Terphenyl-d14	121		53 - 125
2,4,6-Tribromophenol	66		15 - 135

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

Lab Sample ID: MB 400-486237/1-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate - RERA	ND		10	0.69	ug/L		04/17/20 09:17	04/21/20 17:06	1
Dibenz[a,h]acridine - RERA	ND		10	3.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Diethyl phthalate - RERA	ND		10	0.70	ug/L		04/17/20 09:17	04/21/20 17:06	1
Dimethyl phthalate - RERA	ND		10	0.60	ug/L		04/17/20 09:17	04/21/20 17:06	1
Di-n-butyl phthalate - RERA	ND		10	2.7	ug/L		04/17/20 09:17	04/21/20 17:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl - RERA	55		34 - 120	04/17/20 09:17	04/21/20 17:06	1
2-Fluorophenol - RERA	26		10 - 120	04/17/20 09:17	04/21/20 17:06	1

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

Lab Sample ID: MB 400-486237/1-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486237

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 - RERA	67		27 - 120	04/17/20 09:17	04/21/20 17:06	1
Phenol-d5 - RERA	53		10 - 120	04/17/20 09:17	04/21/20 17:06	1
Terphenyl-d14 - RERA	81		53 - 125	04/17/20 09:17	04/21/20 17:06	1
2,4,6-Tribromophenol - RERA	46		15 - 135	04/17/20 09:17	04/21/20 17:06	1

Lab Sample ID: LCS 400-486237/2-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate - RERA	30.0	20.3		ug/L		68	46 - 145
Dibenz[a,h]acridine - RERA	29.6	18.1		ug/L		61	46 - 149
Diethyl phthalate - RERA	30.0	19.5		ug/L		65	44 - 146
Dimethyl phthalate - RERA	30.0	20.3		ug/L		68	50 - 131
Di-n-butyl phthalate - RERA	30.0	19.4		ug/L		65	55 - 131

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl - RERA	58		34 - 120
2-Fluorophenol - RERA	23		10 - 120
Nitrobenzene-d5 - RERA	73		27 - 120
Phenol-d5 - RERA	54		10 - 120
Terphenyl-d14 - RERA	73		53 - 125
2,4,6-Tribromophenol - RERA	79		15 - 135

Lab Sample ID: LCSD 400-486237/3-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate - RERA	30.0	22.4		ug/L		75	46 - 145	10	30
Dibenz[a,h]acridine - RERA	29.6	20.2		ug/L		68	46 - 149	11	30
Diethyl phthalate - RERA	30.0	21.3		ug/L		71	44 - 146	9	30
Dimethyl phthalate - RERA	30.0	22.5		ug/L		75	50 - 131	10	30
Di-n-butyl phthalate - RERA	30.0	20.7		ug/L		69	55 - 131	6	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl - RERA	61		34 - 120
2-Fluorophenol - RERA	14		10 - 120
Nitrobenzene-d5 - RERA	72		27 - 120
Phenol-d5 - RERA	46		10 - 120
Terphenyl-d14 - RERA	82		53 - 125
2,4,6-Tribromophenol - RERA	81		15 - 135

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

Lab Sample ID: MB 400-485510/1-A
Matrix: Water
Analysis Batch: 485804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485510

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.80	0.13	ug/L		04/09/20 13:23	04/13/20 19:01	1
Acenaphthylene	ND		0.80	0.18	ug/L		04/09/20 13:23	04/13/20 19:01	1
Anthracene	ND		0.80	0.12	ug/L		04/09/20 13:23	04/13/20 19:01	1
Benzo[a]anthracene	ND		0.80	0.18	ug/L		04/09/20 13:23	04/13/20 19:01	1
Benzo[a]pyrene	ND		0.80	0.17	ug/L		04/09/20 13:23	04/13/20 19:01	1
Benzo[b]fluoranthene	ND		0.80	0.27	ug/L		04/09/20 13:23	04/13/20 19:01	1
Benzo[g,h,i]perylene	ND		0.80	0.52	ug/L		04/09/20 13:23	04/13/20 19:01	1
Benzo[k]fluoranthene	ND		0.80	0.40	ug/L		04/09/20 13:23	04/13/20 19:01	1
Chrysene	ND		0.80	0.30	ug/L		04/09/20 13:23	04/13/20 19:01	1
Dibenz(a,h)anthracene	ND		0.80	0.18	ug/L		04/09/20 13:23	04/13/20 19:01	1
Fluoranthene	ND		0.80	0.27	ug/L		04/09/20 13:23	04/13/20 19:01	1
Fluorene	ND		0.80	0.44	ug/L		04/09/20 13:23	04/13/20 19:01	1
Indeno[1,2,3-cd]pyrene	ND		0.80	0.48	ug/L		04/09/20 13:23	04/13/20 19:01	1
Phenanthrene	ND		0.80	0.14	ug/L		04/09/20 13:23	04/13/20 19:01	1
Pyrene	ND		0.80	0.16	ug/L		04/09/20 13:23	04/13/20 19:01	1
1-Methylnaphthalene	ND		0.80	0.30	ug/L		04/09/20 13:23	04/13/20 19:01	1
2-Methylnaphthalene	ND		0.80	0.24	ug/L		04/09/20 13:23	04/13/20 19:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*140*	*X*	*33 - 138*	*04/09/20 13:23*	*04/13/20 19:01*	*1*
2-Fluorobiphenyl	*88*		*15 - 122*	*04/09/20 13:23*	*04/13/20 19:01*	*1*
Nitrobenzene-d5	*85*		*19 - 130*	*04/09/20 13:23*	*04/13/20 19:01*	*1*

Lab Sample ID: LCS 400-485510/2-A
Matrix: Water
Analysis Batch: 485804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485510

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	120	107		ug/L		89	41 - 120
Acenaphthylene	120	108		ug/L		90	44 - 120
Anthracene	120	116		ug/L		97	49 - 120
Benzo[a]anthracene	120	116		ug/L		97	61 - 135
Benzo[a]pyrene	120	109		ug/L		91	52 - 120
Benzo[b]fluoranthene	120	114		ug/L		95	53 - 134
Benzo[g,h,i]perylene	120	111		ug/L		93	47 - 133
Benzo[k]fluoranthene	120	117		ug/L		98	57 - 134
Chrysene	120	115		ug/L		96	55 - 122
Dibenz(a,h)anthracene	120	122		ug/L		102	48 - 146
Fluoranthene	120	111		ug/L		93	54 - 128
Fluorene	120	117		ug/L		97	45 - 125
Indeno[1,2,3-cd]pyrene	120	118		ug/L		98	43 - 142
Phenanthrene	120	113		ug/L		95	48 - 120
Pyrene	120	129		ug/L		107	48 - 132
1-Methylnaphthalene	120	86.8		ug/L		72	41 - 120
2-Methylnaphthalene	120	87.7		ug/L		73	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*119*		*33 - 138*

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

Lab Sample ID: LCS 400-485510/2-A
Matrix: Water
Analysis Batch: 485804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485510

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	83		15 - 122
Nitrobenzene-d5	77		19 - 130

Lab Sample ID: LCSD 400-485510/3-A
Matrix: Water
Analysis Batch: 485804

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485510

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	120	107		ug/L		89	41 - 120	1	56
Acenaphthylene	120	108		ug/L		90	44 - 120	0	56
Anthracene	120	116		ug/L		96	49 - 120	1	51
Benzo[a]anthracene	120	112		ug/L		93	61 - 135	4	49
Benzo[a]pyrene	120	104		ug/L		87	52 - 120	5	50
Benzo[b]fluoranthene	120	114		ug/L		95	53 - 134	1	54
Benzo[g,h,i]perylene	120	106		ug/L		88	47 - 133	5	50
Benzo[k]fluoranthene	120	111		ug/L		92	57 - 134	5	52
Chrysene	120	110		ug/L		92	55 - 122	4	50
Dibenz(a,h)anthracene	120	116		ug/L		97	48 - 146	5	50
Fluoranthene	120	108		ug/L		90	54 - 128	3	52
Fluorene	120	116		ug/L		96	45 - 125	1	56
Indeno[1,2,3-cd]pyrene	120	112		ug/L		93	43 - 142	6	51
Phenanthrene	120	111		ug/L		93	48 - 120	2	56
Pyrene	120	124		ug/L		103	48 - 132	4	52
1-Methylnaphthalene	120	82.9		ug/L		69	41 - 120	5	55
2-Methylnaphthalene	120	83.7		ug/L		70	32 - 124	5	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	117		33 - 138
2-Fluorobiphenyl	83		15 - 122
Nitrobenzene-d5	66		19 - 130

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/14/20 11:11	04/20/20 13:10	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/14/20 11:11	04/20/20 13:10	1
Anthracene	ND		0.20	0.031	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/14/20 11:11	04/20/20 13:10	1
Chrysene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluorene	ND		0.20	0.11	ug/L		04/14/20 11:11	04/20/20 13:10	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/14/20 11:11	04/20/20 13:10	1
Phenanthrene	ND		0.20	0.036	ug/L		04/14/20 11:11	04/20/20 13:10	1
Pyrene	ND		0.20	0.040	ug/L		04/14/20 11:11	04/20/20 13:10	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/14/20 11:11	04/20/20 13:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*142*	*X*	*33 - 138*	*04/14/20 11:11*	*04/20/20 13:10*	*1*
2-Fluorobiphenyl	*89*		*15 - 122*	*04/14/20 11:11*	*04/20/20 13:10*	*1*
Nitrobenzene-d5	*82*		*19 - 130*	*04/14/20 11:11*	*04/20/20 13:10*	*1*

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.8		ug/L		83	41 - 120
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120
Anthracene	30.0	24.1		ug/L		80	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	22.0		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	22.9		ug/L		76	53 - 134
Benzo[g,h,i]perylene	30.0	24.7		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	23.8		ug/L		79	57 - 134
Chrysene	30.0	23.7		ug/L		79	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146
Fluoranthene	30.0	20.9		ug/L		70	54 - 128
Fluorene	30.0	24.6		ug/L		82	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.2		ug/L		81	43 - 142
Phenanthrene	30.0	24.1		ug/L		80	48 - 120
Pyrene	30.0	27.7		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	21.1		ug/L		70	41 - 120
2-Methylnaphthalene	30.0	20.7		ug/L		69	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*107*		*33 - 138*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5	*52*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486391/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/20/20 09:04	04/22/20 13:45	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/20/20 09:04	04/22/20 13:45	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-486391/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486391

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		51 - 149	04/20/20 09:04	04/22/20 13:45	1

Lab Sample ID: LCS 400-486391/2-A
Matrix: Water
Analysis Batch: 486454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486391

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0893		ug/L		89	60 - 140		
1,2-Dibromoethane			0.101	0.134		ug/L		133	60 - 140		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	132		51 - 149

Lab Sample ID: LCSD 400-486391/3-A
Matrix: Water
Analysis Batch: 486454

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486391

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0867		ug/L		86	60 - 140	3	30
1,2-Dibromoethane			0.101	0.136		ug/L		135	60 - 140	30	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	109		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1304569 (TestAmerica)~~

Please Check Appropriate Box:		
☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	**GSAP Project ID**
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/7/20

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 — 60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Client ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): Ben Burleson, Brett Howell

LAB USE ONLY

TELEPHONE: 314-429-0100 — FAX: 314-429-0462 — Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002: VOC 8260, SVOC 8270

UNIT COST 60619901 - 1.03.0022: VOC 8011, PAH 8270LL

400-186433 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TIS-Rox-040720-8260	4/7/20	0000	Water	2					2	X			
	TB-Rox-040720-8011		0000		2					2			X	
	~~TB-Rox-040720-EB~~		0730		6			2		8	X	X	X	X
	P114R-Rox-040720-EB		0730		6			2		8	X	X	X	X
	P114R-Rox-040720		1050		6			2		8	X	X	X	X

4/7/20

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	1680 3500 9376 / 1680 3500 9365	4/7/20	1600
	Fedex: 1680 3500 9398 / 1680 3500 9387		
	1680 3500 9354		
3.4°c, 3.2°c, 0.0°c, 1.9°c, 3.6°c IR8		4-8-20	8:59

Custody seal #: 1318055 1318054 / 1318053 1318052 / 1318051 1318050
1318049 1318048 / 1318047 1318046

Version: 14Dec15

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5/26/2020 (Rev. 2)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186433-1

Login Number: 186433
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1318048,1318055,1318054,1318046,1318051,1318053
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4°C, 3.2 °C, 0.0 °C ,1.9 °C, 3.6 °C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186433-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186477-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/5/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-040820-8260	TB-ROX-040820-8011
MW13-ROX-040820	MW3-ROX-040820
MW12-ROX-040820	MW2-ROX-040820

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 SVOCs were re-extracted outside of the extraction time criteria. Several SVOC LCS/LCD recoveries and/or SVOC LCS/LCSD RPDs were outside evaluation criteria. Several SVOC or PAH surrogate recoveries were outside criteria in sample MW12-ROX-040820 and several quality control samples. Several SVOC and 2-chloroethyl vinyl ether MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample MW12-ROX-040820. Sample MW2-ROX-040820 was diluted to bring VOCs into calibration range of the instrument. The continuing calibration verification for pyrene was outside evaluation criteria, biased high. 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, several SVOCs were re-extracted 8 days outside of the extraction time criteria (7 days) in investigative samples due to initial failing associated LCS recoveries. Professional judgement was used to qualify as estimated (**UJ**), however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-040820 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW13-ROX-040820 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-040820 – RERA	SVOCs	Diethyl phthalate	**UJ**
MW13-ROX-040820 – RERA	SVOCs	Dimethyl phthalate	**UJ**
MW13-ROX-040820 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**
MW3-ROX-040820 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW3-ROX-040820 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
MW3-ROX-040820 – RERA	SVOCs	Diethyl phthalate	**UJ**
MW3-ROX-040820 – RERA	SVOCs	Dimethyl phthalate	**UJ**
MW3-ROX-040820 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**
MW12-ROX-040820 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW12-ROX-040820 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
MW12-ROX-040820 – RERA	SVOCs	Diethyl phthalate	**UJ**
MW12-ROX-040820 – RERA	SVOCs	Dimethyl phthalate	**UJ**
MW12-ROX-040820 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**
MW2-ROX-040820 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW2-ROX-040820 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
MW2-ROX-040820 – RERA	SVOCs	Diethyl phthalate	**UJ**
MW2-ROX-040820 – RERA	SVOCs	Dimethyl phthalate	**UJ**
MW2-ROX-040820 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-485894/2-A	SVOCs	Butyl benzyl phthalate	**25**	NA	46-145
LCS 400-485894/2-A	SVOCs	Dibenz[a,h]acridine	**37**	NA	46-149
LCS 400-485894/2-A	SVOCs	Diethyl phthalate	**17**	NA	44-146
LCS 400-485894/2-A	SVOCs	Dimethyl phthalate	**10**	NA	50-131
LCS 400-485894/2-A	SVOCs	Di-n-butyl phthalate	**30**	NA	55-131
LCS/LCSD 400-485894/3-A/4-A	SVOCs	Benzenethiol	**3/2**	14	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; benzenethiol has been identified as a poor performing analyte under Method 8270. Several SVOCs were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required.

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-040820	SVOCs	Benzenethiol	**UJ**

Sample ID	Parameter	Analyte	Qualification
MW3-ROX-040820	SVOCs	Benzenethiol	**UJ**
MW12-ROX-040820	SVOCs	Benzenethiol	**UJ**
MW2-ROX-040820	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW12-ROX-040820	SVOCs	2-Fluorophenol	**5**	10-120
MB 400-485894/1-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
LCS 400-485894/3-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
MW12-ROX-040820 MS	SVOCs	2-Fluorophenol	**2**	10-120
MW12-ROX-040820 MS	SVOCs	Phenol-d_5	**6**	10-120
MW12-ROX-040820 MSD	SVOCs	2-Fluorophenol	**5**	10-120
MW12-ROX-040820 MSD	SVOCs	Phenol-d_5	**9**	10-120
MB 400-485894/1-A	PAHs	Terphenyl-d_{14}	**142**	33-138

Qualifications due to surrogate recoveries were not required if only one of three acid SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Method blanks, laboratory control samples, and matrix spike/matrix spike duplicate samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW12-ROX-040820 was spiked and analyzed for VOCs, SVOCs, PAHs, and VOCs by 8011.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/ MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW12-ROX-040820	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW12-ROX-040820	SVOCs	Aniline	24/63	**91**	10-143/63
MW12-ROX-040820	SVOCs	Benzoic acid	**0**/64	**NC**	10-134/49
MW12-ROX-040820	SVOCs	Butyl benzyl phthalate	**28**/50	**56**	43-151/32
MW12-ROX-040820	SVOCs	2-Chlorophenol	**0/9**	**NC**	19-130/42
MW12-ROX-040820	SVOCs	2,4-Dichlorophenol	**0/11**	**NC**	16-147/43

MS/MSD ID	Parameter	Analyte	MS/ MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW12-ROX-040820	SVOCs	Diethyl phthalate	**13/17**	24	23-160/40
MW12-ROX-040820	SVOCs	Dimethyl phthalate	**10/8**	15	11-158/36
MW12-ROX-040820	SVOCs	Di-n-butyl phthalate	28/46	**50**	28-162/32
MW12-ROX-040820	SVOCs	4,6-Dinitro-ortho-cresol	47/74	**45**	10-168/42
MW12-ROX-040820	SVOCs	2,4-Dinitrophenol	43/93	**75**	10-166/36
MW12-ROX-040820	SVOCs	2,4-Dinitrotoluene	60/92	**42**	26-158/28
MW12-ROX-040820	SVOCs	Hexachlorocyclopentadiene	11/50	**126**	10-151/50
MW12-ROX-040820	SVOCs	3&4-Methylphenol	**21/22**	5	31-130/47
MW12-ROX-040820	SVOCs	2-Nitrophenol	35/59	**52**	27-134/43
MW12-ROX-040820	SVOCs	Pentachlorophenol	**9**/20	**72**	10-180/42
MW12-ROX-040820	SVOCs	Phenol	**0/0**	**NC**	23-130/52
MW12-ROX-040820	SVOCs	Pyridine	**7**//28	**119**	10-130/55
MW12-ROX-040820	SVOCs	Quinoline	55/86	**44**	10-180/40
MW12-ROX-040820	SVOCs	2,4,5-Trichlorophenol	**0/14**	**NC**	43-137/42
MW12-ROX-040820	SVOCs	2,4,6-Trichlorophenol	**0/0**	**NC**	42-135/44

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW12-ROX-040820	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW12-ROX-040820	SVOCs	Benzoic acid	**UJ**
MW12-ROX-040820	SVOCs	2-Chlorophenol	**UJ**
MW12-ROX-040820	SVOCs	2,4-Dichlorophenol	**UJ**
MW12-ROX-040820	SVOCs	3&4-Methylphenol	**UJ**
MW12-ROX-040820	SVOCs	Pentachlorophenol	**UJ**
MW12-ROX-040820	SVOCs	Phenol	**UJ**
MW12-ROX-040820	SVOCs	Pyridine	**UJ**
MW12-ROX-040820	SVOCs	2,4,5-Trichlorophenol	**UJ**
MW12-ROX-040820	SVOCs	2,4,6-Trichlorophenol	**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 pyrene was outside acceptance criteria, biased high, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW13-ROX-040820	PAHs	Pyrene	J

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186477-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/28/2020 12:17:33 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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Reviewed 5/5/

The test results in this report meet all 2003 NELAC and 2009 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: 400-186477-1

Job ID: 400-186477-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186477-1

Comments
No additional comments.

Receipt
The samples were received on 4/9/2020 8:58 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.3° C, 0.4° C, 1.9° C, 2.6° C, 2.6° C, 2.9° C and 3.3° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-486050 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 400-486050 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW2-ROX-040820 (400-186477-6). Elevated reporting limits (RLs) are provided.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-040820-8260 (400-186477-1), MW13-ROX-040820 (400-186477-3), MW3-ROX-040820 (400-186477-4), MW12-ROX-040820 (400-186477-5) and MW2-ROX-040820 (400-186477-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-485894 and analytical batch 400-486452 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: 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: MW12-ROX-040820 (400-186477-5) and (LCS 400-485894/3-A). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following samples were outside control limits: MW12-ROX-040820 (400-186477-5[MS]) and MW12-ROX-040820 (400-186477-5[MSD]). 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 400-486452 recovered above the upper control limit for Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-486835 and analytical batch 400-486944 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 400-486835 and analytical batch 400-486944 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487181 recovered above the upper control limit for

Job ID: 400-186477-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486425 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-485894/1-A). These results have been reported and qualified.

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

GC Semi VOA
No 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: 400-186477-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186477-1	TB-ROX-040820-8260	Water	04/08/20 00:00	04/09/20 08:58	
400-186477-2	TB-ROX-040820-8011	Water	04/08/20 00:00	04/09/20 08:58	
400-186477-3	MW13-ROX-040820	Water	04/08/20 08:50	04/09/20 08:58	
400-186477-4	MW3-ROX-040820	Water	04/08/20 11:10	04/09/20 08:58	
400-186477-5	MW12-ROX-040820	Water	04/08/20 12:15	04/09/20 08:58	
400-186477-6	MW2-ROX-040820	Water	04/08/20 13:25	04/09/20 08:58	

Detection Summary

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

Job ID: 400-186477-1

Client Sample ID: TB-ROX-040820-8260 — Lab Sample ID: 400-186477-1

No Detections.

Client Sample ID: TB-ROX-040820-8011 — Lab Sample ID: 400-186477-2

No Detections.

Client Sample ID: MW13-ROX-040820 — Lab Sample ID: 400-186477-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.3		1.0	0.74	ug/L	1		8260B	Total/NA
Acenaphthene	0.62		0.19	0.031	ug/L	1		8270D LL	Total/NA
Anthracene	0.18	J	0.19	0.030	ug/L	1		8270D LL	Total/NA
Fluorene	0.46		0.19	0.11	ug/L	1		8270D LL	Total/NA
Pyrene	0.050	J	0.19	0.038	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	0.28		0.19	0.071	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW3-ROX-040820 — Lab Sample ID: 400-186477-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	3.3		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	2.3	J	5.0	1.6	ug/L	1		8260B	Total/NA
N-Propylbenzene	6.6		1.0	0.69	ug/L	1		8260B	Total/NA
Toluene	1.2		1.0	0.41	ug/L	1		8260B	Total/NA
Xylenes, Total	2.6	J	10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.27		0.19	0.071	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW12-ROX-040820 — Lab Sample ID: 400-186477-5

No Detections.

Client Sample ID: MW2-ROX-040820 — Lab Sample ID: 400-186477-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.2	J	5.0	1.9	ug/L	5		8260B	Total/NA
Ethylbenzene	770		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	43		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	470		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	60		5.0	5.0	ug/L	5		8260B	Total/NA
n-Butylbenzene	4.4	J	5.0	3.8	ug/L	5		8260B	Total/NA
N-Propylbenzene	53		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	42		25	3.0	ug/L	5		8260B	Total/NA
Toluene	14		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	180		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	52		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	510		50	8.0	ug/L	5		8260B	Total/NA
1-Methylnaphthalene	18		0.19	0.071	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	32		0.19	0.058	ug/L	1		8270D LL	Total/NA
Indene	1.4	J	9.6	0.96	ug/L	1		8270D	Total/NA
3 & 4 Methylphenol	1.1	J	19	1.0	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: 400-186477-1

Client Sample ID: TB-ROX-040820-8260
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		20	10	ug/L			04/17/20 09:42	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 09:42	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 09:42	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 09:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 09:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 09:42	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 09:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 09:42	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 09:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 09:42	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 09:42	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 09:42	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 09:42	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 09:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 09:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 09:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 09:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 09:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 09:42	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 09:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 09:42	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 09:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 09:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 09:42	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 09:42	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 09:42	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 09:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 09:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 09:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 09:42	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 09:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 09:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 09:42	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/17/20 09:42	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 09:42	1

Client Sample ID: TB-ROX-040820-8260
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 09:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 09:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 09:42	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 09:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 09:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 09:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 09:42	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 09:42	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 09:42	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 09:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 09:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 09:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 09:42	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 09:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 09:42	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/17/20 09:42*	*1*
Dibromofluoromethane	*102*		*81 - 121*		*04/17/20 09:42*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/17/20 09:42*	*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			04/20/20 19:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/20/20 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*80*		*78 - 118*		*04/20/20 19:00*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*04/20/20 19:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/20/20 19:00*	*1*

Client Sample ID: TB-ROX-040820-8011
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-2
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	0.0057	ug/L		04/15/20 11:34	04/16/20 17:38	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		04/15/20 11:34	04/16/20 17:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*04/15/20 11:34*	*04/16/20 17:38*	*1*

Client Sample ID: MW13-ROX-040820
Date Collected: 04/08/20 08:50
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-3
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			04/15/20 17:30	1
Acrolein	ND		20	10	ug/L			04/15/20 17:30	1
Acrylonitrile	ND		10	2.8	ug/L			04/15/20 17:30	1
Benzene	ND		1.0	0.38	ug/L			04/15/20 17:30	1
Bromobenzene	ND		1.0	0.54	ug/L			04/15/20 17:30	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/15/20 17:30	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Bromoform	ND		5.0	0.71	ug/L			04/15/20 17:30	1
Bromomethane	ND		1.0	0.98	ug/L			04/15/20 17:30	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/15/20 17:30	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Chloroethane	ND		1.0	0.76	ug/L			04/15/20 17:30	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/15/20 17:30	1
Chloroform	ND		1.0	0.60	ug/L			04/15/20 17:30	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/15/20 17:30	1
Chloromethane	ND		1.0	0.83	ug/L			04/15/20 17:30	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 17:30	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/15/20 17:30	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/15/20 17:30	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/15/20 17:30	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/15/20 17:30	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/15/20 17:30	1
2-Hexanone	ND		25	3.1	ug/L			04/15/20 17:30	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/15/20 17:30	1
Methylene bromide	ND		5.0	0.59	ug/L			04/15/20 17:30	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/15/20 17:30	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/15/20 17:30	1
Methyl tert-butyl ether	**1.3**		1.0	0.74	ug/L			04/15/20 17:30	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/15/20 17:30	1
Naphthalene	ND		1.0	1.0	ug/L			04/15/20 17:30	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/15/20 17:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/15/20 17:30	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/15/20 17:30	1
o-Xylene	ND		5.0	0.60	ug/L			04/15/20 17:30	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/15/20 17:30	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/15/20 17:30	1

Client Sample ID: MW13-ROX-040820
Date Collected: 04/08/20 08:50
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-3
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			04/15/20 17:30	1
Styrene	ND		1.0	1.0	ug/L			04/15/20 17:30	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/15/20 17:30	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/15/20 17:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/15/20 17:30	1
Toluene	ND		1.0	0.41	ug/L			04/15/20 17:30	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 17:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/15/20 17:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/15/20 17:30	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:30	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/15/20 17:30	1
Trichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/15/20 17:30	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/15/20 17:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/15/20 17:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/15/20 17:30	1
Vinyl acetate	ND		25	2.0	ug/L			04/15/20 17:30	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/15/20 17:30	1
Xylenes, Total	ND		10	1.6	ug/L			04/15/20 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*04/15/20 17:30*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/15/20 17:30*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/15/20 17:30*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.62**		0.19	0.031	ug/L		04/14/20 11:12	04/20/20 14:28	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/14/20 11:12	04/20/20 14:28	1
Anthracene	**0.18**	J	0.19	0.030	ug/L		04/14/20 11:12	04/20/20 14:28	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:28	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		04/14/20 11:12	04/20/20 14:28	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		04/14/20 11:12	04/20/20 14:28	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 14:28	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/14/20 11:12	04/20/20 14:28	1
Chrysene	ND		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:28	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:28	1
Fluoranthene	ND		0.19	0.065	ug/L		04/14/20 11:12	04/20/20 14:28	1
Fluorene	**0.46**		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 14:28	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 14:28	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 14:28	1
Pyrene	**0.050**	J J	0.19	0.038	ug/L		04/14/20 11:12	04/20/20 14:28	1
1-Methylnaphthalene	**0.28**		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:28	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 14:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*60*		*33 - 138*	*04/14/20 11:12*	*04/20/20 14:28*	*1*
2-Fluorobiphenyl	*65*		*15 - 122*	*04/14/20 11:12*	*04/20/20 14:28*	*1*

Client Sample ID: MW13-ROX-040820
Date Collected: 04/08/20 08:50
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	58		19 - 130	04/14/20 11:12	04/20/20 14:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		04/14/20 11:12	04/20/20 18:20	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		04/14/20 11:12	04/20/20 18:20	1
Benzoic acid	ND		29	7.0	ug/L		04/14/20 11:12	04/20/20 18:20	1
Benzyl alcohol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:20	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		04/14/20 11:12	04/20/20 18:20	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		04/14/20 11:12	04/20/20 18:20	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		04/14/20 11:12	04/20/20 18:20	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		04/14/20 11:12	04/20/20 18:20	1
Butyl benzyl phthalate	ND	*	9.6	0.66	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Chloroaniline	ND		9.6	3.3	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		04/14/20 11:12	04/20/20 18:20	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 18:20	1
2-Chlorophenol	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:20	1
Dibenz[a,h]acridine	ND	*	9.6	2.9	ug/L		04/14/20 11:12	04/20/20 18:20	1
Dibenzofuran	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 18:20	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		04/14/20 11:12	04/20/20 18:20	1
Diethyl phthalate	ND	*	9.6	0.67	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:20	1
Dimethyl phthalate	ND	*	9.6	0.58	ug/L		04/14/20 11:12	04/20/20 18:20	1
Di-n-butyl phthalate	ND	*	9.6	2.6	ug/L		04/14/20 11:12	04/20/20 18:20	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 18:20	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		04/14/20 11:12	04/20/20 18:20	1
1,4-Dioxane	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:20	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		04/14/20 11:12	04/20/20 18:20	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/14/20 11:12	04/20/20 18:20	1
Hexachloroethane	ND		9.6	4.0	ug/L		04/14/20 11:12	04/20/20 18:20	1
Indene	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:20	1
Isophorone	ND		9.6	0.55	ug/L		04/14/20 11:12	04/20/20 18:20	1
2-Methylphenol	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 18:20	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/14/20 11:12	04/20/20 18:20	1
2-Nitroaniline	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 18:20	1
3-Nitroaniline	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Nitroaniline	ND		9.6	2.4	ug/L		04/14/20 11:12	04/20/20 18:20	1
Nitrobenzene	ND		9.6	0.53	ug/L		04/14/20 11:12	04/20/20 18:20	1
2-Nitrophenol	ND		9.6	0.62	ug/L		04/14/20 11:12	04/20/20 18:20	1
4-Nitrophenol	ND		9.6	2.0	ug/L		04/14/20 11:12	04/20/20 18:20	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:20	1

Client Sample ID: MW13-ROX-040820
Date Collected: 04/08/20 08:50
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-3
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		04/14/20 11:12	04/20/20 18:20	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		04/14/20 11:12	04/20/20 18:20	1
Pentachlorophenol	ND		19	1.7	ug/L		04/14/20 11:12	04/20/20 18:20	1
Phenol	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 18:20	1
Pyridine	ND		9.6	3.1	ug/L		04/14/20 11:12	04/20/20 18:20	1
Quinoline	ND		9.6	5.8	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		04/14/20 11:12	04/20/20 18:20	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*04/14/20 11:12*	*04/20/20 18:20*	*1*
2-Fluorophenol	*27*		*10 - 120*	*04/14/20 11:12*	*04/20/20 18:20*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*04/14/20 11:12*	*04/20/20 18:20*	*1*
Phenol-d5	*31*		*10 - 120*	*04/14/20 11:12*	*04/20/20 18:20*	*1*
Terphenyl-d14	*60*		*53 - 125*	*04/14/20 11:12*	*04/20/20 18:20*	*1*
2,4,6-Tribromophenol	*47*		*15 - 135*	*04/14/20 11:12*	*04/20/20 18:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H	10	0.69	ug/L		04/23/20 13:48	04/24/20 17:37	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		04/23/20 13:48	04/24/20 17:37	1
Diethyl phthalate	ND	H	10	0.70	ug/L		04/23/20 13:48	04/24/20 17:37	1
Dimethyl phthalate	ND	H	10	0.60	ug/L		04/23/20 13:48	04/24/20 17:37	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		04/23/20 13:48	04/24/20 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*04/23/20 13:48*	*04/24/20 17:37*	*1*
2-Fluorophenol	*21*		*10 - 120*	*04/23/20 13:48*	*04/24/20 17:37*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/23/20 13:48*	*04/24/20 17:37*	*1*
Phenol-d5	*48*		*10 - 120*	*04/23/20 13:48*	*04/24/20 17:37*	*1*
Terphenyl-d14	*66*		*53 - 125*	*04/23/20 13:48*	*04/24/20 17:37*	*1*
2,4,6-Tribromophenol	*72*		*15 - 135*	*04/23/20 13:48*	*04/24/20 17:37*	*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		0.032	0.0058	ug/L		04/15/20 11:34	04/16/20 17:58	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		04/15/20 11:34	04/16/20 17:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*51 - 149*	*04/15/20 11:34*	*04/16/20 17:58*	*1*

Client Sample ID: MW3-ROX-040820
Date Collected: 04/08/20 11:10
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-4
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			04/15/20 17:51	1
Acrolein	ND		20	10	ug/L			04/15/20 17:51	1
Acrylonitrile	ND		10	2.8	ug/L			04/15/20 17:51	1
Benzene	ND		1.0	0.38	ug/L			04/15/20 17:51	1
Bromobenzene	ND		1.0	0.54	ug/L			04/15/20 17:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/15/20 17:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Bromoform	ND		5.0	0.71	ug/L			04/15/20 17:51	1
Bromomethane	ND		1.0	0.98	ug/L			04/15/20 17:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/15/20 17:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Chloroethane	ND		1.0	0.76	ug/L			04/15/20 17:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/15/20 17:51	1
Chloroform	ND		1.0	0.60	ug/L			04/15/20 17:51	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/15/20 17:51	1
Chloromethane	ND		1.0	0.83	ug/L			04/15/20 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 17:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/15/20 17:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/15/20 17:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/15/20 17:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/15/20 17:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/15/20 17:51	1
2-Hexanone	ND		25	3.1	ug/L			04/15/20 17:51	1
Isopropylbenzene	**3.3**		1.0	0.53	ug/L			04/15/20 17:51	1
Methylene bromide	ND		5.0	0.59	ug/L			04/15/20 17:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/15/20 17:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/15/20 17:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/15/20 17:51	1
m-Xylene & p-Xylene	**2.3**	**J**	5.0	1.6	ug/L			04/15/20 17:51	1
Naphthalene	ND		1.0	1.0	ug/L			04/15/20 17:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/15/20 17:51	1
N-Propylbenzene	**6.6**		1.0	0.69	ug/L			04/15/20 17:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/15/20 17:51	1
o-Xylene	ND		5.0	0.60	ug/L			04/15/20 17:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/15/20 17:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/15/20 17:51	1

Client Sample ID: MW3-ROX-040820
Date Collected: 04/08/20 11:10
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-4
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			04/15/20 17:51	1
Styrene	ND		1.0	1.0	ug/L			04/15/20 17:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/15/20 17:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/15/20 17:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/15/20 17:51	1
Toluene	**1.2**		1.0	0.41	ug/L			04/15/20 17:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 17:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/15/20 17:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/15/20 17:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/15/20 17:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/15/20 17:51	1
Trichloroethene	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/15/20 17:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/15/20 17:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/15/20 17:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/15/20 17:51	1
Vinyl acetate	ND		25	2.0	ug/L			04/15/20 17:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/15/20 17:51	1
Xylenes, Total	**2.6**	**J**	10	1.6	ug/L			04/15/20 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/15/20 17:51*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/15/20 17:51*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/15/20 17:51*	*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		04/14/20 11:12	04/20/20 14:43	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/14/20 11:12	04/20/20 14:43	1
Anthracene	ND		0.19	0.030	ug/L		04/14/20 11:12	04/20/20 14:43	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:43	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		04/14/20 11:12	04/20/20 14:43	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:43	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/14/20 11:12	04/20/20 14:43	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/14/20 11:12	04/20/20 14:43	1
Chrysene	ND		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:43	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:43	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:43	1
Fluorene	ND		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 14:43	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 14:43	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 14:43	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 14:43	1
1-Methylnaphthalene	**0.27**		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:43	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 14:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*108*		*33 - 138*	*04/14/20 11:12*	*04/20/20 14:43*	*1*
2-Fluorobiphenyl	*90*		*15 - 122*	*04/14/20 11:12*	*04/20/20 14:43*	*1*

Client Sample ID: MW3-ROX-040820
Date Collected: 04/08/20 11:10
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	56		19 - 130	04/14/20 11:12	04/20/20 14:43	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		04/14/20 11:12	04/20/20 18:41	1
Benzenethiol	ND	*	9.6	1.6	ug/L		04/14/20 11:12	04/20/20 18:41	1
Benzoic acid	ND		29	7.0	ug/L		04/14/20 11:12	04/20/20 18:41	1
Benzyl alcohol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:41	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		04/14/20 11:12	04/20/20 18:41	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		04/14/20 11:12	04/20/20 18:41	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		04/14/20 11:12	04/20/20 18:41	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		04/14/20 11:12	04/20/20 18:41	1
Butyl benzyl phthalate	ND	*	9.6	0.66	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Chloroaniline	ND		9.6	3.3	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		04/14/20 11:12	04/20/20 18:41	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 18:41	1
2-Chlorophenol	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:41	1
Dibenz[a,h]acridine	ND	*	9.6	2.9	ug/L		04/14/20 11:12	04/20/20 18:41	1
Dibenzofuran	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 18:41	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		04/14/20 11:12	04/20/20 18:41	1
Diethyl phthalate	ND	*	9.6	0.67	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:41	1
Dimethyl phthalate	ND	*	9.6	0.58	ug/L		04/14/20 11:12	04/20/20 18:41	1
Di-n-butyl phthalate	ND	*	9.6	2.6	ug/L		04/14/20 11:12	04/20/20 18:41	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 18:41	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		04/14/20 11:12	04/20/20 18:41	1
1,4-Dioxane	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:41	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:41	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		04/14/20 11:12	04/20/20 18:41	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/14/20 11:12	04/20/20 18:41	1
Hexachloroethane	ND		9.6	4.0	ug/L		04/14/20 11:12	04/20/20 18:41	1
Indene	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 18:41	1
Isophorone	ND		9.6	0.55	ug/L		04/14/20 11:12	04/20/20 18:41	1
2-Methylphenol	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 18:41	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/14/20 11:12	04/20/20 18:41	1
2-Nitroaniline	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 18:41	1
3-Nitroaniline	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Nitroaniline	ND		9.6	2.4	ug/L		04/14/20 11:12	04/20/20 18:41	1
Nitrobenzene	ND		9.6	0.53	ug/L		04/14/20 11:12	04/20/20 18:41	1
2-Nitrophenol	ND		9.6	0.63	ug/L		04/14/20 11:12	04/20/20 18:41	1
4-Nitrophenol	ND		9.6	2.0	ug/L		04/14/20 11:12	04/20/20 18:41	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:41	1

Client Sample Results

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

Job ID: 400-186477-1

Client Sample ID: MW3-ROX-040820
Date Collected: 04/08/20 11:10
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-4
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		04/14/20 11:12	04/20/20 18:41	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		04/14/20 11:12	04/20/20 18:41	1
Pentachlorophenol	ND		19	1.7	ug/L		04/14/20 11:12	04/20/20 18:41	1
Phenol	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 18:41	1
Pyridine	ND		9.6	3.1	ug/L		04/14/20 11:12	04/20/20 18:41	1
Quinoline	ND		9.6	5.8	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		04/14/20 11:12	04/20/20 18:41	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*103*		*34 - 120*	*04/14/20 11:12*	*04/20/20 18:41*	*1*
2-Fluorophenol	*81*		*10 - 120*	*04/14/20 11:12*	*04/20/20 18:41*	*1*
Nitrobenzene-d5	*96*		*27 - 120*	*04/14/20 11:12*	*04/20/20 18:41*	*1*
Phenol-d5	*80*		*10 - 120*	*04/14/20 11:12*	*04/20/20 18:41*	*1*
Terphenyl-d14	*105*		*53 - 125*	*04/14/20 11:12*	*04/20/20 18:41*	*1*
2,4,6-Tribromophenol	*107*		*15 - 135*	*04/14/20 11:12*	*04/20/20 18:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H UJ	10	0.70	ug/L		04/23/20 13:48	04/24/20 18:03	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		04/23/20 13:48	04/24/20 18:03	1
Diethyl phthalate	ND	H	10	0.71	ug/L		04/23/20 13:48	04/24/20 18:03	1
Dimethyl phthalate	ND	H	10	0.61	ug/L		04/23/20 13:48	04/24/20 18:03	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		04/23/20 13:48	04/24/20 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*04/23/20 13:48*	*04/24/20 18:03*	*1*
2-Fluorophenol	*22*		*10 - 120*	*04/23/20 13:48*	*04/24/20 18:03*	*1*
Nitrobenzene-d5	*56*		*27 - 120*	*04/23/20 13:48*	*04/24/20 18:03*	*1*
Phenol-d5	*44*		*10 - 120*	*04/23/20 13:48*	*04/24/20 18:03*	*1*
Terphenyl-d14	*58*		*53 - 125*	*04/23/20 13:48*	*04/24/20 18:03*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*04/23/20 13:48*	*04/24/20 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	0.0053	ug/L		04/15/20 11:34	04/16/20 18:18	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/15/20 11:34	04/16/20 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*04/15/20 11:34*	*04/16/20 18:18*	*1*

Client Sample Results

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

Job ID: 400-186477-1

Client Sample ID: MW12-ROX-040820
Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-5
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			04/15/20 16:09	1
Acrolein	ND		20	10	ug/L			04/15/20 16:09	1
Acrylonitrile	ND		10	2.8	ug/L			04/15/20 16:09	1
Benzene	ND		1.0	0.38	ug/L			04/15/20 16:09	1
Bromobenzene	ND		1.0	0.54	ug/L			04/15/20 16:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/15/20 16:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Bromoform	ND		5.0	0.71	ug/L			04/15/20 16:09	1
Bromomethane	ND		1.0	0.98	ug/L			04/15/20 16:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/15/20 16:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Chloroethane	ND		1.0	0.76	ug/L			04/15/20 16:09	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			04/15/20 16:09	1
Chloroform	ND		1.0	0.60	ug/L			04/15/20 16:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/15/20 16:09	1
Chloromethane	ND		1.0	0.83	ug/L			04/15/20 16:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 16:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/15/20 16:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/15/20 16:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/15/20 16:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/15/20 16:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/15/20 16:09	1
2-Hexanone	ND		25	3.1	ug/L			04/15/20 16:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/15/20 16:09	1
Methylene bromide	ND		5.0	0.59	ug/L			04/15/20 16:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/15/20 16:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/15/20 16:09	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/15/20 16:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/15/20 16:09	1
Naphthalene	ND		1.0	1.0	ug/L			04/15/20 16:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/15/20 16:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/15/20 16:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/15/20 16:09	1
o-Xylene	ND		5.0	0.60	ug/L			04/15/20 16:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/15/20 16:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/15/20 16:09	1

Client Sample ID: MW12-ROX-040820
Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-5
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			04/15/20 16:09	1
Styrene	ND		1.0	1.0	ug/L			04/15/20 16:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/15/20 16:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/15/20 16:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/15/20 16:09	1
Toluene	ND		1.0	0.41	ug/L			04/15/20 16:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 16:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/15/20 16:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/15/20 16:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/15/20 16:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/15/20 16:09	1
Trichloroethene	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/15/20 16:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/15/20 16:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/15/20 16:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/15/20 16:09	1
Vinyl acetate	ND		25	2.0	ug/L			04/15/20 16:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/15/20 16:09	1
Xylenes, Total	ND		10	1.6	ug/L			04/15/20 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/15/20 16:09*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/15/20 16:09*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/15/20 16:09*	*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		04/14/20 11:12	04/20/20 14:12	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/14/20 11:12	04/20/20 14:12	1
Anthracene	ND		0.19	0.030	ug/L		04/14/20 11:12	04/20/20 14:12	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:12	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/14/20 11:12	04/20/20 14:12	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:12	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/14/20 11:12	04/20/20 14:12	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/14/20 11:12	04/20/20 14:12	1
Chrysene	ND		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:12	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:12	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:12	1
Fluorene	ND		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 14:12	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 14:12	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 14:12	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 14:12	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:12	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 14:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*33 - 138*	*04/14/20 11:12*	*04/20/20 14:12*	*1*
2-Fluorobiphenyl	*67*		*15 - 122*	*04/14/20 11:12*	*04/20/20 14:12*	*1*

Client Sample ID: MW12-ROX-040820
Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	60		19 - 130	04/14/20 11:12	04/20/20 14:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F2	9.7	3.7	ug/L		04/14/20 11:12	04/20/20 19:45	1
Benzenethiol	ND	* UJ	9.7	1.6	ug/L		04/14/20 11:12	04/20/20 19:45	1
Benzoic acid	ND	F1 UJ	29	7.0	ug/L		04/14/20 11:12	04/20/20 19:45	1
Benzyl alcohol	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 19:45	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/14/20 11:12	04/20/20 19:45	1
Bis(2-chloroethyl)ether	ND		9.7	0.71	ug/L		04/14/20 11:12	04/20/20 19:45	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		04/14/20 11:12	04/20/20 19:45	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		04/14/20 11:12	04/20/20 19:45	1
Butyl benzyl phthalate	ND	F1 * F2 UJ	9.7	0.67	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		04/14/20 11:12	04/20/20 19:45	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		04/14/20 11:12	04/20/20 19:45	1
2-Chlorophenol	ND	F1 UJ	9.7	2.1	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 19:45	1
Dibenz[a,h]acridine	ND	*	9.7	2.9	ug/L		04/14/20 11:12	04/20/20 19:45	1
Dibenzofuran	ND		9.7	0.50	ug/L		04/14/20 11:12	04/20/20 19:45	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4-Dichlorophenol	ND	F1 UJ	9.7	2.9	ug/L		04/14/20 11:12	04/20/20 19:45	1
Diethyl phthalate	ND	F1 * UJ	9.7	0.68	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 19:45	1
Dimethyl phthalate	ND	F1 * UJ	9.7	0.58	ug/L		04/14/20 11:12	04/20/20 19:45	1
Di-n-butyl phthalate	ND	* F2	9.7	2.6	ug/L		04/14/20 11:12	04/20/20 19:45	1
4,6-Dinitro-ortho-cresol	ND	F2	9.7	1.9	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4-Dinitrophenol	ND	F2	29	3.3	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4-Dinitrotoluene	ND	F2	9.7	1.8	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		04/14/20 11:12	04/20/20 19:45	1
Di-n-octyl phthalate	ND		9.7	0.42	ug/L		04/14/20 11:12	04/20/20 19:45	1
1,4-Dioxane	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 19:45	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 19:45	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		04/14/20 11:12	04/20/20 19:45	1
Hexachlorocyclopentadiene	ND	F2	19	2.5	ug/L		04/14/20 11:12	04/20/20 19:45	1
Hexachloroethane	ND		9.7	4.1	ug/L		04/14/20 11:12	04/20/20 19:45	1
Indene	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 19:45	1
Isophorone	ND		9.7	0.55	ug/L		04/14/20 11:12	04/20/20 19:45	1
2-Methylphenol	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 19:45	1
3 & 4 Methylphenol	ND	F1 UJ	19	1.0	ug/L		04/14/20 11:12	04/20/20 19:45	1
2-Nitroaniline	ND		9.7	2.1	ug/L		04/14/20 11:12	04/20/20 19:45	1
3-Nitroaniline	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Nitroaniline	ND		9.7	2.4	ug/L		04/14/20 11:12	04/20/20 19:45	1
Nitrobenzene	ND		9.7	0.53	ug/L		04/14/20 11:12	04/20/20 19:45	1
2-Nitrophenol	ND	F2	9.7	0.63	ug/L		04/14/20 11:12	04/20/20 19:45	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/14/20 11:12	04/20/20 19:45	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 19:45	1

Client Sample ID: MW12-ROX-040820
Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-5
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		04/14/20 11:12	04/20/20 19:45	1
N-Nitrosodiphenylamine	ND		9.7	0.45	ug/L		04/14/20 11:12	04/20/20 19:45	1
Pentachlorophenol	ND	F1 F2	19	1.7	ug/L		04/14/20 11:12	04/20/20 19:45	1
Phenol	ND	F1	9.7	2.5	ug/L		04/14/20 11:12	04/20/20 19:45	1
Pyridine	ND	F1 F2	9.7	3.1	ug/L		04/14/20 11:12	04/20/20 19:45	1
Quinoline	ND	F2	9.7	5.8	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4,5-Trichlorophenol	ND	F1	9.7	3.6	ug/L		04/14/20 11:12	04/20/20 19:45	1
2,4,6-Trichlorophenol	ND	F1	9.7	3.4	ug/L		04/14/20 11:12	04/20/20 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*95*		*34 - 120*	*04/14/20 11:12*	*04/20/20 19:45*	*1*
2-Fluorophenol	*5*	*X*	*10 - 120*	*04/14/20 11:12*	*04/20/20 19:45*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*04/14/20 11:12*	*04/20/20 19:45*	*1*
Phenol-d5	*12*		*10 - 120*	*04/14/20 11:12*	*04/20/20 19:45*	*1*
Terphenyl-d14	*113*		*53 - 125*	*04/14/20 11:12*	*04/20/20 19:45*	*1*
2,4,6-Tribromophenol	*17*		*15 - 135*	*04/14/20 11:12*	*04/20/20 19:45*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H	10	0.69	ug/L		04/23/20 13:48	04/24/20 18:29	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		04/23/20 13:48	04/24/20 18:29	1
Diethyl phthalate	ND	H	10	0.70	ug/L		04/23/20 13:48	04/24/20 18:29	1
Dimethyl phthalate	ND	H	10	0.60	ug/L		04/23/20 13:48	04/24/20 18:29	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		04/23/20 13:48	04/24/20 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*04/23/20 13:48*	*04/24/20 18:29*	*1*
2-Fluorophenol	*28*		*10 - 120*	*04/23/20 13:48*	*04/24/20 18:29*	*1*
Nitrobenzene-d5	*52*		*27 - 120*	*04/23/20 13:48*	*04/24/20 18:29*	*1*
Phenol-d5	*39*		*10 - 120*	*04/23/20 13:48*	*04/24/20 18:29*	*1*
Terphenyl-d14	*56*		*53 - 125*	*04/23/20 13:48*	*04/24/20 18:29*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*04/23/20 13:48*	*04/24/20 18:29*	*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	0.0053	ug/L		04/15/20 11:34	04/16/20 18:37	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		04/15/20 11:34	04/16/20 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*04/15/20 11:34*	*04/16/20 18:37*	*1*

Client Sample ID: MW2-ROX-040820
Date Collected: 04/08/20 13:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-6
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			04/15/20 19:53	5
Acrolein	ND		100	50	ug/L			04/15/20 19:53	5
Acrylonitrile	ND		50	14	ug/L			04/15/20 19:53	5
Benzene	**3.2**	**J**	5.0	1.9	ug/L			04/15/20 19:53	5
Bromobenzene	ND		5.0	2.7	ug/L			04/15/20 19:53	5
Bromochloromethane	ND		5.0	2.6	ug/L			04/15/20 19:53	5
Bromodichloromethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Bromoform	ND		25	3.6	ug/L			04/15/20 19:53	5
Bromomethane	ND		5.0	4.9	ug/L			04/15/20 19:53	5
2-Butanone (MEK)	ND		130	13	ug/L			04/15/20 19:53	5
Carbon disulfide	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Chlorobenzene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Dibromochloromethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Chloroethane	ND		5.0	3.8	ug/L			04/15/20 19:53	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			04/15/20 19:53	5
Chloroform	ND		5.0	3.0	ug/L			04/15/20 19:53	5
1-Chlorohexane	ND		5.0	3.5	ug/L			04/15/20 19:53	5
Chloromethane	ND		5.0	4.2	ug/L			04/15/20 19:53	5
cis-1,2-Dichloroethene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			04/15/20 19:53	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			04/15/20 19:53	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			04/15/20 19:53	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			04/15/20 19:53	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Ethylbenzene	**770**		5.0	2.5	ug/L			04/15/20 19:53	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			04/15/20 19:53	5
Hexachlorobutadiene	ND		25	4.5	ug/L			04/15/20 19:53	5
2-Hexanone	ND		130	16	ug/L			04/15/20 19:53	5
Isopropylbenzene	**43**		5.0	2.7	ug/L			04/15/20 19:53	5
Methylene bromide	ND		25	3.0	ug/L			04/15/20 19:53	5
Methylene Chloride	ND		25	15	ug/L			04/15/20 19:53	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			04/15/20 19:53	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			04/15/20 19:53	5
m-Xylene & p-Xylene	**470**		25	8.0	ug/L			04/15/20 19:53	5
Naphthalene	**60**		5.0	5.0	ug/L			04/15/20 19:53	5
n-Butylbenzene	**4.4**	**J**	5.0	3.8	ug/L			04/15/20 19:53	5
N-Propylbenzene	**53**		5.0	3.5	ug/L			04/15/20 19:53	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			04/15/20 19:53	5
o-Xylene	**42**		25	3.0	ug/L			04/15/20 19:53	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			04/15/20 19:53	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			04/15/20 19:53	5

Client Sample ID: MW2-ROX-040820
Date Collected: 04/08/20 13:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			04/15/20 19:53	5
Styrene	ND		5.0	5.0	ug/L			04/15/20 19:53	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			04/15/20 19:53	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			04/15/20 19:53	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Tetrachloroethene	ND		5.0	2.9	ug/L			04/15/20 19:53	5
Toluene	**14**		5.0	2.1	ug/L			04/15/20 19:53	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			04/15/20 19:53	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			04/15/20 19:53	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			04/15/20 19:53	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			04/15/20 19:53	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			04/15/20 19:53	5
Trichloroethene	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			04/15/20 19:53	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			04/15/20 19:53	5
1,2,4-Trimethylbenzene	**180**		5.0	4.1	ug/L			04/15/20 19:53	5
1,3,5-Trimethylbenzene	**52**		5.0	2.8	ug/L			04/15/20 19:53	5
Vinyl acetate	ND		130	10	ug/L			04/15/20 19:53	5
Vinyl chloride	ND		5.0	2.5	ug/L			04/15/20 19:53	5
Xylenes, Total	**510**		50	8.0	ug/L			04/15/20 19:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*04/15/20 19:53*	*5*
Dibromofluoromethane	*94*		*81 - 121*		*04/15/20 19:53*	*5*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/15/20 19:53*	*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	0.031	ug/L		04/14/20 11:12	04/20/20 14:59	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/14/20 11:12	04/20/20 14:59	1
Anthracene	ND		0.19	0.030	ug/L		04/14/20 11:12	04/20/20 14:59	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:59	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/14/20 11:12	04/20/20 14:59	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:59	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/14/20 11:12	04/20/20 14:59	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/14/20 11:12	04/20/20 14:59	1
Chrysene	ND		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:59	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 14:59	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 14:59	1
Fluorene	ND		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 14:59	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 14:59	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 14:59	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 14:59	1
1-Methylnaphthalene	**18**		0.19	0.071	ug/L		04/14/20 11:12	04/20/20 14:59	1
2-Methylnaphthalene	**32**		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*94*		*33 - 138*	*04/14/20 11:12*	*04/20/20 14:59*	*1*
2-Fluorobiphenyl	*85*		*15 - 122*	*04/14/20 11:12*	*04/20/20 14:59*	*1*

Client Sample ID: MW2-ROX-040820
Date Collected: 04/08/20 13:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84		19 - 130	04/14/20 11:12	04/20/20 14:59	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		04/14/20 11:12	04/20/20 20:06	1
Benzenethiol	ND	* UJ	9.6	1.6	ug/L		04/14/20 11:12	04/20/20 20:06	1
Benzoic acid	ND		29	7.0	ug/L		04/14/20 11:12	04/20/20 20:06	1
Benzyl alcohol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 20:06	1
Bis(2-chloroethoxy)methane	ND		9.6	0.67	ug/L		04/14/20 11:12	04/20/20 20:06	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		04/14/20 11:12	04/20/20 20:06	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		04/14/20 11:12	04/20/20 20:06	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		04/14/20 11:12	04/20/20 20:06	1
Butyl benzyl phthalate	ND	*	9.6	0.67	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Chloroaniline	ND		9.6	3.3	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		04/14/20 11:12	04/20/20 20:06	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 20:06	1
2-Chlorophenol	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 20:06	1
Dibenz[a,h]acridine	ND	*	9.6	2.9	ug/L		04/14/20 11:12	04/20/20 20:06	1
Dibenzofuran	ND		9.6	0.50	ug/L		04/14/20 11:12	04/20/20 20:06	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		04/14/20 11:12	04/20/20 20:06	1
Diethyl phthalate	ND	*	9.6	0.68	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 20:06	1
Dimethyl phthalate	ND	*	9.6	0.58	ug/L		04/14/20 11:12	04/20/20 20:06	1
Di-n-butyl phthalate	ND	*	9.6	2.6	ug/L		04/14/20 11:12	04/20/20 20:06	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		04/14/20 11:12	04/20/20 20:06	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		04/14/20 11:12	04/20/20 20:06	1
1,4-Dioxane	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 20:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		04/14/20 11:12	04/20/20 20:06	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		04/14/20 11:12	04/20/20 20:06	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/14/20 11:12	04/20/20 20:06	1
Hexachloroethane	ND		9.6	4.1	ug/L		04/14/20 11:12	04/20/20 20:06	1
Indene	**1.4**	**J**	9.6	0.96	ug/L		04/14/20 11:12	04/20/20 20:06	1
Isophorone	ND		9.6	0.55	ug/L		04/14/20 11:12	04/20/20 20:06	1
2-Methylphenol	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 20:06	1
3 & 4 Methylphenol	**1.1**	**J**	19	1.0	ug/L		04/14/20 11:12	04/20/20 20:06	1
2-Nitroaniline	ND		9.6	2.1	ug/L		04/14/20 11:12	04/20/20 20:06	1
3-Nitroaniline	ND		9.6	1.7	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Nitroaniline	ND		9.6	2.4	ug/L		04/14/20 11:12	04/20/20 20:06	1
Nitrobenzene	ND		9.6	0.53	ug/L		04/14/20 11:12	04/20/20 20:06	1
2-Nitrophenol	ND		9.6	0.63	ug/L		04/14/20 11:12	04/20/20 20:06	1
4-Nitrophenol	ND		9.6	2.0	ug/L		04/14/20 11:12	04/20/20 20:06	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 20:06	1

Client Sample ID: MW2-ROX-040820
Date Collected: 04/08/20 13:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186477-6
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		9.6	3.2	ug/L		04/14/20 11:12	04/20/20 20:06	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		04/14/20 11:12	04/20/20 20:06	1
Pentachlorophenol	ND		19	1.7	ug/L		04/14/20 11:12	04/20/20 20:06	1
Phenol	ND		9.6	2.5	ug/L		04/14/20 11:12	04/20/20 20:06	1
Pyridine	ND		9.6	3.1	ug/L		04/14/20 11:12	04/20/20 20:06	1
Quinoline	ND		9.6	5.8	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		04/14/20 11:12	04/20/20 20:06	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		04/14/20 11:12	04/20/20 20:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*04/14/20 11:12*	*04/20/20 20:06*	*1*
2-Fluorophenol	*27*		*10 - 120*	*04/14/20 11:12*	*04/20/20 20:06*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*04/14/20 11:12*	*04/20/20 20:06*	*1*
Phenol-d5	*55*		*10 - 120*	*04/14/20 11:12*	*04/20/20 20:06*	*1*
Terphenyl-d14	*67*		*53 - 125*	*04/14/20 11:12*	*04/20/20 20:06*	*1*
2,4,6-Tribromophenol	*87*		*15 - 135*	*04/14/20 11:12*	*04/20/20 20:06*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H UJ	10	0.70	ug/L		04/23/20 13:48	04/24/20 19:46	1
Dibenz[a,h]acridine	ND	H	10	3.0	ug/L		04/23/20 13:48	04/24/20 19:46	1
Diethyl phthalate	ND	H	10	0.71	ug/L		04/23/20 13:48	04/24/20 19:46	1
Dimethyl phthalate	ND	H	10	0.61	ug/L		04/23/20 13:48	04/24/20 19:46	1
Di-n-butyl phthalate	ND	H	10	2.7	ug/L		04/23/20 13:48	04/24/20 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*04/23/20 13:48*	*04/24/20 19:46*	*1*
2-Fluorophenol	*41*		*10 - 120*	*04/23/20 13:48*	*04/24/20 19:46*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*04/23/20 13:48*	*04/24/20 19:46*	*1*
Phenol-d5	*69*		*10 - 120*	*04/23/20 13:48*	*04/24/20 19:46*	*1*
Terphenyl-d14	*85*		*53 - 125*	*04/23/20 13:48*	*04/24/20 19:46*	*1*
2,4,6-Tribromophenol	*90*		*15 - 135*	*04/23/20 13:48*	*04/24/20 19:46*	*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	0.0054	ug/L		04/15/20 11:34	04/16/20 19:37	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		04/15/20 11:34	04/16/20 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/15/20 11:34*	*04/16/20 19:37*	*1*

Definitions/Glossary

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

Job ID: 400-186477-1

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 or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186477-1

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	(78-118)	(81-121)	(80-120)
400-186477-1	TB-ROX-040820-8260	96	102	96
400-186477-1 - RA	TB-ROX-040820-8260	80	91	101
400-186477-3	MW13-ROX-040820	93	92	99
400-186477-4	MW3-ROX-040820	92	92	98
400-186477-5	MW12-ROX-040820	92	94	98
400-186477-5 MS	MW12-ROX-040820	91	100	98
400-186477-5 MSD	MW12-ROX-040820	90	99	99
400-186477-6	MW2-ROX-040820	90	94	97
LCS 400-486050/1002	Lab Control Sample	90	101	96
LCS 400-486222/1002	Lab Control Sample	98	106	97
LCS 400-486405/1002	Lab Control Sample	91	95	98
MB 400-486050/14	Method Blank	92	95	98
MB 400-486222/4	Method Blank	99	106	96
MB 400-486405/4	Method Blank	85	89	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186477-3	MW13-ROX-040820	76	27	69	31	60	47
400-186477-3 - RERA	MW13-ROX-040820	66	21	59	48	66	72
400-186477-4	MW3-ROX-040820	103	81	96	80	105	107
400-186477-4 - RERA	MW3-ROX-040820	63	22	56	44	58	65
400-186477-5	MW12-ROX-040820	95	5 X	88	12	113	17
400-186477-5 - RERA	MW12-ROX-040820	56	28	52	39	56	46
400-186477-5 MS	MW12-ROX-040820	73	2 X	70	6 X	77	19
400-186477-5 MS - RERA	MW12-ROX-040820	68	24	69	46	68	65
400-186477-5 MSD	MW12-ROX-040820	83	5 X	78	9 X	72	21
400-186477-5 MSD - RERA	MW12-ROX-040820	59	27	63	40	59	53
400-186477-6	MW2-ROX-040820	83	27	74	55	67	87
400-186477-6 - RERA	MW2-ROX-040820	78	41	71	69	85	90
LCS 400-485894/2-A	Lab Control Sample	60	50	61	49	72	64
LCS 400-485894/3-A	Lab Control Sample	112	90	102	99	136 X	81
LCS 400-486835/2-A	Lab Control Sample	51	32	51	44	58	55
LCSD 400-485894/4-A	Lab Control Sample Dup	95	77	90	79	121	66
LCSD 400-486835/3-A	Lab Control Sample Dup	58	28	58	47	66	63
MB 400-485894/1-A	Method Blank	108	94	103	92	136 X	92
MB 400-486835/1-A	Method Blank	57	34	52	49	57	58

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5

Surrogate Summary

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

Job ID: 400-186477-1

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186477-3	MW13-ROX-040820	60	65	58
400-186477-4	MW3-ROX-040820	108	90	56
400-186477-5	MW12-ROX-040820	90	67	60
400-186477-5 MS	MW12-ROX-040820	94	80	43
400-186477-5 MSD	MW12-ROX-040820	82	88	39
400-186477-6	MW2-ROX-040820	94	85	84
LCS 400-485894/2-A	Lab Control Sample	107	78	52
MB 400-485894/1-A	Method Blank	142 X	89	82

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186477-2	TB-ROX-040820-8011	107
400-186477-3	MW13-ROX-040820	93
400-186477-4	MW3-ROX-040820	102
400-186477-5	MW12-ROX-040820	102
400-186477-5 MS	MW12-ROX-040820	104
400-186477-5 MSD	MW12-ROX-040820	108
400-186477-6	MW2-ROX-040820	108
LCS 400-486019/2-A	Lab Control Sample	94
LCSD 400-486019/3-A	Lab Control Sample Dup	93
MB 400-486019/1-A	Method Blank	96

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186477-1

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 TestAmerica, 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: 400-186477-1

Client Sample ID: TB-ROX-040820-8260

Lab Sample ID: 400-186477-1

Date Collected: 04/08/20 00:00
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	486405	04/20/20 19:00	SAB	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	486222	04/17/20 09:42	WPD	TAL PEN

Client Sample ID: TB-ROX-040820-8011

Lab Sample ID: 400-186477-2

Date Collected: 04/08/20 00:00
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			33.7 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 17:38	DS	TAL PEN

Client Sample ID: MW13-ROX-040820

Lab Sample ID: 400-186477-3

Date Collected: 04/08/20 08:50
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486050	04/15/20 17:30	RS	TAL PEN
Total/NA	Prep	3520C			1040.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 18:20	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		997 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 17:37	VC1	TAL PEN
Total/NA	Prep	3520C			1040.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 14:28	PP1	TAL PEN
Total/NA	Prep	8011			33.2 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 17:58	DS	TAL PEN

Client Sample ID: MW3-ROX-040820

Lab Sample ID: 400-186477-4

Date Collected: 04/08/20 11:10
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486050	04/15/20 17:51	RS	TAL PEN
Total/NA	Prep	3520C			1037.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 18:41	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		989.2 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 18:03	VC1	TAL PEN
Total/NA	Prep	3520C			1037.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 14:43	PP1	TAL PEN
Total/NA	Prep	8011			36.4 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 18:18	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186477-1

Client Sample ID: MW12-ROX-040820

Lab Sample ID: 400-186477-5

Date Collected: 04/08/20 12:15
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486050	04/15/20 16:09	RS	TAL PEN
Total/NA	Prep	3520C			1036.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 19:45	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		993.4 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 18:29	VC1	TAL PEN
Total/NA	Prep	3520C			1036.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 14:12	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 18:37	DS	TAL PEN

Client Sample ID: MW2-ROX-040820

Lab Sample ID: 400-186477-6

Date Collected: 04/08/20 13:25
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	486050	04/15/20 19:53	RS	TAL PEN
Total/NA	Prep	3520C			1036.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 20:06	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		989.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 19:46	VC1	TAL PEN
Total/NA	Prep	3520C			1036.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 14:59	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 19:37	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-485894/1-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 16:55	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 13:10	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486019/1-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 16:39	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186477-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486050/14
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	486050	04/15/20 15:48	RS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486222/4
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	486222	04/17/20 08:55	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486405/4
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	486405	04/20/20 16:23	SAB	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486835/1-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 16:43	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485894/2-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:25	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485894/3-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486019/2-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 16:59	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486050/1002**
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	486050	04/15/20 14:21	RS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486222/1002**
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	486222	04/17/20 08:01	WPD	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486405/1002**
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	486405	04/20/20 15:23	SAB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486835/2-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	486944	04/24/20 15:55	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-485894/4-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:59	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186477-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486019/3-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 17:18	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486835/3-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:21	VC1	TAL PEN

Client Sample ID: MW12-ROX-040820

Lab Sample ID: 400-186477-5 MS

Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

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	486050	04/15/20 16:29	RS	TAL PEN
Total/NA	Prep	3520C			1045.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 19:03	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		967.2 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 18:54	VC1	TAL PEN
Total/NA	Prep	3520C			1045.4 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:41	PP1	TAL PEN
Total/NA	Prep	8011			33.4 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 18:57	DS	TAL PEN

Client Sample ID: MW12-ROX-040820

Lab Sample ID: 400-186477-5 MSD

Date Collected: 04/08/20 12:15
Date Received: 04/09/20 08:58

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	486050	04/15/20 16:50	RS	TAL PEN
Total/NA	Prep	3520C			1040.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 19:24	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		982.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 19:20	VC1	TAL PEN
Total/NA	Prep	3520C			1040.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:57	PP1	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 19:17	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186477-1

GC/MS VOA

Analysis Batch: 486050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3	MW13-ROX-040820	Total/NA	Water	8260B	
400-186477-4	MW3-ROX-040820	Total/NA	Water	8260B	
400-186477-5	MW12-ROX-040820	Total/NA	Water	8260B	
400-186477-6	MW2-ROX-040820	Total/NA	Water	8260B	
MB 400-486050/14	Method Blank	Total/NA	Water	8260B	
LCS 400-486050/1002	Lab Control Sample	Total/NA	Water	8260B	
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	8260B	
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	8260B	

Analysis Batch: 486222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-1	TB-ROX-040820-8260	Total/NA	Water	8260B	
MB 400-486222/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486222/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 486405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-1 - RA	TB-ROX-040820-8260	Total/NA	Water	8260B	
MB 400-486405/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486405/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 485894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3	MW13-ROX-040820	Total/NA	Water	3520C	
400-186477-4	MW3-ROX-040820	Total/NA	Water	3520C	
400-186477-5	MW12-ROX-040820	Total/NA	Water	3520C	
400-186477-6	MW2-ROX-040820	Total/NA	Water	3520C	
MB 400-485894/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	3520C	
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	3520C	

Analysis Batch: 486425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3	MW13-ROX-040820	Total/NA	Water	8270D LL	485894
400-186477-4	MW3-ROX-040820	Total/NA	Water	8270D LL	485894
400-186477-5	MW12-ROX-040820	Total/NA	Water	8270D LL	485894
400-186477-6	MW2-ROX-040820	Total/NA	Water	8270D LL	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D LL	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485894
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	8270D LL	485894
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	8270D LL	485894

Analysis Batch: 486452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3	MW13-ROX-040820	Total/NA	Water	8270D	485894
400-186477-4	MW3-ROX-040820	Total/NA	Water	8270D	485894

GC/MS Semi VOA (Continued)

Analysis Batch: 486452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-5	MW12-ROX-040820	Total/NA	Water	8270D	485894
400-186477-6	MW2-ROX-040820	Total/NA	Water	8270D	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	485894
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	8270D	485894
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	8270D	485894

Prep Batch: 486835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3 - RERA	MW13-ROX-040820	Total/NA	Water	3520C	
400-186477-4 - RERA	MW3-ROX-040820	Total/NA	Water	3520C	
400-186477-5 - RERA	MW12-ROX-040820	Total/NA	Water	3520C	
400-186477-6 - RERA	MW2-ROX-040820	Total/NA	Water	3520C	
MB 400-486835/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-186477-5 MS - RERA	MW12-ROX-040820	Total/NA	Water	3520C	
400-186477-5 MSD - RERA	MW12-ROX-040820	Total/NA	Water	3520C	

Analysis Batch: 486944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-3 - RERA	MW13-ROX-040820	Total/NA	Water	8270D	486835
400-186477-4 - RERA	MW3-ROX-040820	Total/NA	Water	8270D	486835
400-186477-5 - RERA	MW12-ROX-040820	Total/NA	Water	8270D	486835
400-186477-6 - RERA	MW2-ROX-040820	Total/NA	Water	8270D	486835
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	8270D	486835
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835
400-186477-5 MS - RERA	MW12-ROX-040820	Total/NA	Water	8270D	486835
400-186477-5 MSD - RERA	MW12-ROX-040820	Total/NA	Water	8270D	486835

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-486835/1-A	Method Blank	Total/NA	Water	8270D	486835

GC Semi VOA

Prep Batch: 486019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-2	TB-ROX-040820-8011	Total/NA	Water	8011	
400-186477-3	MW13-ROX-040820	Total/NA	Water	8011	
400-186477-4	MW3-ROX-040820	Total/NA	Water	8011	
400-186477-5	MW12-ROX-040820	Total/NA	Water	8011	
400-186477-6	MW2-ROX-040820	Total/NA	Water	8011	
MB 400-486019/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486019/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486019/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	8011	
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-186477-1

GC Semi VOA

Analysis Batch: 486175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186477-2	TB-ROX-040820-8011	Total/NA	Water	8011	486019
400-186477-3	MW13-ROX-040820	Total/NA	Water	8011	486019
400-186477-4	MW3-ROX-040820	Total/NA	Water	8011	486019
400-186477-5	MW12-ROX-040820	Total/NA	Water	8011	486019
400-186477-6	MW2-ROX-040820	Total/NA	Water	8011	486019
MB 400-486019/1-A	Method Blank	Total/NA	Water	8011	486019
LCS 400-486019/2-A	Lab Control Sample	Total/NA	Water	8011	486019
LCSD 400-486019/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486019
400-186477-5 MS	MW12-ROX-040820	Total/NA	Water	8011	486019
400-186477-5 MSD	MW12-ROX-040820	Total/NA	Water	8011	486019

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

Lab Sample ID: MB 400-486050/14
Matrix: Water
Analysis Batch: 486050

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			04/15/20 15:48	1
Acrolein	ND		20	10	ug/L			04/15/20 15:48	1
Acrylonitrile	ND		10	2.8	ug/L			04/15/20 15:48	1
Benzene	ND		1.0	0.38	ug/L			04/15/20 15:48	1
Bromobenzene	ND		1.0	0.54	ug/L			04/15/20 15:48	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/15/20 15:48	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Bromoform	ND		5.0	0.71	ug/L			04/15/20 15:48	1
Bromomethane	ND		1.0	0.98	ug/L			04/15/20 15:48	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/15/20 15:48	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Chloroethane	ND		1.0	0.76	ug/L			04/15/20 15:48	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/15/20 15:48	1
Chloroform	ND		1.0	0.60	ug/L			04/15/20 15:48	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/15/20 15:48	1
Chloromethane	ND		1.0	0.83	ug/L			04/15/20 15:48	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 15:48	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/15/20 15:48	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/15/20 15:48	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/15/20 15:48	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/15/20 15:48	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/15/20 15:48	1
2-Hexanone	ND		25	3.1	ug/L			04/15/20 15:48	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/15/20 15:48	1
Methylene bromide	ND		5.0	0.59	ug/L			04/15/20 15:48	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/15/20 15:48	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/15/20 15:48	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/15/20 15:48	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/15/20 15:48	1
Naphthalene	ND		1.0	1.0	ug/L			04/15/20 15:48	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/15/20 15:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/15/20 15:48	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/15/20 15:48	1
o-Xylene	ND		5.0	0.60	ug/L			04/15/20 15:48	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/15/20 15:48	1

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

Lab Sample ID: MB 400-486050/14
Matrix: Water
Analysis Batch: 486050

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			04/15/20 15:48	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/15/20 15:48	1
Styrene	ND		1.0	1.0	ug/L			04/15/20 15:48	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/15/20 15:48	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/15/20 15:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/15/20 15:48	1
Toluene	ND		1.0	0.41	ug/L			04/15/20 15:48	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/15/20 15:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/15/20 15:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/15/20 15:48	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/15/20 15:48	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/15/20 15:48	1
Trichloroethene	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/15/20 15:48	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/15/20 15:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/15/20 15:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/15/20 15:48	1
Vinyl acetate	ND		25	2.0	ug/L			04/15/20 15:48	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/15/20 15:48	1
Xylenes, Total	ND		10	1.6	ug/L			04/15/20 15:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/15/20 15:48*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/15/20 15:48*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/15/20 15:48*	*1*

Lab Sample ID: LCS 400-486050/1002
Matrix: Water
Analysis Batch: 486050

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	213		ug/L		106	43 - 160
Acrolein	500	513		ug/L		103	38 - 160
Acrylonitrile	500	522		ug/L		104	64 - 142
Benzene	50.0	45.9		ug/L		92	70 - 130
Bromobenzene	50.0	50.6		ug/L		101	70 - 132
Bromochloromethane	50.0	49.3		ug/L		99	70 - 130
Bromodichloromethane	50.0	44.4		ug/L		89	67 - 133
Bromoform	50.0	44.7		ug/L		89	57 - 140
Bromomethane	50.0	53.5		ug/L		107	10 - 160
2-Butanone (MEK)	200	223		ug/L		112	61 - 145
Carbon disulfide	50.0	36.0		ug/L		72	61 - 137
Carbon tetrachloride	50.0	46.2		ug/L		92	61 - 137
Chlorobenzene	50.0	46.5		ug/L		93	70 - 130
Dibromochloromethane	50.0	46.3		ug/L		93	67 - 135
Chloroethane	50.0	47.3		ug/L		95	55 - 141

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

Lab Sample ID: LCS 400-486050/1002
Matrix: Water
Analysis Batch: 486050

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	52.1		ug/L		104	10 - 160
Chloroform	50.0	46.6		ug/L		93	69 - 130
1-Chlorohexane	50.0	48.9		ug/L		98	69 - 130
Chloromethane	50.0	46.4		ug/L		93	58 - 137
cis-1,2-Dichloroethene	50.0	45.7		ug/L		91	68 - 130
cis-1,3-Dichloropropene	50.0	46.6		ug/L		93	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	47.4		ug/L		95	70 - 130
Dichlorodifluoromethane	50.0	48.0		ug/L		96	41 - 146
1,1-Dichloroethane	50.0	46.9		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	49.1		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	48.1		ug/L		96	70 - 130
2,2-Dichloropropane	50.0	41.7		ug/L		83	52 - 135
1,1-Dichloropropene	50.0	47.5		ug/L		95	70 - 130
Ethylbenzene	50.0	46.9		ug/L		94	70 - 130
Ethyl methacrylate	50.0	51.2		ug/L		102	68 - 130
Hexachlorobutadiene	50.0	58.6		ug/L		117	53 - 140
2-Hexanone	200	214		ug/L		107	65 - 137
Isopropylbenzene	50.0	47.8		ug/L		96	70 - 130
Methylene bromide	50.0	49.1		ug/L		98	70 - 130
Methylene Chloride	50.0	49.4		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	213		ug/L		107	69 - 138
Methyl tert-butyl ether	50.0	47.0		ug/L		94	66 - 130
m-Xylene & p-Xylene	50.0	46.2		ug/L		92	70 - 130
Naphthalene	50.0	53.8		ug/L		108	47 - 149
n-Butylbenzene	50.0	46.7		ug/L		93	67 - 130
N-Propylbenzene	50.0	47.5		ug/L		95	70 - 130
o-Chlorotoluene	50.0	44.5		ug/L		89	70 - 130
o-Xylene	50.0	46.5		ug/L		93	70 - 130
p-Chlorotoluene	50.0	44.6		ug/L		89	70 - 130
p-Isopropyltoluene	50.0	47.3		ug/L		95	65 - 130
sec-Butylbenzene	50.0	46.5		ug/L		93	66 - 130
Styrene	50.0	48.2		ug/L		96	70 - 130
tert-Butylbenzene	50.0	44.0		ug/L		88	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.6		ug/L		97	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.0		ug/L		98	70 - 131
Tetrachloroethene	50.0	48.8		ug/L		98	65 - 130
Toluene	50.0	44.8		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	48.1		ug/L		96	70 - 130
trans-1,3-Dichloropropene	50.0	46.3		ug/L		93	63 - 130
1,2,3-Trichlorobenzene	50.0	55.4		ug/L		111	60 - 138
1,2,4-Trichlorobenzene	50.0	55.6		ug/L		111	60 - 140
1,1,1-Trichloroethane	50.0	46.3		ug/L		93	68 - 130
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	70 - 130
Trichloroethene	50.0	50.0		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	47.2		ug/L		94	65 - 138

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

Lab Sample ID: LCS 400-486050/1002
Matrix: Water
Analysis Batch: 486050

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	51.5		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	45.9		ug/L		92	70 - 130
1,3,5-Trimethylbenzene	50.0	46.1		ug/L		92	69 - 130
Vinyl acetate	100	106		ug/L		106	26 - 160
Vinyl chloride	50.0	46.8		ug/L		94	59 - 136
Xylenes, Total	100	92.8		ug/L		93	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*101*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486050

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	171		ug/L		86	43 - 150
Acrolein	ND		500	465		ug/L		93	38 - 150
Acrylonitrile	ND		500	458		ug/L		92	62 - 149
Benzene	ND		50.0	42.2		ug/L		84	56 - 142
Bromobenzene	ND		50.0	44.0		ug/L		88	59 - 136
Bromochloromethane	ND		50.0	45.3		ug/L		91	64 - 140
Bromodichloromethane	ND		50.0	39.3		ug/L		79	59 - 143
Bromoform	ND		50.0	38.2		ug/L		76	50 - 140
Bromomethane	ND		50.0	47.5		ug/L		95	10 - 150
2-Butanone (MEK)	ND		200	187		ug/L		94	55 - 150
Carbon disulfide	ND		50.0	31.6		ug/L		63	48 - 150
Carbon tetrachloride	ND		50.0	40.6		ug/L		81	55 - 145
Chlorobenzene	ND		50.0	41.1		ug/L		82	64 - 130
Dibromochloromethane	ND		50.0	41.2		ug/L		82	56 - 143
Chloroethane	ND		50.0	44.6		ug/L		89	50 - 150
2-Chloroethyl vinyl ether	ND	F1	50.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	42.8		ug/L		86	60 - 141
1-Chlorohexane	ND		50.0	39.9		ug/L		80	56 - 136
Chloromethane	ND		50.0	41.2		ug/L		82	49 - 148
cis-1,2-Dichloroethene	ND		50.0	42.4		ug/L		85	59 - 143
cis-1,3-Dichloropropene	ND		50.0	40.8		ug/L		82	57 - 140
1,2-Dichlorobenzene	ND		50.0	40.8		ug/L		82	52 - 137
1,3-Dichlorobenzene	ND		50.0	40.6		ug/L		81	54 - 135
1,4-Dichlorobenzene	ND		50.0	39.4		ug/L		79	53 - 135
Dichlorodifluoromethane	ND		50.0	41.4		ug/L		83	16 - 150
1,1-Dichloroethane	ND		50.0	43.6		ug/L		87	61 - 144
1,2-Dichloroethane	ND		50.0	42.6		ug/L		85	60 - 141
1,1-Dichloroethene	ND		50.0	44.8		ug/L		90	54 - 147
1,2-Dichloropropane	ND		50.0	42.3		ug/L		85	66 - 137
1,3-Dichloropropane	ND		50.0	44.1		ug/L		88	66 - 133
2,2-Dichloropropane	ND		50.0	37.6		ug/L		75	42 - 144

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

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486050

Client Sample ID: MW12-ROX-040820
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	42.2		ug/L		84	65 - 136
Ethylbenzene	ND		50.0	40.2		ug/L		80	58 - 131
Ethyl methacrylate	ND		50.0	45.5		ug/L		91	64 - 130
Hexachlorobutadiene	ND		50.0	42.3		ug/L		85	31 - 149
2-Hexanone	ND		200	182		ug/L		91	65 - 140
Isopropylbenzene	ND		50.0	39.7		ug/L		79	56 - 133
Methylene bromide	ND		50.0	44.1		ug/L		88	63 - 138
Methylene Chloride	ND		50.0	45.1		ug/L		90	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	181		ug/L		91	63 - 146
Methyl tert-butyl ether	ND		50.0	42.2		ug/L		84	59 - 137
m-Xylene & p-Xylene	ND		50.0	39.7		ug/L		79	57 - 130
Naphthalene	ND		50.0	45.2		ug/L		90	25 - 150
n-Butylbenzene	ND		50.0	35.1		ug/L		70	41 - 142
N-Propylbenzene	ND		50.0	38.5		ug/L		77	51 - 138
o-Chlorotoluene	ND		50.0	37.3		ug/L		75	53 - 134
o-Xylene	ND		50.0	40.2		ug/L		80	61 - 130
p-Chlorotoluene	ND		50.0	37.2		ug/L		74	54 - 133
p-Isopropyltoluene	ND		50.0	37.3		ug/L		75	48 - 139
sec-Butylbenzene	ND		50.0	36.9		ug/L		74	50 - 138
Styrene	ND		50.0	41.4		ug/L		83	58 - 131
tert-Butylbenzene	ND		50.0	36.1		ug/L		72	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	43.7		ug/L		87	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	43.4		ug/L		87	66 - 135
Tetrachloroethene	ND		50.0	40.8		ug/L		82	52 - 133
Toluene	ND		50.0	40.2		ug/L		80	65 - 130
trans-1,2-Dichloroethene	ND		50.0	43.7		ug/L		87	61 - 143
trans-1,3-Dichloropropene	ND		50.0	40.1		ug/L		80	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	45.4		ug/L		91	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	45.4		ug/L		91	39 - 148
1,1,1-Trichloroethane	ND		50.0	41.3		ug/L		83	57 - 142
1,1,2-Trichloroethane	ND		50.0	44.5		ug/L		89	66 - 131
Trichloroethene	ND		50.0	44.4		ug/L		89	64 - 136
Trichlorofluoromethane	ND		50.0	42.1		ug/L		84	54 - 150
1,2,3-Trichloropropane	ND		50.0	45.9		ug/L		92	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	37.9		ug/L		76	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	38.1		ug/L		76	52 - 135
Vinyl acetate	ND		100	94.2		ug/L		94	26 - 150
Vinyl chloride	ND		50.0	41.8		ug/L		84	46 - 150
Xylenes, Total	ND		100	79.8		ug/L		80	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486050

Client Sample ID: MW12-ROX-040820
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	180		ug/L		90	43 - 150	5	30
Acrolein	ND		500	481		ug/L		96	38 - 150	3	31
Acrylonitrile	ND		500	473		ug/L		95	62 - 149	3	30
Benzene	ND		50.0	43.1		ug/L		86	56 - 142	2	30
Bromobenzene	ND		50.0	45.2		ug/L		90	59 - 136	3	30
Bromochloromethane	ND		50.0	45.8		ug/L		92	64 - 140	1	30
Bromodichloromethane	ND		50.0	40.0		ug/L		80	59 - 143	2	30
Bromoform	ND		50.0	38.2		ug/L		76	50 - 140	0	30
Bromomethane	ND		50.0	51.5		ug/L		103	10 - 150	8	50
2-Butanone (MEK)	ND		200	195		ug/L		98	55 - 150	4	30
Carbon disulfide	ND		50.0	33.3		ug/L		67	48 - 150	5	30
Carbon tetrachloride	ND		50.0	41.3		ug/L		83	55 - 145	2	30
Chlorobenzene	ND		50.0	42.6		ug/L		85	64 - 130	4	30
Dibromochloromethane	ND		50.0	41.5		ug/L		83	56 - 143	1	30
Chloroethane	ND		50.0	43.4		ug/L		87	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	44.0		ug/L		88	60 - 141	3	30
1-Chlorohexane	ND		50.0	43.3		ug/L		87	56 - 136	8	30
Chloromethane	ND		50.0	42.7		ug/L		85	49 - 148	4	31
cis-1,2-Dichloroethene	ND		50.0	43.3		ug/L		87	59 - 143	2	30
cis-1,3-Dichloropropene	ND		50.0	42.2		ug/L		84	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	42.7		ug/L		85	52 - 137	4	30
1,3-Dichlorobenzene	ND		50.0	42.4		ug/L		85	54 - 135	4	30
1,4-Dichlorobenzene	ND		50.0	41.2		ug/L		82	53 - 135	4	30
Dichlorodifluoromethane	ND		50.0	42.9		ug/L		86	16 - 150	4	31
1,1-Dichloroethane	ND		50.0	44.3		ug/L		89	61 - 144	2	30
1,2-Dichloroethane	ND		50.0	43.5		ug/L		87	60 - 141	2	30
1,1-Dichloroethene	ND		50.0	44.6		ug/L		89	54 - 147	1	30
1,2-Dichloropropane	ND		50.0	42.9		ug/L		86	66 - 137	1	30
1,3-Dichloropropane	ND		50.0	45.0		ug/L		90	66 - 133	2	30
2,2-Dichloropropane	ND		50.0	39.2		ug/L		78	42 - 144	4	31
1,1-Dichloropropene	ND		50.0	43.3		ug/L		87	65 - 136	3	30
Ethylbenzene	ND		50.0	42.5		ug/L		85	58 - 131	5	30
Ethyl methacrylate	ND		50.0	47.5		ug/L		95	64 - 130	4	30
Hexachlorobutadiene	ND		50.0	48.4		ug/L		97	31 - 149	13	36
2-Hexanone	ND		200	194		ug/L		97	65 - 140	7	30
Isopropylbenzene	ND		50.0	42.5		ug/L		85	56 - 133	7	30
Methylene bromide	ND		50.0	44.5		ug/L		89	63 - 138	1	30
Methylene Chloride	ND		50.0	46.3		ug/L		93	60 - 146	3	32
4-Methyl-2-pentanone (MIBK)	ND		200	188		ug/L		94	63 - 146	4	30
Methyl tert-butyl ether	ND		50.0	43.8		ug/L		88	59 - 137	4	30
m-Xylene & p-Xylene	ND		50.0	41.8		ug/L		84	57 - 130	5	30
Naphthalene	ND		50.0	48.9		ug/L		98	25 - 150	8	30
n-Butylbenzene	ND		50.0	38.5		ug/L		77	41 - 142	9	31
N-Propylbenzene	ND		50.0	40.9		ug/L		82	51 - 138	6	30
o-Chlorotoluene	ND		50.0	38.8		ug/L		78	53 - 134	4	30
o-Xylene	ND		50.0	42.6		ug/L		85	61 - 130	6	30
p-Chlorotoluene	ND		50.0	38.9		ug/L		78	54 - 133	5	30

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

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486050

Client Sample ID: MW12-ROX-040820
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	40.2		ug/L		80	48 - 139	8	30
sec-Butylbenzene	ND		50.0	39.3		ug/L		79	50 - 138	6	30
Styrene	ND		50.0	43.4		ug/L		87	58 - 131	5	30
tert-Butylbenzene	ND		50.0	37.8		ug/L		76	54 - 146	5	30
1,1,1,2-Tetrachloroethane	ND		50.0	44.9		ug/L		90	59 - 137	3	30
1,1,2,2-Tetrachloroethane	ND		50.0	44.6		ug/L		89	66 - 135	3	30
Tetrachloroethene	ND		50.0	42.7		ug/L		85	52 - 133	5	30
Toluene	ND		50.0	41.8		ug/L		84	65 - 130	4	30
trans-1,2-Dichloroethene	ND		50.0	45.2		ug/L		90	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	42.9		ug/L		86	53 - 133	7	30
1,2,3-Trichlorobenzene	ND		50.0	49.4		ug/L		99	43 - 145	9	30
1,2,4-Trichlorobenzene	ND		50.0	48.0		ug/L		96	39 - 148	6	30
1,1,1-Trichloroethane	ND		50.0	42.3		ug/L		85	57 - 142	2	30
1,1,2-Trichloroethane	ND		50.0	45.8		ug/L		92	66 - 131	3	30
Trichloroethene	ND		50.0	46.0		ug/L		92	64 - 136	4	30
Trichlorofluoromethane	ND		50.0	40.3		ug/L		81	54 - 150	4	30
1,2,3-Trichloropropane	ND		50.0	45.6		ug/L		91	65 - 133	1	30
1,2,4-Trimethylbenzene	ND		50.0	39.8		ug/L		80	50 - 139	5	30
1,3,5-Trimethylbenzene	ND		50.0	40.0		ug/L		80	52 - 135	5	30
Vinyl acetate	ND		100	96.4		ug/L		96	26 - 150	2	33
Vinyl chloride	ND		50.0	42.3		ug/L		85	46 - 150	1	30
Xylenes, Total	ND		100	84.4		ug/L		84	59 - 130	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*90*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: MB 400-486222/4
Matrix: Water
Analysis Batch: 486222

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			04/17/20 08:55	1
Acrolein	ND		20	10	ug/L			04/17/20 08:55	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 08:55	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 08:55	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 08:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 08:55	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 08:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 08:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 08:55	1

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

Lab Sample ID: MB 400-486222/4
Matrix: Water
Analysis Batch: 486222

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 08:55	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 08:55	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 08:55	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 08:55	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 08:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 08:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 08:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 08:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 08:55	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 08:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 08:55	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 08:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 08:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 08:55	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 08:55	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 08:55	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 08:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 08:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 08:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 08:55	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 08:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 08:55	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 08:55	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/17/20 08:55	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 08:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 08:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 08:55	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 08:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 08:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 08:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 08:55	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 08:55	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1

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

Lab Sample ID: MB 400-486222/4
Matrix: Water
Analysis Batch: 486222

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 08:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 08:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 08:55	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 08:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/17/20 08:55*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*04/17/20 08:55*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/17/20 08:55*	*1*

Lab Sample ID: LCS 400-486222/1002
Matrix: Water
Analysis Batch: 486222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	235		ug/L		117	43 - 160
Acrolein	250	229		ug/L		92	38 - 160
Acrylonitrile	500	492		ug/L		98	64 - 142
Benzene	50.0	46.6		ug/L		93	70 - 130
Bromobenzene	50.0	47.6		ug/L		95	70 - 132
Bromochloromethane	50.0	48.6		ug/L		97	70 - 130
Bromodichloromethane	50.0	49.8		ug/L		100	67 - 133
Bromoform	50.0	55.6		ug/L		111	57 - 140
Bromomethane	25.0	35.8		ug/L		143	10 - 160
2-Butanone (MEK)	200	198		ug/L		99	61 - 145
Carbon disulfide	50.0	44.8		ug/L		90	61 - 137
Carbon tetrachloride	50.0	51.1		ug/L		102	61 - 137
Chlorobenzene	50.0	47.8		ug/L		96	70 - 130
Dibromochloromethane	50.0	52.7		ug/L		105	67 - 135
Chloroethane	25.0	30.0		ug/L		120	55 - 141
2-Chloroethyl vinyl ether	25.0	20.4		ug/L		82	10 - 160
Chloroform	50.0	49.1		ug/L		98	69 - 130
1-Chlorohexane	50.0	44.4		ug/L		89	69 - 130
Chloromethane	25.0	15.1		ug/L		61	58 - 137
cis-1,2-Dichloroethene	50.0	50.7		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	47.7		ug/L		95	69 - 132
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 130
Dichlorodifluoromethane	25.0	17.0		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	50.4		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	52.1		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	49.2		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	47.9		ug/L		96	70 - 130
2,2-Dichloropropane	50.0	54.5		ug/L		109	52 - 135

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

Lab Sample ID: LCS 400-486222/1002
Matrix: Water
Analysis Batch: 486222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	50.9		ug/L		102	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	47.2		ug/L		94	68 - 130
Hexachlorobutadiene	50.0	51.2		ug/L		102	53 - 140
2-Hexanone	200	191		ug/L		95	65 - 137
Isopropylbenzene	50.0	48.8		ug/L		98	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	40.2		ug/L		80	66 - 135
4-Methyl-2-pentanone (MIBK)	200	183		ug/L		91	69 - 138
Methyl tert-butyl ether	50.0	50.6		ug/L		101	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	49.6		ug/L		99	67 - 130
N-Propylbenzene	50.0	49.5		ug/L		99	70 - 130
o-Chlorotoluene	50.0	48.0		ug/L		96	70 - 130
o-Xylene	50.0	48.1		ug/L		96	70 - 130
p-Chlorotoluene	50.0	48.5		ug/L		97	70 - 130
p-Isopropyltoluene	50.0	48.6		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.8		ug/L		98	66 - 130
Styrene	50.0	47.6		ug/L		95	70 - 130
tert-Butylbenzene	50.0	46.2		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/L		93	70 - 131
Tetrachloroethene	50.0	46.3		ug/L		93	65 - 130
Toluene	50.0	47.6		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	49.3		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	52.2		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	50.5		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	48.3		ug/L		97	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	25.0	26.6		ug/L		106	65 - 138
1,2,3-Trichloropropane	50.0	46.8		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	48.7		ug/L		97	69 - 130
Vinyl acetate	50.0	49.5		ug/L		99	26 - 160
Vinyl chloride	25.0	23.8		ug/L		95	59 - 136
Xylenes, Total	100	97.2		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 400-486405/4
Matrix: Water
Analysis Batch: 486405

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			04/20/20 16:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/20/20 16:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*04/20/20 16:23*	*1*
Dibromofluoromethane	*89*		*81 - 121*		*04/20/20 16:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/20/20 16:23*	*1*

Lab Sample ID: LCS 400-486405/1002
Matrix: Water
Analysis Batch: 486405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	164		ug/L		82	43 - 160
Carbon disulfide	50.0	38.6		ug/L		77	61 - 137

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*91*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzenethiol	ND		10	1.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzoic acid	ND		30	7.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzyl alcohol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/14/20 11:11	04/20/20 16:55	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/14/20 11:11	04/20/20 16:55	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloroaniline	ND		10	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chlorophenol	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenzofuran	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Diethyl phthalate	ND		10	0.70	ug/L		04/14/20 11:11	04/20/20 16:55	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,4-Dioxane	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachloroethane	ND		10	4.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Indene	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Isophorone	ND		10	0.57	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Methylphenol	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitroaniline	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
3-Nitroaniline	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitroaniline	ND		10	2.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Nitrobenzene	ND		10	0.55	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitrophenol	ND		10	0.65	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitrophenol	ND		10	2.1	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pentachlorophenol	ND		20	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Phenol	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pyridine	ND		10	3.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Quinoline	ND		10	6.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*34 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2-Fluorophenol	*94*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Nitrobenzene-d5	*103*		*27 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Phenol-d5	*92*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Terphenyl-d14	*136*	*X*	*53 - 125*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*04/14/20 11:11*	*04/20/20 16:55*	*1*

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	20.0		ug/L		67	29 - 120
Benzoic acid	116	74.9		ug/L		64	10 - 150

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.8		ug/L		66	45 - 120
Bis(2-chloroethyl)ether	30.0	17.8		ug/L		59	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.1		ug/L		50	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.5		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	7.38	J *	ug/L		25	46 - 145
4-Chloroaniline	30.0	19.4		ug/L		65	30 - 120
4-Chloro-3-methylphenol	30.0	21.8		ug/L		73	39 - 140
2-Chloronaphthalene	30.0	20.4		ug/L		68	52 - 120
2-Chlorophenol	30.0	19.8		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.1		ug/L		70	58 - 124
Dibenz[a,h]acridine	29.6	11.0	*	ug/L		37	46 - 149
Dibenzofuran	30.0	20.9		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	38.9		ug/L		97	39 - 135
2,4-Dichlorophenol	30.0	21.2		ug/L		71	39 - 128
Diethyl phthalate	30.0	5.08	J *	ug/L		17	44 - 146
2,4-Dimethylphenol	30.0	23.0		ug/L		77	44 - 120
Dimethyl phthalate	30.0	2.99	J *	ug/L		10	50 - 131
Di-n-butyl phthalate	30.0	9.02	J *	ug/L		30	55 - 131
4,6-Dinitro-ortho-cresol	60.0	37.4		ug/L		62	10 - 150
2,4-Dinitrophenol	60.0	42.6		ug/L		71	10 - 150
2,4-Dinitrotoluene	30.0	23.8		ug/L		79	58 - 140
2,6-Dinitrotoluene	30.0	25.2		ug/L		84	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	12.0		ug/L		40	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.0		ug/L		57	47 - 123
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131
Hexachlorocyclopentadiene	30.0	7.05	J	ug/L		24	10 - 129
Hexachloroethane	30.0	15.8		ug/L		53	20 - 120
Indene	30.0	21.3		ug/L		71	47 - 120
Isophorone	30.0	20.3		ug/L		68	49 - 120
2-Methylphenol	30.0	19.3		ug/L		64	39 - 123
3 & 4 Methylphenol	30.0	18.3	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	20.3		ug/L		68	47 - 150
3-Nitroaniline	30.0	19.2		ug/L		64	34 - 132
4-Nitroaniline	30.0	18.6		ug/L		62	41 - 135
Nitrobenzene	30.0	20.6		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.0		ug/L		60	28 - 136
4-Nitrophenol	60.0	37.2		ug/L		62	10 - 150
N-Nitrosodimethylamine	30.0	19.2		ug/L		64	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.2		ug/L		64	44 - 120
N-Nitrosodiphenylamine	29.8	21.9		ug/L		74	56 - 120
Pentachlorophenol	60.0	37.6		ug/L		63	15 - 141
Phenol	30.0	17.0		ug/L		57	33 - 120
Pyridine	60.0	23.0		ug/L		38	26 - 120
Quinoline	29.6	23.6		ug/L		80	51 - 129
2,4,5-Trichlorophenol	30.0	20.4		ug/L		68	38 - 147

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,6-Trichlorophenol	30.0	20.9		ug/L		70	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*61*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*72*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

Lab Sample ID: LCS 400-485894/3-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*112*		*34 - 120*
2-Fluorophenol	*90*		*10 - 120*
Nitrobenzene-d5	*102*		*27 - 120*
Phenol-d5	*99*		*10 - 120*
Terphenyl-d14	*136*	*X*	*53 - 125*
2,4,6-Tribromophenol	*81*		*15 - 135*

Lab Sample ID: LCSD 400-485894/4-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*34 - 120*
2-Fluorophenol	*77*		*10 - 120*
Nitrobenzene-d5	*90*		*27 - 120*
Phenol-d5	*79*		*10 - 120*
Terphenyl-d14	*121*		*53 - 125*
2,4,6-Tribromophenol	*66*		*15 - 135*

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND	F2	28.7	6.88	J	ug/L		24	10 - 143
Benzoic acid	ND	F1	111	ND	F1	ug/L		0	10 - 134
Benzyl alcohol	ND		28.7	23.0		ug/L		80	10 - 154

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

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	ND		28.7	19.0		ug/L		66	14 - 147
Bis(2-chloroethyl)ether	ND		28.7	16.0		ug/L		56	28 - 130
bis (2-chloroisopropyl) ether	ND		28.7	14.0		ug/L		49	10 - 141
Bis(2-ethylhexyl) phthalate	ND		28.7	21.3		ug/L		74	43 - 160
4-Bromophenyl phenyl ether	ND		28.7	24.1		ug/L		84	26 - 159
Butyl benzyl phthalate	ND	F1 * F2	28.7	8.10	J F1	ug/L		28	43 - 151
4-Chloroaniline	ND		28.7	9.86		ug/L		34	10 - 152
4-Chloro-3-methylphenol	ND		28.7	5.99	J	ug/L		21	17 - 156
2-Chloronaphthalene	ND		28.7	20.9		ug/L		73	10 - 155
2-Chlorophenol	ND	F1	28.7	ND	F1	ug/L		0	19 - 130
4-Chlorophenyl phenyl ether	ND		28.7	22.4		ug/L		78	25 - 161
Dibenz[a,h]acridine	ND	*	28.3	15.5		ug/L		55	42 - 147
Dibenzofuran	ND		28.7	21.1		ug/L		74	18 - 157
3,3'-Dichlorobenzidine	ND		38.3	35.3		ug/L		92	10 - 172
2,4-Dichlorophenol	ND	F1	28.7	ND	F1	ug/L		0	16 - 147
Diethyl phthalate	ND	F1 *	28.7	3.77	J F1	ug/L		13	23 - 160
2,4-Dimethylphenol	ND		28.7	19.6		ug/L		68	25 - 146
Dimethyl phthalate	ND	F1 *	28.7	2.74	J F1	ug/L		10	11 - 158
Di-n-butyl phthalate	ND	* F2	28.7	7.94	J	ug/L		28	28 - 162
4,6-Dinitro-ortho-cresol	ND	F2	57.4	27.0		ug/L		47	10 - 168
2,4-Dinitrophenol	ND	F2	57.4	24.5	J	ug/L		43	10 - 166
2,4-Dinitrotoluene	ND	F2	28.7	17.3		ug/L		60	26 - 158
2,6-Dinitrotoluene	ND		28.7	23.0		ug/L		80	19 - 157
Di-n-octyl phthalate	ND		28.7	17.1		ug/L		60	42 - 150
1,4-Dioxane	ND		28.7	10.2		ug/L		36	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.7	17.4		ug/L		61	19 - 162
Hexachlorobenzene	ND		28.7	23.7		ug/L		83	45 - 145
Hexachlorocyclopentadiene	ND	F2	28.7	3.28	J	ug/L		11	10 - 151
Hexachloroethane	ND		28.7	14.0		ug/L		49	29 - 130
Indene	ND		28.7	17.2		ug/L		60	22 - 130
Isophorone	ND		28.7	19.0		ug/L		66	24 - 144
2-Methylphenol	ND		28.7	9.17	J	ug/L		32	22 - 130
3 & 4 Methylphenol	ND	F1	28.7	6.05	J F1	ug/L		21	31 - 130
2-Nitroaniline	ND		28.7	20.6		ug/L		72	10 - 162
3-Nitroaniline	ND		28.7	18.9		ug/L		66	10 - 163
4-Nitroaniline	ND		28.7	20.6		ug/L		72	10 - 162
Nitrobenzene	ND		28.7	18.9		ug/L		66	34 - 135
2-Nitrophenol	ND	F2	28.7	10.0		ug/L		35	27 - 134
4-Nitrophenol	ND		57.4	28.5		ug/L		50	10 - 175
N-Nitrosodimethylamine	ND		28.7	16.5		ug/L		57	10 - 139
N-Nitrosodi-n-propylamine	ND		28.7	19.0		ug/L		66	13 - 147
N-Nitrosodiphenylamine	ND		28.5	21.2		ug/L		75	31 - 150
Pentachlorophenol	ND	F1 F2	57.4	5.42	J F1	ug/L		9	10 - 180
Phenol	ND	F1	28.7	ND	F1	ug/L		0	23 - 130
Pyridine	ND	F1 F2	57.4	4.09	J F1	ug/L		7	10 - 130
Quinoline	ND	F2	28.3	15.6		ug/L		55	10 - 180
2,4,5-Trichlorophenol	ND	F1	28.7	ND	F1	ug/L		0	43 - 137
2,4,6-Trichlorophenol	ND	F1	28.7	ND	F1	ug/L		0	42 - 135

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

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	73		34 - 120
2-Fluorophenol	2	X	10 - 120
Nitrobenzene-d5	70		27 - 120
Phenol-d5	6	X	10 - 120
Terphenyl-d14	77		53 - 125
2,4,6-Tribromophenol	19		15 - 135

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND	F2	28.8	18.3	F2	ug/L		63	10 - 143	91	63
Benzoic acid	ND	F1	112	71.4		ug/L		64	10 - 134	NC	49
Benzyl alcohol	ND		28.8	23.6		ug/L		82	10 - 154	3	37
Bis(2-chloroethoxy)methane	ND		28.8	20.1		ug/L		70	14 - 147	6	70
Bis(2-chloroethyl)ether	ND		28.8	17.8		ug/L		62	28 - 130	11	42
bis (2-chloroisopropyl) ether	ND		28.8	15.3		ug/L		53	10 - 141	9	41
Bis(2-ethylhexyl) phthalate	ND		28.8	22.5		ug/L		78	43 - 160	6	35
4-Bromophenyl phenyl ether	ND		28.8	27.2		ug/L		94	26 - 159	12	30
Butyl benzyl phthalate	ND	F1 * F2	28.8	14.4	F2	ug/L		50	43 - 151	56	32
4-Chloroaniline	ND		28.8	14.1		ug/L		49	10 - 152	35	94
4-Chloro-3-methylphenol	ND		28.8	7.60	J	ug/L		26	17 - 156	24	40
2-Chloronaphthalene	ND		28.8	24.3		ug/L		84	10 - 155	15	29
2-Chlorophenol	ND	F1	28.8	2.74	J F1	ug/L		9	19 - 130	NC	42
4-Chlorophenyl phenyl ether	ND		28.8	25.7		ug/L		89	25 - 161	14	27
Dibenz[a,h]acridine	ND	*	28.5	19.6		ug/L		69	42 - 147	23	40
Dibenzofuran	ND		28.8	24.5		ug/L		85	18 - 157	15	29
3,3'-Dichlorobenzidine	ND		38.5	39.1		ug/L		102	10 - 172	10	58
2,4-Dichlorophenol	ND	F1	28.8	3.17	J F1	ug/L		11	16 - 147	NC	43
Diethyl phthalate	ND	F1 *	28.8	4.79	J F1	ug/L		17	23 - 160	24	40
2,4-Dimethylphenol	ND		28.8	20.5		ug/L		71	25 - 146	4	47
Dimethyl phthalate	ND	F1 *	28.8	2.35	J F1	ug/L		8	11 - 158	15	36
Di-n-butyl phthalate	ND	* F2	28.8	13.2	F2	ug/L		46	28 - 162	50	32
4,6-Dinitro-ortho-cresol	ND	F2	57.7	42.6	F2	ug/L		74	10 - 168	45	42
2,4-Dinitrophenol	ND	F2	57.7	53.8	F2	ug/L		93	10 - 166	75	36
2,4-Dinitrotoluene	ND	F2	28.8	26.6	F2	ug/L		92	26 - 158	42	28
2,6-Dinitrotoluene	ND		28.8	28.3		ug/L		98	19 - 157	21	28
Di-n-octyl phthalate	ND		28.8	20.6		ug/L		71	42 - 150	18	35
1,4-Dioxane	ND		28.8	10.5		ug/L		37	10 - 130	3	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		28.8	19.6		ug/L		68	19 - 162	12	40
Hexachlorobenzene	ND		28.8	26.0		ug/L		90	45 - 145	9	33
Hexachlorocyclopentadiene	ND	F2	28.8	14.5	J F2	ug/L		50	10 - 151	126	50
Hexachloroethane	ND		28.8	15.6		ug/L		54	29 - 130	11	41
Indene	ND		28.8	20.2		ug/L		70	22 - 130	16	40
Isophorone	ND		28.8	20.3		ug/L		70	24 - 144	7	33
2-Methylphenol	ND		28.8	9.19	J	ug/L		32	22 - 130	0	47
3 & 4 Methylphenol	ND	F1	28.8	6.37	J F1	ug/L		22	31 - 130	5	47
2-Nitroaniline	ND		28.8	22.5		ug/L		78	10 - 162	9	33
3-Nitroaniline	ND		28.8	20.5		ug/L		71	10 - 163	8	39
4-Nitroaniline	ND		28.8	20.6		ug/L		71	10 - 162	0	50

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

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	ND		28.8	20.5		ug/L		71	34 - 135	8	35
2-Nitrophenol	ND	F2	28.8	17.1	F2	ug/L		59	27 - 134	52	43
4-Nitrophenol	ND		57.7	40.6		ug/L		70	10 - 175	35	82
N-Nitrosodimethylamine	ND		28.8	17.6		ug/L		61	10 - 139	7	62
N-Nitrosodi-n-propylamine	ND		28.8	20.1		ug/L		70	13 - 147	6	36
N-Nitrosodiphenylamine	ND		28.6	24.3		ug/L		85	31 - 150	14	34
Pentachlorophenol	ND	F1 F2	57.7	11.6	J F2	ug/L		20	10 - 180	72	42
Phenol	ND	F1	28.8	ND	F1	ug/L		0	23 - 130	NC	52
Pyridine	ND	F1 F2	57.7	16.1	F2	ug/L		28	10 - 130	119	55
Quinoline	ND	F2	28.5	24.4	F2	ug/L		86	10 - 180	44	40
2,4,5-Trichlorophenol	ND	F1	28.8	4.07	J F1	ug/L		14	43 - 137	NC	42
2,4,6-Trichlorophenol	ND	F1	28.8	ND	F1	ug/L		0	42 - 135	NC	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*83*		*34 - 120*
2-Fluorophenol	*5*	*X*	*10 - 120*
Nitrobenzene-d5	*78*		*27 - 120*
Phenol-d5	*9*	*X*	*10 - 120*
Terphenyl-d14	*72*		*53 - 125*
2,4,6-Tribromophenol	*21*		*15 - 135*

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/27/20 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2-Fluorophenol	*34*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Nitrobenzene-d5	*52*		*27 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Phenol-d5	*49*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Terphenyl-d14	*57*		*53 - 125*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2,4,6-Tribromophenol	*58*		*15 - 135*	*04/23/20 13:48*	*04/27/20 16:43*	*1*

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	30.0	17.1		ug/L		57	46 - 145
Dibenz[a,h]acridine	29.6	15.3		ug/L		52	46 - 149
Diethyl phthalate	30.0	17.7		ug/L		59	44 - 146

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

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dimethyl phthalate	30.0	16.8		ug/L		56	50 - 131
Di-n-butyl phthalate	30.0	17.7		ug/L		59	55 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*34 - 120*
2-Fluorophenol	*32*		*10 - 120*
Nitrobenzene-d5	*51*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*55*		*15 - 135*

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	30.0	19.7		ug/L		66	46 - 145	14	30
Dibenz[a,h]acridine	29.6	16.6		ug/L		56	46 - 149	8	30
Diethyl phthalate	30.0	20.2		ug/L		67	44 - 146	13	30
Dimethyl phthalate	30.0	18.9		ug/L		63	50 - 131	12	30
Di-n-butyl phthalate	30.0	20.2		ug/L		67	55 - 131	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*28*		*10 - 120*
Nitrobenzene-d5	*58*		*27 - 120*
Phenol-d5	*47*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*63*		*15 - 135*

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

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486944

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate - RERA	ND	H	31.0	23.5	H	ug/L		76	43 - 151
Diethyl phthalate - RERA	ND	H	31.0	24.1	H	ug/L		78	23 - 160
Dimethyl phthalate - RERA	ND	H	31.0	22.6	H	ug/L		73	11 - 158
Di-n-butyl phthalate - RERA	ND	H	31.0	24.3	H	ug/L		78	28 - 162

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl - RERA	*68*		*34 - 120*
2-Fluorophenol - RERA	*24*		*10 - 120*
Nitrobenzene-d5 - RERA	*69*		*27 - 120*
Phenol-d5 - RERA	*46*		*10 - 120*
Terphenyl-d14 - RERA	*68*		*53 - 125*

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

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486944

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	MS %Recovery	MS Qualifier	Limits
2,4,6-Tribromophenol - RERA	65		15 - 135

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486944

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate - RERA	ND	H	30.5	19.6	H	ug/L		64	43 - 151	18	32
Diethyl phthalate - RERA	ND	H	30.5	19.8	H	ug/L		65	23 - 160	19	40
Dimethyl phthalate - RERA	ND	H	30.5	18.4	H	ug/L		60	11 - 158	20	36
Di-n-butyl phthalate - RERA	ND	H	30.5	20.6	H	ug/L		67	28 - 162	16	32

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl - RERA	59		34 - 120
2-Fluorophenol - RERA	27		10 - 120
Nitrobenzene-d5 - RERA	63		27 - 120
Phenol-d5 - RERA	40		10 - 120
Terphenyl-d14 - RERA	59		53 - 125
2,4,6-Tribromophenol - RERA	53		15 - 135

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/14/20 11:11	04/20/20 13:10	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/14/20 11:11	04/20/20 13:10	1
Anthracene	ND		0.20	0.031	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/14/20 11:11	04/20/20 13:10	1
Chrysene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluorene	ND		0.20	0.11	ug/L		04/14/20 11:11	04/20/20 13:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/14/20 11:11	04/20/20 13:10	1
Phenanthrene	ND		0.20	0.036	ug/L		04/14/20 11:11	04/20/20 13:10	1
Pyrene	ND		0.20	0.040	ug/L		04/14/20 11:11	04/20/20 13:10	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/14/20 11:11	04/20/20 13:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	142	X	33 - 138	04/14/20 11:11	04/20/20 13:10	1
2-Fluorobiphenyl	89		15 - 122	04/14/20 11:11	04/20/20 13:10	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		19 - 130	04/14/20 11:11	04/20/20 13:10	1

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.8		ug/L		83	41 - 120
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120
Anthracene	30.0	24.1		ug/L		80	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	22.0		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	22.9		ug/L		76	53 - 134
Benzo[g,h,i]perylene	30.0	24.7		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	23.8		ug/L		79	57 - 134
Chrysene	30.0	23.7		ug/L		79	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146
Fluoranthene	30.0	20.9		ug/L		70	54 - 128
Fluorene	30.0	24.6		ug/L		82	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.2		ug/L		81	43 - 142
Phenanthrene	30.0	24.1		ug/L		80	48 - 120
Pyrene	30.0	27.7		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	21.1		ug/L		70	41 - 120
2-Methylnaphthalene	30.0	20.7		ug/L		69	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	107		33 - 138
2-Fluorobiphenyl	78		15 - 122
Nitrobenzene-d5	52		19 - 130

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		28.7	23.4		ug/L		82	35 - 113
Acenaphthylene	ND		28.7	24.3		ug/L		85	41 - 118
Anthracene	ND		28.7	23.6		ug/L		82	45 - 122
Benzo[a]anthracene	ND		28.7	20.0		ug/L		70	55 - 133
Benzo[a]pyrene	ND		28.7	17.0		ug/L		59	50 - 108
Benzo[b]fluoranthene	ND		28.7	19.7		ug/L		69	50 - 128
Benzo[g,h,i]perylene	ND		28.7	19.3		ug/L		67	46 - 133
Benzo[k]fluoranthene	ND		28.7	18.0		ug/L		63	52 - 128
Chrysene	ND		28.7	20.7		ug/L		72	52 - 116
Dibenz(a,h)anthracene	ND		28.7	20.6		ug/L		72	52 - 143
Fluoranthene	ND		28.7	20.9		ug/L		73	32 - 150
Fluorene	ND		28.7	23.9		ug/L		83	15 - 150
Indeno[1,2,3-cd]pyrene	ND		28.7	20.1		ug/L		70	41 - 141

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

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenanthrene	ND		28.7	24.0		ug/L		84	36 - 125
Pyrene	ND		28.7	24.9		ug/L		87	41 - 127
1-Methylnaphthalene	ND		28.7	19.8		ug/L		69	10 - 150
2-Methylnaphthalene	ND		28.7	19.3		ug/L		67	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*94*		*33 - 138*
2-Fluorobiphenyl	*80*		*15 - 122*
Nitrobenzene-d5	*43*		*19 - 130*

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		28.8	25.5		ug/L		89	35 - 113	9	49
Acenaphthylene	ND		28.8	26.2		ug/L		91	41 - 118	8	48
Anthracene	ND		28.8	25.7		ug/L		89	45 - 122	9	56
Benzo[a]anthracene	ND		28.8	21.7		ug/L		75	55 - 133	8	57
Benzo[a]pyrene	ND		28.8	19.1		ug/L		66	50 - 108	12	59
Benzo[b]fluoranthene	ND		28.8	20.4		ug/L		71	50 - 128	3	62
Benzo[g,h,i]perylene	ND		28.8	21.1		ug/L		73	46 - 133	9	58
Benzo[k]fluoranthene	ND		28.8	20.7		ug/L		72	52 - 128	14	58
Chrysene	ND		28.8	22.1		ug/L		77	52 - 116	6	59
Dibenz(a,h)anthracene	ND		28.8	23.1		ug/L		80	52 - 143	11	60
Fluoranthene	ND		28.8	22.3		ug/L		77	32 - 150	6	59
Fluorene	ND		28.8	26.1		ug/L		90	15 - 150	9	49
Indeno[1,2,3-cd]pyrene	ND		28.8	22.5		ug/L		78	41 - 141	11	58
Phenanthrene	ND		28.8	26.0		ug/L		90	36 - 125	8	69
Pyrene	ND		28.8	27.0		ug/L		94	41 - 127	8	58
1-Methylnaphthalene	ND		28.8	21.6		ug/L		75	10 - 150	9	66
2-Methylnaphthalene	ND		28.8	21.2		ug/L		74	10 - 150	10	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*82*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*39*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486019/1-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/15/20 11:34	04/16/20 16:39	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/15/20 11:34	04/16/20 16:39	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-486019/1-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486019

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		51 - 149	04/15/20 11:34	04/16/20 16:39	1

Lab Sample ID: LCS 400-486019/2-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.101		ug/L		100	60 - 140
1,2-Dibromoethane	0.101	0.116		ug/L		115	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	94		51 - 149

Lab Sample ID: LCSD 400-486019/3-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0976		ug/L		97	60 - 140	3	30
1,2-Dibromoethane	0.101	0.113		ug/L		112	60 - 140	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	93		51 - 149

Lab Sample ID: 400-186477-5 MS
Matrix: Water
Analysis Batch: 486175

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 486019

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.105	0.116		ug/L		110	65 - 135
1,2-Dibromoethane	ND		0.106	0.124		ug/L		118	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	104		51 - 149

Lab Sample ID: 400-186477-5 MSD
Matrix: Water
Analysis Batch: 486175

Client Sample ID: MW12-ROX-040820
Prep Type: Total/NA
Prep Batch: 486019

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	0.114		ug/L		116	65 - 135	11	20
1,2-Dibromoethane	ND		0.0988	0.119		ug/L		120	65 - 135	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	108		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1304589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/8/20
Bob Billman	25278	PAGE: 1 of 1
PO #	**GSAP Project ID**	
60619901 - 1.03.002 / 60619901 - 1.03.0022	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 — 60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B. Burleson, B. Harrell

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

- ☒ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☒ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 | UNIT COST 60619901 - 1.03.0022

400-186477 COC

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TD-ROX-040820-8260	4/8/20	0000	Water	2					2	X			
	TD-ROX-040820-8011		0000		2					2			X	
	MW13-ROX-040820		0850		6			2		8	X	X	X	X
	MW3-ROX-040820		1110		6			2		8	X	X	X	X
	MW12-ROX-040820		1215		6			2		8	X	X	X	X
	MW12-ROX-040820-MS		1215		6			2		8	X	X	X	X
	MW12-ROX-040820-MSD		1215		6			2		8	X	X	X	X
	MW2-ROX-040820		1325		6			2		8	X	X	X	X

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

Relinquished by (Signature)	Received by (Signature)	Date	Time
BR	Fedex: 1680 3500 9353 / 1680 3500 9321	4/8/20	1600
Relinquished by (Signature)	Received by (Signature)	Date: 4/9/20	Time: 8:58
Relinquished by (Signature)	Received by (Signature)	Date:	Time

Version: 14Dec15

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4/8/2020

0.4C, 2.6C 1.9C
2.6C, 2.9C IR7
0.3C, 3.3C

Custody seal #: 1318037 1318036 / 1318033 1318032
1318035 1318034

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186477-1

Login Number: 186477
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1.9°C 2.9°C 2.6°C 0.3°C 2.6°C 0.4°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186477-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186523-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/18/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-040820-8260-BP	TB-ROX-040820-8011-BP
MW23-ROX-040820	

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 SVOCs were re-extracted outside of the extraction time criteria in sample MW23-ROX-040820. Several SVOC LCS/LCD recoveries were outside evaluation criteria. Several SVOC or PAH surrogate recoveries were outside criteria in several quality control samples. The MS/MSD RPD for 2-chloroethyl vinyl ether was outside evaluation criteria in sample MW23-ROX-040820. 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, several SVOCs were re-extracted 8 days outside of the extraction time criteria (7 days) in sample MW23-ROX-040820 due to initial failing associated LCS recoveries. Professional judgement was used to qualify as estimated (**UJ**), however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-040820 – RERA	SVOCs	Butyl benzyl phthalate	**UJ**
MW23-ROX-040820 – RERA	SVOCs	Dibenz[a,h]acridine	**UJ**
MW23-ROX-040820 – RERA	SVOCs	Diethyl phthalate	**UJ**
MW23-ROX-040820 – RERA	SVOCs	Dimethyl phthalate	**UJ**
MW23-ROX-040820 – RERA	SVOCs	Di-n-butyl phthalate	**UJ**

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-485894/2-A	SVOCs	Butyl benzyl phthalate	**25**	NA	46-145
LCS 400-485894/2-A	SVOCs	Dibenz[a,h]acridine	**37**	NA	46-149
LCS 400-485894/2-A	SVOCs	Diethyl phthalate	**17**	NA	44-146
LCS 400-485894/2-A	SVOCs	Dimethyl phthalate	**10**	NA	50-131
LCS 400-485894/2-A	SVOCs	Di-n-butyl phthalate	**30**	NA	55-131
LCS/LCSD 400-485894/3-A/4-A	SVOCs	Benzenethiol	**3/2**	14	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; benzenethiol has been identified as a poor performing analyte under Method 8270. Several SVOCs were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required.

Sample ID	Parameter	Analyte	Qualification
MW23-ROX-040820	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-485894/1-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
LCS 400-485894/3-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
MB 400-485894/1-A	PAHs	Terphenyl-d_{14}	**142**	33-138

Method blanks and laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, although not requested, sample MW23-ROX-040820 was spiked and analyzed for VOCs.

Were MS/MSD recoveries within evaluation criteria?

No

MS/MSD ID	Parameter	Analyte	MS/ MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW23-ROX-040820	VOCs	2-Chloroethyl vinyl ether	34/20	**53**	10-150/50

Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186523-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/28/2020 3:33:00 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/18/2020 LR

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186523-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186523-1

Comments
No additional comments.

Receipt
The samples were received on 4/9/2020 8:58 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 7 coolers at receipt time were 0.3° C, 0.4° C, 1.9° C, 2.6° C, 2.6° C, 2.9° C and 3.3° C.

GC/MS VOA
Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was outside of acceptance limits for analytical batch 400-486109 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-040820-8260-BP (400-186523-1) and MW23-ROX-040820 (400-186523-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-485894 and analytical batch 400-486452 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: 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: (LCS 400-485894/3-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486452 recovered above the upper control limit for Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample duplicate (LCSD) and RPD for preparation batch 400-486835 and analytical batch 400-486944 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 400-487181 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. 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 (LCS) for preparation batch 400-485894 and analytical batch 400-486452 recovered outside control limits for the following analytes: Butyl benzyl phthalate, Dibenz[a,h]acridine, Diethyl phthalate, Dimethyl phthalate and Di-n-butyl 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: The continuing calibration verification (CCV) associated with batch 400-486425 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-485894/1-A). These results have been reported and qualified.

Job ID: 400-186523-1 (Continued)

Laboratory: Eurofins TestAmerica, 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.

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: 400-186523-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186523-1	TB-ROX-040820-8260-BP	Water	04/08/20 00:00	04/09/20 08:58	
400-186523-2	TB-ROX-040820-8011-BP	Water	04/08/20 00:00	04/09/20 08:58	
400-186523-3	MW23-ROX-040820	Water	04/08/20 10:25	04/09/20 08:58	

Detection Summary

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

Job ID: 400-186523-1

Client Sample ID: TB-ROX-040820-8260-BP

Lab Sample ID: 400-186523-1

No Detections.

Client Sample ID: TB-ROX-040820-8011-BP

Lab Sample ID: 400-186523-2

No Detections.

Client Sample ID: MW23-ROX-040820

Lab Sample ID: 400-186523-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.96	J	1.0	0.74	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-040820-8260-BP
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-1
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			04/16/20 09:46	1
Acrolein	ND		20	10	ug/L			04/16/20 09:46	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 09:46	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 09:46	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 09:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 09:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 09:46	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 09:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 09:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 09:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 09:46	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 09:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 09:46	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 09:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 09:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 09:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 09:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 09:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 09:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 09:46	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 09:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 09:46	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 09:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 09:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 09:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 09:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 09:46	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 09:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 09:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 09:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 09:46	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 09:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 09:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 09:46	1

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

Job ID: 400-186523-1

Client Sample ID: TB-ROX-040820-8260-BP
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-1
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			04/16/20 09:46	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 09:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 09:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 09:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 09:46	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 09:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 09:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 09:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 09:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 09:46	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 09:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 09:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 09:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 09:46	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 09:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 09:46	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 09:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*04/16/20 09:46*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*04/16/20 09:46*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/16/20 09:46*	*1*

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

Job ID: 400-186523-1

Client Sample ID: TB-ROX-040820-8011-BP
Date Collected: 04/08/20 00:00
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-2
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	0.0055	ug/L		04/15/20 11:34	04/16/20 22:34	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/15/20 11:34	04/16/20 22:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*51 - 149*	*04/15/20 11:34*	*04/16/20 22:34*	*1*

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

Job ID: 400-186523-1

Client Sample ID: MW23-ROX-040820
Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-3
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			04/16/20 10:09	1
Acrolein	ND		20	10	ug/L			04/16/20 10:09	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 10:09	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 10:09	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 10:09	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 10:09	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 10:09	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 10:09	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 10:09	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 10:09	1
2-Chloroethyl vinyl ether	ND	F2	5.0	2.0	ug/L			04/16/20 10:09	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 10:09	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 10:09	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 10:09	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 10:09	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 10:09	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 10:09	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 10:09	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 10:09	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 10:09	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 10:09	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 10:09	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 10:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 10:09	1
Methyl tert-butyl ether	0.96	J	1.0	0.74	ug/L			04/16/20 10:09	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 10:09	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 10:09	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 10:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 10:09	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 10:09	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 10:09	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 10:09	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 10:09	1

Client Sample ID: MW23-ROX-040820
Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-3
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			04/16/20 10:09	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 10:09	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 10:09	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 10:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 10:09	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 10:09	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 10:09	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 10:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 10:09	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:09	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 10:09	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 10:09	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 10:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 10:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 10:09	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 10:09	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 10:09	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 10:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*04/16/20 10:09*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*04/16/20 10:09*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/16/20 10:09*	*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		04/14/20 11:12	04/20/20 16:54	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/14/20 11:12	04/20/20 16:54	1
Anthracene	ND		0.20	0.031	ug/L		04/14/20 11:12	04/20/20 16:54	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/14/20 11:12	04/20/20 16:54	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/14/20 11:12	04/20/20 16:54	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/14/20 11:12	04/20/20 16:54	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/14/20 11:12	04/20/20 16:54	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/14/20 11:12	04/20/20 16:54	1
Chrysene	ND		0.20	0.073	ug/L		04/14/20 11:12	04/20/20 16:54	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/14/20 11:12	04/20/20 16:54	1
Fluoranthene	ND		0.20	0.067	ug/L		04/14/20 11:12	04/20/20 16:54	1
Fluorene	ND		0.20	0.11	ug/L		04/14/20 11:12	04/20/20 16:54	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/14/20 11:12	04/20/20 16:54	1
Phenanthrene	ND		0.20	0.036	ug/L		04/14/20 11:12	04/20/20 16:54	1
Pyrene	ND		0.20	0.040	ug/L		04/14/20 11:12	04/20/20 16:54	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/14/20 11:12	04/20/20 16:54	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/14/20 11:12	04/20/20 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*65*		*33 - 138*	*04/14/20 11:12*	*04/20/20 16:54*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*04/14/20 11:12*	*04/20/20 16:54*	*1*

Client Sample ID: MW23-ROX-040820
Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		19 - 130	04/14/20 11:12	04/20/20 16:54	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		04/14/20 11:12	04/20/20 22:35	1
Benzenethiol	ND	* UJ	9.9	1.7	ug/L		04/14/20 11:12	04/20/20 22:35	1
Benzoic acid	ND		30	7.2	ug/L		04/14/20 11:12	04/20/20 22:35	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/14/20 11:12	04/20/20 22:35	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/14/20 11:12	04/20/20 22:35	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/14/20 11:12	04/20/20 22:35	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/14/20 11:12	04/20/20 22:35	1
Butyl benzyl phthalate	ND	*	9.9	0.68	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/14/20 11:12	04/20/20 22:35	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/14/20 11:12	04/20/20 22:35	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
Dibenz[a,h]acridine	ND	*	9.9	3.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/14/20 11:12	04/20/20 22:35	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
Diethyl phthalate	ND	*	9.9	0.69	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/14/20 11:12	04/20/20 22:35	1
Dimethyl phthalate	ND	*	9.9	0.59	ug/L		04/14/20 11:12	04/20/20 22:35	1
Di-n-butyl phthalate	ND	*	9.9	2.7	ug/L		04/14/20 11:12	04/20/20 22:35	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/14/20 11:12	04/20/20 22:35	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/14/20 11:12	04/20/20 22:35	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/14/20 11:12	04/20/20 22:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/14/20 11:12	04/20/20 22:35	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/14/20 11:12	04/20/20 22:35	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/14/20 11:12	04/20/20 22:35	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/14/20 11:12	04/20/20 22:35	1
Indene	ND		9.9	0.99	ug/L		04/14/20 11:12	04/20/20 22:35	1
Isophorone	ND		9.9	0.56	ug/L		04/14/20 11:12	04/20/20 22:35	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/14/20 11:12	04/20/20 22:35	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/14/20 11:12	04/20/20 22:35	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/14/20 11:12	04/20/20 22:35	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/14/20 11:12	04/20/20 22:35	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/14/20 11:12	04/20/20 22:35	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/14/20 11:12	04/20/20 22:35	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/14/20 11:12	04/20/20 22:35	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/14/20 11:12	04/20/20 22:35	1

Client Sample ID: MW23-ROX-040820
Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

Lab Sample ID: 400-186523-3
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		04/14/20 11:12	04/20/20 22:35	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/14/20 11:12	04/20/20 22:35	1
Pentachlorophenol	ND		20	1.8	ug/L		04/14/20 11:12	04/20/20 22:35	1
Phenol	ND		9.9	2.6	ug/L		04/14/20 11:12	04/20/20 22:35	1
Pyridine	ND		9.9	3.2	ug/L		04/14/20 11:12	04/20/20 22:35	1
Quinoline	ND		9.9	5.9	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/14/20 11:12	04/20/20 22:35	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/14/20 11:12	04/20/20 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*04/14/20 11:12*	*04/20/20 22:35*	*1*
2-Fluorophenol	*52*		*10 - 120*	*04/14/20 11:12*	*04/20/20 22:35*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*04/14/20 11:12*	*04/20/20 22:35*	*1*
Phenol-d5	*55*		*10 - 120*	*04/14/20 11:12*	*04/20/20 22:35*	*1*
Terphenyl-d14	*58*		*53 - 125*	*04/14/20 11:12*	*04/20/20 22:35*	*1*
2,4,6-Tribromophenol	*79*		*15 - 135*	*04/14/20 11:12*	*04/20/20 22:35*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND	H	9.8	0.68	ug/L		04/23/20 13:48	04/24/20 22:45	1
Dibenz[a,h]acridine	ND	H	9.8	3.0	ug/L		04/23/20 13:48	04/24/20 22:45	1
Diethyl phthalate	ND	H	9.8	0.69	ug/L		04/23/20 13:48	04/24/20 22:45	1
Dimethyl phthalate	ND	H	9.8	0.59	ug/L		04/23/20 13:48	04/24/20 22:45	1
Di-n-butyl phthalate	ND	H	9.8	2.7	ug/L		04/23/20 13:48	04/24/20 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*04/23/20 13:48*	*04/24/20 22:45*	*1*
2-Fluorophenol	*41*		*10 - 120*	*04/23/20 13:48*	*04/24/20 22:45*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*04/23/20 13:48*	*04/24/20 22:45*	*1*
Phenol-d5	*64*		*10 - 120*	*04/23/20 13:48*	*04/24/20 22:45*	*1*
Terphenyl-d14	*88*		*53 - 125*	*04/23/20 13:48*	*04/24/20 22:45*	*1*
2,4,6-Tribromophenol	*86*		*15 - 135*	*04/23/20 13:48*	*04/24/20 22:45*	*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	0.0055	ug/L		04/15/20 11:34	04/16/20 22:54	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/15/20 11:34	04/16/20 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*51 - 149*	*04/15/20 11:34*	*04/16/20 22:54*	*1*

Definitions/Glossary

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

Job ID: 400-186523-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
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 or LCSD is outside acceptance 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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186523-1

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	(78-118)	(81-121)	(80-120)
400-186523-1	TB-ROX-040820-8260-BP	97	103	96
400-186523-3	MW23-ROX-040820	102	108	97
400-186523-3 MS	MW23-ROX-040820	98	105	98
400-186523-3 MSD	MW23-ROX-040820	95	106	97
LCS 400-486109/1002	Lab Control Sample	97	105	98
MB 400-486109/4	Method Blank	98	105	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186523-3	MW23-ROX-040820	73	52	65	55	58	79
400-186523-3 - RERA	MW23-ROX-040820	79	41	72	64	88	86
LCS 400-485894/2-A	Lab Control Sample	60	50	61	49	72	64
LCS 400-485894/3-A	Lab Control Sample	112	90	102	99	136 X	81
LCS 400-486835/2-A	Lab Control Sample	51	32	51	44	58	55
LCSD 400-485894/4-A	Lab Control Sample Dup	95	77	90	79	121	66
LCSD 400-486835/3-A	Lab Control Sample Dup	58	28	58	47	66	63
MB 400-485894/1-A	Method Blank	108	94	103	92	136 X	92
MB 400-486835/1-A	Method Blank	57	34	52	49	57	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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186523-3	MW23-ROX-040820	65	77	69
LCS 400-485894/2-A	Lab Control Sample	107	78	52
MB 400-485894/1-A	Method Blank	142 X	89	82

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-186523-1

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)**
400-186523-2	TB-ROX-040820-8011-BP	94
400-186523-3	MW23-ROX-040820	104
LCS 400-486019/2-A	Lab Control Sample	94
LCSD 400-486019/3-A	Lab Control Sample Dup	93
MB 400-486019/1-A	Method Blank	96

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186523-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-040820-8260-BP

Lab Sample ID: 400-186523-1

Date Collected: 04/08/20 00:00
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486109	04/16/20 09:46	WPD	TAL PEN

Client Sample ID: TB-ROX-040820-8011-BP

Lab Sample ID: 400-186523-2

Date Collected: 04/08/20 00:00
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			34.8 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 22:34	DS	TAL PEN

Client Sample ID: MW23-ROX-040820

Lab Sample ID: 400-186523-3

Date Collected: 04/08/20 10:25
Matrix: Water
Date Received: 04/09/20 08:58

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486109	04/16/20 10:09	WPD	TAL PEN
Total/NA	Prep	3520C			1012 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 22:35	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1015.6 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 22:45	VC1	TAL PEN
Total/NA	Prep	3520C			1012 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 16:54	PP1	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 22:54	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-485894/1-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 16:55	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 13:10	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486019/1-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 16:39	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186523-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-486109/4
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	486109	04/16/20 09:23	WPD	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-486835/1-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 16:43	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-485894/2-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:25	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-485894/3-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486019/2-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 16:59	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486109/1002
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	486109	04/16/20 08:24	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-486835/2-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	486944	04/24/20 15:55	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-485894/4-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:59	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486019/3-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	486019	04/15/20 11:34	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486175	04/16/20 17:18	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486835/3-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:21	VC1	TAL PEN

Client Sample ID: MW23-ROX-040820

Lab Sample ID: 400-186523-3 MS

Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

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	486109	04/16/20 12:04	WPD	TAL PEN

Client Sample ID: MW23-ROX-040820

Lab Sample ID: 400-186523-3 MSD

Date Collected: 04/08/20 10:25
Date Received: 04/09/20 08:58

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	486109	04/16/20 12:29	WPD	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 486109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-1	TB-ROX-040820-8260-BP	Total/NA	Water	8260B	
400-186523-3	MW23-ROX-040820	Total/NA	Water	8260B	
MB 400-486109/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486109/1002	Lab Control Sample	Total/NA	Water	8260B	
400-186523-3 MS	MW23-ROX-040820	Total/NA	Water	8260B	
400-186523-3 MSD	MW23-ROX-040820	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 485894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-3	MW23-ROX-040820	Total/NA	Water	3520C	
MB 400-485894/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-3	MW23-ROX-040820	Total/NA	Water	8270D LL	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D LL	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485894

Analysis Batch: 486452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-3	MW23-ROX-040820	Total/NA	Water	8270D	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	485894

Prep Batch: 486835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-3 - RERA	MW23-ROX-040820	Total/NA	Water	3520C	
MB 400-486835/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-3 - RERA	MW23-ROX-040820	Total/NA	Water	8270D	486835
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	8270D	486835
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-486835/1-A	Method Blank	Total/NA	Water	8270D	486835

GC Semi VOA

Prep Batch: 486019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-2	TB-ROX-040820-8011-BP	Total/NA	Water	8011	
400-186523-3	MW23-ROX-040820	Total/NA	Water	8011	
MB 400-486019/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486019/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486019/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 486175

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186523-2	TB-ROX-040820-8011-BP	Total/NA	Water	8011	486019
400-186523-3	MW23-ROX-040820	Total/NA	Water	8011	486019
MB 400-486019/1-A	Method Blank	Total/NA	Water	8011	486019
LCS 400-486019/2-A	Lab Control Sample	Total/NA	Water	8011	486019
LCSD 400-486019/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486019

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

Lab Sample ID: MB 400-486109/4
Matrix: Water
Analysis Batch: 486109

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			04/16/20 09:23	1
Acrolein	ND		20	10	ug/L			04/16/20 09:23	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 09:23	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 09:23	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 09:23	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 09:23	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 09:23	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 09:23	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 09:23	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 09:23	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 09:23	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 09:23	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 09:23	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 09:23	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 09:23	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 09:23	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 09:23	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 09:23	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 09:23	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 09:23	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 09:23	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 09:23	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 09:23	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 09:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 09:23	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 09:23	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 09:23	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 09:23	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 09:23	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 09:23	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 09:23	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 09:23	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 09:23	1

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

Lab Sample ID: MB 400-486109/4
Matrix: Water
Analysis Batch: 486109

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			04/16/20 09:23	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/16/20 09:23	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 09:23	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 09:23	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 09:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 09:23	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 09:23	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 09:23	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 09:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 09:23	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 09:23	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 09:23	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 09:23	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 09:23	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 09:23	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 09:23	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 09:23	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 09:23	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 09:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*04/16/20 09:23*	*1*
Dibromofluoromethane	*105*		*81 - 121*		*04/16/20 09:23*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/16/20 09:23*	*1*

Lab Sample ID: LCS 400-486109/1002
Matrix: Water
Analysis Batch: 486109

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	196		ug/L		98	43 - 160
Acrolein	250	242		ug/L		97	38 - 160
Acrylonitrile	500	480		ug/L		96	64 - 142
Benzene	50.0	45.8		ug/L		92	70 - 130
Bromobenzene	50.0	45.1		ug/L		90	70 - 132
Bromochloromethane	50.0	48.8		ug/L		98	70 - 130
Bromodichloromethane	50.0	48.1		ug/L		96	67 - 133
Bromoform	50.0	55.3		ug/L		111	57 - 140
Bromomethane	25.0	37.3		ug/L		149	10 - 160
2-Butanone (MEK)	200	191		ug/L		96	61 - 145
Carbon disulfide	50.0	43.6		ug/L		87	61 - 137
Carbon tetrachloride	50.0	50.6		ug/L		101	61 - 137
Chlorobenzene	50.0	46.6		ug/L		93	70 - 130
Dibromochloromethane	50.0	52.2		ug/L		104	67 - 135
Chloroethane	25.0	29.9		ug/L		120	55 - 141

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

Lab Sample ID: LCS 400-486109/1002
Matrix: Water
Analysis Batch: 486109

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	21.7		ug/L		87	10 - 160
Chloroform	50.0	47.6		ug/L		95	69 - 130
1-Chlorohexane	50.0	44.9		ug/L		90	69 - 130
Chloromethane	25.0	16.1		ug/L		64	58 - 137
cis-1,2-Dichloroethene	50.0	49.0		ug/L		98	68 - 130
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	69 - 132
1,2-Dichlorobenzene	50.0	45.9		ug/L		92	67 - 130
1,3-Dichlorobenzene	50.0	46.7		ug/L		93	70 - 130
1,4-Dichlorobenzene	50.0	45.1		ug/L		90	70 - 130
Dichlorodifluoromethane	25.0	17.8		ug/L		71	41 - 146
1,1-Dichloroethane	50.0	50.6		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	51.1		ug/L		102	69 - 130
1,1-Dichloroethene	50.0	48.9		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	45.1		ug/L		90	70 - 130
1,3-Dichloropropane	50.0	48.5		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	52.6		ug/L		105	52 - 135
1,1-Dichloropropene	50.0	48.6		ug/L		97	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	48.0		ug/L		96	68 - 130
Hexachlorobutadiene	50.0	50.4		ug/L		101	53 - 140
2-Hexanone	200	197		ug/L		99	65 - 137
Isopropylbenzene	50.0	49.4		ug/L		99	70 - 130
Methylene bromide	50.0	47.9		ug/L		96	70 - 130
Methylene Chloride	50.0	40.2		ug/L		80	66 - 135
4-Methyl-2-pentanone (MIBK)	200	187		ug/L		94	69 - 138
Methyl tert-butyl ether	50.0	49.1		ug/L		98	66 - 130
m-Xylene & p-Xylene	50.0	48.9		ug/L		98	70 - 130
Naphthalene	50.0	45.9		ug/L		92	47 - 149
n-Butylbenzene	50.0	47.4		ug/L		95	67 - 130
N-Propylbenzene	50.0	48.8		ug/L		98	70 - 130
o-Chlorotoluene	50.0	46.8		ug/L		94	70 - 130
o-Xylene	50.0	48.4		ug/L		97	70 - 130
p-Chlorotoluene	50.0	47.2		ug/L		94	70 - 130
p-Isopropyltoluene	50.0	48.1		ug/L		96	65 - 130
sec-Butylbenzene	50.0	47.4		ug/L		95	66 - 130
Styrene	50.0	47.1		ug/L		94	70 - 130
tert-Butylbenzene	50.0	46.2		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.7		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.5		ug/L		95	70 - 131
Tetrachloroethene	50.0	49.6		ug/L		99	65 - 130
Toluene	50.0	47.2		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	46.2		ug/L		92	70 - 130
trans-1,3-Dichloropropene	50.0	53.3		ug/L		107	63 - 130
1,2,3-Trichlorobenzene	50.0	48.1		ug/L		96	60 - 138
1,2,4-Trichlorobenzene	50.0	49.2		ug/L		98	60 - 140
1,1,1-Trichloroethane	50.0	48.7		ug/L		97	68 - 130
1,1,2-Trichloroethane	50.0	50.5		ug/L		101	70 - 130
Trichloroethene	50.0	46.9		ug/L		94	70 - 130
Trichlorofluoromethane	25.0	27.2		ug/L		109	65 - 138

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

Lab Sample ID: LCS 400-486109/1002
Matrix: Water
Analysis Batch: 486109

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	51.7		ug/L		103	70 - 130
1,2,4-Trimethylbenzene	50.0	46.9		ug/L		94	70 - 130
1,3,5-Trimethylbenzene	50.0	47.8		ug/L		96	69 - 130
Vinyl acetate	50.0	55.6		ug/L		111	26 - 160
Vinyl chloride	25.0	25.1		ug/L		100	59 - 136
Xylenes, Total	100	97.3		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 400-186523-3 MS
Matrix: Water
Analysis Batch: 486109

Client Sample ID: MW23-ROX-040820
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	156		ug/L		78	43 - 150
Acrolein	ND		250	219		ug/L		87	38 - 150
Acrylonitrile	ND		500	430		ug/L		86	62 - 149
Benzene	ND		50.0	42.5		ug/L		85	56 - 142
Bromobenzene	ND		50.0	42.6		ug/L		85	59 - 136
Bromochloromethane	ND		50.0	42.1		ug/L		84	64 - 140
Bromodichloromethane	ND		50.0	44.9		ug/L		90	59 - 143
Bromoform	ND		50.0	48.6		ug/L		97	50 - 140
Bromomethane	ND		25.0	30.4		ug/L		122	10 - 150
2-Butanone (MEK)	ND		200	173		ug/L		86	55 - 150
Carbon disulfide	ND		50.0	40.1		ug/L		80	48 - 150
Carbon tetrachloride	ND		50.0	46.5		ug/L		93	55 - 145
Chlorobenzene	ND		50.0	42.3		ug/L		85	64 - 130
Dibromochloromethane	ND		50.0	48.1		ug/L		96	56 - 143
Chloroethane	ND		25.0	23.1		ug/L		92	50 - 150
2-Chloroethyl vinyl ether	ND	F2	25.0	8.40		ug/L		34	10 - 150
Chloroform	ND		50.0	45.2		ug/L		90	60 - 141
1-Chlorohexane	ND		50.0	39.5		ug/L		79	56 - 136
Chloromethane	ND		25.0	13.0		ug/L		52	49 - 148
cis-1,2-Dichloroethene	ND		50.0	46.6		ug/L		93	59 - 143
cis-1,3-Dichloropropene	ND		50.0	43.0		ug/L		86	57 - 140
1,2-Dichlorobenzene	ND		50.0	42.2		ug/L		84	52 - 137
1,3-Dichlorobenzene	ND		50.0	41.7		ug/L		83	54 - 135
1,4-Dichlorobenzene	ND		50.0	39.7		ug/L		79	53 - 135
Dichlorodifluoromethane	ND		25.0	17.8		ug/L		71	16 - 150
1,1-Dichloroethane	ND		50.0	44.8		ug/L		90	61 - 144
1,2-Dichloroethane	ND		50.0	46.5		ug/L		93	60 - 141
1,1-Dichloroethene	ND		50.0	44.6		ug/L		89	54 - 147
1,2-Dichloropropane	ND		50.0	42.4		ug/L		85	66 - 137
1,3-Dichloropropane	ND		50.0	44.6		ug/L		89	66 - 133
2,2-Dichloropropane	ND		50.0	49.8		ug/L		100	42 - 144

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

Lab Sample ID: 400-186523-3 MS
Matrix: Water
Analysis Batch: 486109

Client Sample ID: MW23-ROX-040820
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	ND		50.0	45.7		ug/L		91	65 - 136
Ethylbenzene	ND		50.0	43.0		ug/L		86	58 - 131
Ethyl methacrylate	ND		50.0	43.3		ug/L		87	64 - 130
Hexachlorobutadiene	ND		50.0	43.7		ug/L		87	31 - 149
2-Hexanone	ND		200	166		ug/L		83	65 - 140
Isopropylbenzene	ND		50.0	43.7		ug/L		87	56 - 133
Methylene bromide	ND		50.0	42.5		ug/L		85	63 - 138
Methylene Chloride	ND		50.0	35.2		ug/L		70	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	161		ug/L		80	63 - 146
Methyl tert-butyl ether	0.96	J	50.0	47.0		ug/L		92	59 - 137
m-Xylene & p-Xylene	ND		50.0	42.7		ug/L		85	57 - 130
Naphthalene	ND		50.0	39.7		ug/L		79	25 - 150
n-Butylbenzene	ND		50.0	41.8		ug/L		84	41 - 142
N-Propylbenzene	ND		50.0	41.7		ug/L		83	51 - 138
o-Chlorotoluene	ND		50.0	41.8		ug/L		84	53 - 134
o-Xylene	ND		50.0	43.0		ug/L		86	61 - 130
p-Chlorotoluene	ND		50.0	42.6		ug/L		85	54 - 133
p-Isopropyltoluene	ND		50.0	42.3		ug/L		85	48 - 139
sec-Butylbenzene	ND		50.0	42.4		ug/L		85	50 - 138
Styrene	ND		50.0	41.8		ug/L		84	58 - 131
tert-Butylbenzene	ND		50.0	41.0		ug/L		82	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	47.9		ug/L		96	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	42.3		ug/L		85	66 - 135
Tetrachloroethene	ND		50.0	40.9		ug/L		82	52 - 133
Toluene	ND		50.0	44.0		ug/L		88	65 - 130
trans-1,2-Dichloroethene	ND		50.0	44.3		ug/L		89	61 - 143
trans-1,3-Dichloropropene	ND		50.0	48.5		ug/L		97	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	41.0		ug/L		82	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	41.6		ug/L		83	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.8		ug/L		94	57 - 142
1,1,2-Trichloroethane	ND		50.0	43.4		ug/L		87	66 - 131
Trichloroethene	ND		50.0	43.7		ug/L		87	64 - 136
Trichlorofluoromethane	ND		25.0	25.5		ug/L		102	54 - 150
1,2,3-Trichloropropane	ND		50.0	45.0		ug/L		90	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	42.0		ug/L		84	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	42.6		ug/L		85	52 - 135
Vinyl acetate	ND		50.0	45.8		ug/L		92	26 - 150
Vinyl chloride	ND		25.0	21.3		ug/L		85	46 - 150
Xylenes, Total	ND		100	85.7		ug/L		86	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: 400-186523-3 MSD
Matrix: Water
Analysis Batch: 486109

Client Sample ID: MW23-ROX-040820
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	177		ug/L		88	43 - 150	12	30
Acrolein	ND		250	251		ug/L		101	38 - 150	14	31
Acrylonitrile	ND		500	450		ug/L		90	62 - 149	4	30
Benzene	ND		50.0	41.1		ug/L		82	56 - 142	3	30
Bromobenzene	ND		50.0	41.1		ug/L		82	59 - 136	4	30
Bromochloromethane	ND		50.0	44.4		ug/L		89	64 - 140	5	30
Bromodichloromethane	ND		50.0	42.9		ug/L		86	59 - 143	5	30
Bromoform	ND		50.0	47.0		ug/L		94	50 - 140	3	30
Bromomethane	ND		25.0	36.4		ug/L		146	10 - 150	18	50
2-Butanone (MEK)	ND		200	177		ug/L		89	55 - 150	3	30
Carbon disulfide	ND		50.0	40.1		ug/L		80	48 - 150	0	30
Carbon tetrachloride	ND		50.0	44.8		ug/L		90	55 - 145	4	30
Chlorobenzene	ND		50.0	40.1		ug/L		80	64 - 130	5	30
Dibromochloromethane	ND		50.0	46.8		ug/L		94	56 - 143	3	30
Chloroethane	ND		25.0	29.0		ug/L		116	50 - 150	23	30
2-Chloroethyl vinyl ether	ND	F2	25.0	4.88	J F2	ug/L		20	10 - 150	53	50
Chloroform	ND		50.0	43.5		ug/L		87	60 - 141	4	30
1-Chlorohexane	ND		50.0	37.4		ug/L		75	56 - 136	5	30
Chloromethane	ND		25.0	15.5		ug/L		62	49 - 148	18	31
cis-1,2-Dichloroethene	ND		50.0	43.9		ug/L		88	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	41.6		ug/L		83	57 - 140	3	30
1,2-Dichlorobenzene	ND		50.0	38.2		ug/L		76	52 - 137	10	30
1,3-Dichlorobenzene	ND		50.0	38.4		ug/L		77	54 - 135	8	30
1,4-Dichlorobenzene	ND		50.0	36.7		ug/L		73	53 - 135	8	30
Dichlorodifluoromethane	ND		25.0	17.2		ug/L		69	16 - 150	3	31
1,1-Dichloroethane	ND		50.0	43.5		ug/L		87	61 - 144	3	30
1,2-Dichloroethane	ND		50.0	46.8		ug/L		94	60 - 141	1	30
1,1-Dichloroethene	ND		50.0	41.7		ug/L		83	54 - 147	7	30
1,2-Dichloropropane	ND		50.0	39.6		ug/L		79	66 - 137	7	30
1,3-Dichloropropane	ND		50.0	41.7		ug/L		83	66 - 133	7	30
2,2-Dichloropropane	ND		50.0	48.4		ug/L		97	42 - 144	3	31
1,1-Dichloropropene	ND		50.0	44.5		ug/L		89	65 - 136	2	30
Ethylbenzene	ND		50.0	41.0		ug/L		82	58 - 131	5	30
Ethyl methacrylate	ND		50.0	43.4		ug/L		87	64 - 130	0	30
Hexachlorobutadiene	ND		50.0	40.4		ug/L		81	31 - 149	8	36
2-Hexanone	ND		200	170		ug/L		85	65 - 140	3	30
Isopropylbenzene	ND		50.0	42.1		ug/L		84	56 - 133	4	30
Methylene bromide	ND		50.0	42.6		ug/L		85	63 - 138	0	30
Methylene Chloride	ND		50.0	37.3		ug/L		75	60 - 146	6	32
4-Methyl-2-pentanone (MIBK)	ND		200	166		ug/L		83	63 - 146	3	30
Methyl tert-butyl ether	0.96	J	50.0	47.0		ug/L		92	59 - 137	0	30
m-Xylene & p-Xylene	ND		50.0	41.8		ug/L		84	57 - 130	2	30
Naphthalene	ND		50.0	38.8		ug/L		78	25 - 150	2	30
n-Butylbenzene	ND		50.0	38.4		ug/L		77	41 - 142	9	31
N-Propylbenzene	ND		50.0	39.5		ug/L		79	51 - 138	5	30
o-Chlorotoluene	ND		50.0	39.7		ug/L		79	53 - 134	5	30
o-Xylene	ND		50.0	42.0		ug/L		84	61 - 130	2	30
p-Chlorotoluene	ND		50.0	39.1		ug/L		78	54 - 133	9	30

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

Lab Sample ID: 400-186523-3 MSD
Matrix: Water
Analysis Batch: 486109

Client Sample ID: MW23-ROX-040820
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
p-Isopropyltoluene	ND		50.0	38.2		ug/L		76	48 - 139	10	30
sec-Butylbenzene	ND		50.0	39.9		ug/L		80	50 - 138	6	30
Styrene	ND		50.0	41.1		ug/L		82	58 - 131	2	30
tert-Butylbenzene	ND		50.0	38.4		ug/L		77	54 - 146	7	30
1,1,1,2-Tetrachloroethane	ND		50.0	45.4		ug/L		91	59 - 137	5	30
1,1,2,2-Tetrachloroethane	ND		50.0	40.3		ug/L		81	66 - 135	5	30
Tetrachloroethene	ND		50.0	39.5		ug/L		79	52 - 133	3	30
Toluene	ND		50.0	41.8		ug/L		84	65 - 130	5	30
trans-1,2-Dichloroethene	ND		50.0	43.1		ug/L		86	61 - 143	3	30
trans-1,3-Dichloropropene	ND		50.0	46.9		ug/L		94	53 - 133	3	30
1,2,3-Trichlorobenzene	ND		50.0	37.2		ug/L		74	43 - 145	10	30
1,2,4-Trichlorobenzene	ND		50.0	37.4		ug/L		75	39 - 148	11	30
1,1,1-Trichloroethane	ND		50.0	46.8		ug/L		94	57 - 142	0	30
1,1,2-Trichloroethane	ND		50.0	42.4		ug/L		85	66 - 131	2	30
Trichloroethene	ND		50.0	42.1		ug/L		84	64 - 136	4	30
Trichlorofluoromethane	ND		25.0	28.1		ug/L		112	54 - 150	10	30
1,2,3-Trichloropropane	ND		50.0	44.1		ug/L		88	65 - 133	2	30
1,2,4-Trimethylbenzene	ND		50.0	38.7		ug/L		77	50 - 139	8	30
1,3,5-Trimethylbenzene	ND		50.0	39.0		ug/L		78	52 - 135	9	30
Vinyl acetate	ND		50.0	51.8		ug/L		104	26 - 150	12	33
Vinyl chloride	ND		25.0	23.4		ug/L		93	46 - 150	9	30
Xylenes, Total	ND		100	83.8		ug/L		84	59 - 130	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzenethiol	ND		10	1.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzoic acid	ND		30	7.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzyl alcohol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/14/20 11:11	04/20/20 16:55	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/14/20 11:11	04/20/20 16:55	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloroaniline	ND		10	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chlorophenol	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenzofuran	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Diethyl phthalate	ND		10	0.70	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,4-Dioxane	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachloroethane	ND		10	4.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Indene	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Isophorone	ND		10	0.57	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Methylphenol	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitroaniline	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
3-Nitroaniline	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitroaniline	ND		10	2.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Nitrobenzene	ND		10	0.55	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitrophenol	ND		10	0.65	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitrophenol	ND		10	2.1	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pentachlorophenol	ND		20	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Phenol	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pyridine	ND		10	3.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Quinoline	ND		10	6.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*34 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2-Fluorophenol	*94*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Nitrobenzene-d5	*103*		*27 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Phenol-d5	*92*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Terphenyl-d14	*136*	*X*	*53 - 125*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*04/14/20 11:11*	*04/20/20 16:55*	*1*

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	20.0		ug/L		67	29 - 120
Benzoic acid	116	74.9		ug/L		64	10 - 150
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.8		ug/L		66	45 - 120
Bis(2-chloroethyl)ether	30.0	17.8		ug/L		59	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.1		ug/L		50	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.5		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	7.38	J *	ug/L		25	46 - 145
4-Chloroaniline	30.0	19.4		ug/L		65	30 - 120
4-Chloro-3-methylphenol	30.0	21.8		ug/L		73	39 - 140
2-Chloronaphthalene	30.0	20.4		ug/L		68	52 - 120
2-Chlorophenol	30.0	19.8		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.1		ug/L		70	58 - 124
Dibenz[a,h]acridine	29.6	11.0	*	ug/L		37	46 - 149
Dibenzofuran	30.0	20.9		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	38.9		ug/L		97	39 - 135
2,4-Dichlorophenol	30.0	21.2		ug/L		71	39 - 128
Diethyl phthalate	30.0	5.08	J *	ug/L		17	44 - 146
2,4-Dimethylphenol	30.0	23.0		ug/L		77	44 - 120
Dimethyl phthalate	30.0	2.99	J *	ug/L		10	50 - 131
Di-n-butyl phthalate	30.0	9.02	J *	ug/L		30	55 - 131
4,6-Dinitro-ortho-cresol	60.0	37.4		ug/L		62	10 - 150
2,4-Dinitrophenol	60.0	42.6		ug/L		71	10 - 150
2,4-Dinitrotoluene	30.0	23.8		ug/L		79	58 - 140
2,6-Dinitrotoluene	30.0	25.2		ug/L		84	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	12.0		ug/L		40	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.0		ug/L		57	47 - 123
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131
Hexachlorocyclopentadiene	30.0	7.05	J	ug/L		24	10 - 129
Hexachloroethane	30.0	15.8		ug/L		53	20 - 120
Indene	30.0	21.3		ug/L		71	47 - 120
Isophorone	30.0	20.3		ug/L		68	49 - 120
2-Methylphenol	30.0	19.3		ug/L		64	39 - 123
3 & 4 Methylphenol	30.0	18.3	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	20.3		ug/L		68	47 - 150
3-Nitroaniline	30.0	19.2		ug/L		64	34 - 132
4-Nitroaniline	30.0	18.6		ug/L		62	41 - 135
Nitrobenzene	30.0	20.6		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.0		ug/L		60	28 - 136
4-Nitrophenol	60.0	37.2		ug/L		62	10 - 150
N-Nitrosodimethylamine	30.0	19.2		ug/L		64	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.2		ug/L		64	44 - 120
N-Nitrosodiphenylamine	29.8	21.9		ug/L		74	56 - 120
Pentachlorophenol	60.0	37.6		ug/L		63	15 - 141
Phenol	30.0	17.0		ug/L		57	33 - 120
Pyridine	60.0	23.0		ug/L		38	26 - 120

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	23.6		ug/L		80	51 - 129
2,4,5-Trichlorophenol	30.0	20.4		ug/L		68	38 - 147
2,4,6-Trichlorophenol	30.0	20.9		ug/L		70	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*61*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*72*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

Lab Sample ID: LCS 400-485894/3-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*112*		*34 - 120*
2-Fluorophenol	*90*		*10 - 120*
Nitrobenzene-d5	*102*		*27 - 120*
Phenol-d5	*99*		*10 - 120*
Terphenyl-d14	*136*	*X*	*53 - 125*
2,4,6-Tribromophenol	*81*		*15 - 135*

Lab Sample ID: LCSD 400-485894/4-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	14	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*95*		*34 - 120*
2-Fluorophenol	*77*		*10 - 120*
Nitrobenzene-d5	*90*		*27 - 120*
Phenol-d5	*79*		*10 - 120*
Terphenyl-d14	*121*		*53 - 125*
2,4,6-Tribromophenol	*66*		*15 - 135*

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/27/20 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2-Fluorophenol	*34*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Nitrobenzene-d5	*52*		*27 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Phenol-d5	*49*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Terphenyl-d14	*57*		*53 - 125*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2,4,6-Tribromophenol	*58*		*15 - 135*	*04/23/20 13:48*	*04/27/20 16:43*	*1*

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	30.0	17.1		ug/L		57	46 - 145
Dibenz[a,h]acridine	29.6	15.3		ug/L		52	46 - 149
Diethyl phthalate	30.0	17.7		ug/L		59	44 - 146
Dimethyl phthalate	30.0	16.8		ug/L		56	50 - 131
Di-n-butyl phthalate	30.0	17.7		ug/L		59	55 - 131

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*51*		*34 - 120*
2-Fluorophenol	*32*		*10 - 120*
Nitrobenzene-d5	*51*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*55*		*15 - 135*

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	30.0	19.7		ug/L		66	46 - 145	14	30
Dibenz[a,h]acridine	29.6	16.6		ug/L		56	46 - 149	8	30
Diethyl phthalate	30.0	20.2		ug/L		67	44 - 146	13	30
Dimethyl phthalate	30.0	18.9		ug/L		63	50 - 131	12	30
Di-n-butyl phthalate	30.0	20.2		ug/L		67	55 - 131	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*28*		*10 - 120*
Nitrobenzene-d5	*58*		*27 - 120*
Phenol-d5	*47*		*10 - 120*

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

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	66		53 - 125
2,4,6-Tribromophenol	63		15 - 135

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/14/20 11:11	04/20/20 13:10	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/14/20 11:11	04/20/20 13:10	1
Anthracene	ND		0.20	0.031	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/14/20 11:11	04/20/20 13:10	1
Chrysene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluorene	ND		0.20	0.11	ug/L		04/14/20 11:11	04/20/20 13:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/14/20 11:11	04/20/20 13:10	1
Phenanthrene	ND		0.20	0.036	ug/L		04/14/20 11:11	04/20/20 13:10	1
Pyrene	ND		0.20	0.040	ug/L		04/14/20 11:11	04/20/20 13:10	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/14/20 11:11	04/20/20 13:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	142	X	33 - 138	04/14/20 11:11	04/20/20 13:10	1
2-Fluorobiphenyl	89		15 - 122	04/14/20 11:11	04/20/20 13:10	1
Nitrobenzene-d5	82		19 - 130	04/14/20 11:11	04/20/20 13:10	1

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.8		ug/L		83	41 - 120
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120
Anthracene	30.0	24.1		ug/L		80	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	22.0		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	22.9		ug/L		76	53 - 134
Benzo[g,h,i]perylene	30.0	24.7		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	23.8		ug/L		79	57 - 134
Chrysene	30.0	23.7		ug/L		79	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	30.0	20.9		ug/L		70	54 - 128
Fluorene	30.0	24.6		ug/L		82	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.2		ug/L		81	43 - 142
Phenanthrene	30.0	24.1		ug/L		80	48 - 120
Pyrene	30.0	27.7		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	21.1		ug/L		70	41 - 120
2-Methylnaphthalene	30.0	20.7		ug/L		69	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*107*		*33 - 138*
2-Fluorobiphenyl	*78*		*15 - 122*
Nitrobenzene-d5	*52*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486019/1-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/15/20 11:34	04/16/20 16:39	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/15/20 11:34	04/16/20 16:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/15/20 11:34*	*04/16/20 16:39*	*1*

Lab Sample ID: LCS 400-486019/2-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.101		ug/L		100	60 - 140
1,2-Dibromoethane	0.101	0.116		ug/L		115	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*94*		*51 - 149*

Lab Sample ID: LCSD 400-486019/3-A
Matrix: Water
Analysis Batch: 486175

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486019

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0976		ug/L		97	60 - 140	3	30
1,2-Dibromoethane	0.101	0.113		ug/L		112	60 - 140	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*93*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1364589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	GSAP Project ID
60619901 - 1.03.002 / 60619901 - 1 03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 4/8/20
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 60619901 - 1.03.002

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): Jen Burleson, Brett Howell
LAB USE ONLY

TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

400-186523 COC

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60619901 - 1.03.002: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0022: VOC 8011	PAH 8270LL	FIELD NOTES: TEMPERATURE ON RECEIPT C° / Container PID Readings or Laboratory Notes
	TB-Rox-040820-8260-BP	4/8/20	0000	Water	2					2	X				
	TB-Rox-040820-8011-BP	4/8/20	0000		2					2			X		
	MW23-Rox-040820		1025		6			2		8	X	X	X	X	

4/8/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
[signature]	Fedex: 1680 3500 9332 / 1680 3500 9343 / 1680 3500 9321	4/8/20	1600
	[signature]	4/9/20	8:58

4.4°C, 2.6°C 1.9°C, 2.6°C, 2.9°C, .3°C, 3.3°C } IRJ

custody seal #s: 1318037 1318036 / 1318033 1318032 1318035 1318034

Version 14Dec15

4/28/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186523-1

Login Number: 186523
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	0.4°C 2.6°C 1.9°C 2.6°C 2.9°C 0.3°C 3.3°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186523-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186546-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/5/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-040920-8260	TB-ROX-040920-8011
MW1-ROX-040920	MW24-ROX-040920
P54-ROX-040920	MW11-ROX-040920

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 SVOCs in several samples were re-extracted outside of the extraction time criteria. Several SVOC LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several SVOC and/or PAH surrogate recoveries were outside criteria in several investigative and quality control samples. Several SVOC, SVOC, and PAH MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample MW11-ROX-040920. The SVOC/PAH internal standard recoveries for perylene-d_{12} were outside criteria in sample MW11-ROX-040920. 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, SVOCs in several samples were re-extracted 7 days outside of the extraction time criteria (7 days) in investigative samples due to initial failing SVOC surrogates. Professional judgement was used to qualify as estimated (**UJ**), however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW1-ROX-040920 – RERA	SVOCs	All non-detects	**UJ**
P54-ROX-040920 – RERA	SVOCs	All non-detects	**UJ**
MW11-ROX-040920 – RERA	SVOCs	All non-detects	**UJ**

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/ LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-485894/2-A	SVOCs	Butyl benzyl phthalate	**25**	NA	46-145
LCS 400-485894/2-A	SVOCs	Dibenz[a,h]acridine	**37**	NA	46-149
LCS 400-485894/2-A	SVOCs	Diethyl phthalate	**17**	NA	44-146
LCS 400-485894/2-A	SVOCs	Dimethyl phthalate	**10**	NA	50-131
LCS 400-485894/2-A	SVOCs	Di-n-butyl phthalate	**30**	NA	55-131
LCS/LCSD 400-485894/3-A/4-A	SVOCs	Benzenethiol	**3/2**	14	10-120/30
LCS/LCSD 400-486081/4-A/5-A	SVOCs	Benzenethiol	18/25	**34**	10-120/30
LCS/LCSD 400-486835/2-A/3-A	SVOCs	Quinoline	**46**/53	NaN	51-129/30

SVOCs in several samples were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required. Analytical data associated with RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW1-ROX-040920	SVOCs	2-Fluorophenol	**3**	10-120
MW1-ROX-040920	SVOCs	Phenol-d_5	**9**	10-120
MW24-ROX-040920	PAHs	Terphenyl-d_{14}	**145**	33-138
P54-ROX-040920	SVOCs	Terphenyl-d_{14}	**128**	53-125
MW11-ROX-040920	PAHs	Terphenyl-d_{14}	**225**	33-138
MW11-ROX-040920	PAHs	2-Fluorophenol	**169**	15-122
MW11-ROX-040920	PAHs	Nitrobenzene-d_5	**155**	19-130
MW11-ROX-040920	SVOCs	2-Fluorobiphenyl	**194**	34-120
MW11-ROX-040920	SVOCs	2-Fluorophenol	**4**	10-120
MW11-ROX-040920	SVOCs	Nitrobenzene-d_5	**160**	27-120
MW11-ROX-040920	SVOCs	Phenol-d_5	**8**	10-120
MW11-ROX-040920	SVOCs	Terphenyl-d_{14}	**264**	53-125
MB 400-485894/1-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
LCS 400-485894/3-A	SVOCs	Terphenyl-d_{14}	**136**	53-125
MB 400-485894/1-A	PAHs	Terphenyl-d_{14}	**142**	33-138

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-486081/1-A	PAHs	Terphenyl-d_{14}	**156**	33-138

Qualifications due to surrogate recoveries were not required if only one of three acid and/or base/neutral SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Analytical data reported as non-detect and associated with surrogate recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. SVOCs in several samples were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required. Method blanks and laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

Yes, sample MW11-ROX-040920 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
MW11-ROX-040920	VOCs	Bromomethane	133/**180**	30	10-150/50
MW11-ROX-040920	VOCs	Chloroethane	102/147	**37**	50-150/30
MW11-ROX-040920	VOCs	2-Chloroethyl vinyl ether	47/24	**63**	10-150/50
MW11-ROX-040920	SVOCs	Benzyl alcohol	48/91	**63**	10-154/37
MW11-ROX-040920	SVOCs	bis(2-Chloroethyl) ether	38/67	**57**	28-130/42
MW11-ROX-040920	SVOCs	bis(2-Chloroisopropyl) ether	29/52	**57**	10-141/41
MW11-ROX-040920	SVOCs	bis(2-Ethylhexyl) phthalate	46/89	**50**	43-160/35
MW11-ROX-040920	SVOCs	4-Bromophenyl phenyl ether	61/108	**55**	26-159/30
MW11-ROX-040920	SVOCs	Butyl benzyl phthalate	**30/42**	**34**	43-151/32
MW11-ROX-040920	SVOCs	4-Chloro-3-methylphenol	50/82	**50**	17-156/40
MW11-ROX-040920	SVOCs	2-Chloronaphthalene	47/88	**60**	10-155/29
MW11-ROX-040920	SVOCs	2-Chlorophenol	47/76	**48**	19-130/42
MW11-ROX-040920	SVOCs	4-Chlorophenyl phenyl ether	53/97	**59**	25-161/27

MS/MSD ID	Parameter	Analyte	MS/ MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW11-ROX-040920	SVOCs	Dibenz[a,h]acridine	**41**/74	**57**	42-147/40
MW11-ROX-040920	SVOCs	Dibenzofuran	50/91	**58**	18-157/29
MW11-ROX-040920	SVOCs	3,3'-Dichlorobenzidine	43/101	**82**	10-172/58
MW11-ROX-040920	SVOCs	2,4-Dichlorophenol	53/85	**46**	16-147/43
MW11-ROX-040920	SVOCs	Diethyl phthalate	**12/16**	**28**	23-160/40
MW11-ROX-040920	SVOCs	2,4-Dimethylphenol	49/84	**53**	25-146/47
MW11-ROX-040920	SVOCs	Dimethyl phthalate	**8**/11	31	11-158/36
MW11-ROX-040920	SVOCs	Di-n-butyl phthalate	**26**/39	**41**	28-162/32
MW11-ROX-040920	SVOCs	4,6-Dinitro-ortho-cresol	22/55	**87**	10-168/42
MW11-ROX-040920	SVOCs	2,4-Dinitrophenol	17/53	**101**	10-166/36
MW11-ROX-040920	SVOCs	2,4-Dinitrotoluene	51/94	**60**	26-158/28
MW11-ROX-040920	SVOCs	2,6-Dinitrotoluene	53/101	**62**	19-157/28
MW11-ROX-040920	SVOCs	Di-n-octyl phthalate	50/71	**36**	42-150/35
MW11-ROX-040920	SVOCs	1,4-Dioxane	23/39	**54**	10-130/40
MW11-ROX-040920	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	41/74	**58**	19-162/40
MW11-ROX-040920	SVOCs	Hexachlorobenzene	59/99	**52**	45-145/33
MW11-ROX-040920	SVOCs	Hexachlorocyclopentadiene	22/38	**53**	10-151/50
MW11-ROX-040920	SVOCs	Hexachloroethane	32/56	**56**	29-130/41
MW11-ROX-040920	SVOCs	Indene	39/68	**56**	22-130/40
MW11-ROX-040920	SVOCs	Isophorone	41/72	**55**	24-144/33
MW11-ROX-040920	SVOCs	2-Methylphenol	38/68	**56**	22-130/47
MW11-ROX-040920	SVOCs	3 & 4 Methylphenol	40/67	**52**	31-130/47
MW11-ROX-040920	SVOCs	2-Nitroaniline	43/79	**59**	10-162/33
MW11-ROX-040920	SVOCs	3-Nitroaniline	36/70	**65**	10-163/39

MS/MSD ID	Parameter	Analyte	MS/ MSD Recovery (%)	RPD	MS/MSD/ RPD Criteria
MW11-ROX-040920	SVOCs	4-Nitroaniline	38/79	**70**	10-162/50
MW11-ROX-040920	SVOCs	Nitrobenzene	41/72	**56**	34-135/35
MW11-ROX-040920	SVOCs	n-Nitrosodi-n-propylamine	40/70	**55**	13-147/36
MW11-ROX-040920	SVOCs	n-Nitrosodiphenylamine	53/96	**58**	31-150/34
MW11-ROX-040920	SVOCs	Phenol	37/71	**62**	23-130/52
MW11-ROX-040920	SVOCs	Pyridine	13/35	**94**	10-130/55
MW11-ROX-040920	SVOCs	Quinoline	47/86	**59**	10-180/40
MW11-ROX-040920	SVOCs	2,4,5-Trichlorophenol	55/88	**46**	43-137/42
MW11-ROX-040920	SVOCs	2,4,6-Trichlorophenol	53/88	**50**	42-135/44
MW11-ROX-040920	PAHs	Acenaphthene	44/84	**63**	35-113/49
MW11-ROX-040920	PAHs	Acenaphthylene	47/87	**61**	41-118/48
MW11-ROX-040920	PAHs	Anthracene	49/88	**58**	45-122/56
MW11-ROX-040920	PAHs	Benzo[a]anthracene	**45**/67	40	55-133/57
MW11-ROX-040920	PAHs	Benzo[a]pyrene	**42**/60	36	50-108/59
MW11-ROX-040920	PAHs	Benzo[b]fluoranthene	**40**/62	44	50-128/62
MW11-ROX-040920	PAHs	Benzo[g,h,i]perylene	**41**/53	27	46-133/58
MW11-ROX-040920	PAHs	Benzo[k]fluoranthene	**47/67**	35	52-128/58
MW11-ROX-040920	PAHs	Chrysene	**47**/68	38	52-116/59
MW11-ROX-040920	PAHs	Dibenz(a,h)anthracene	**45**/61	31	52-143/60
MW11-ROX-040920	PAHs	Fluorene	48/89	**61**	15-150/49

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. SVOCs in sample MW11-ROX-040920 were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of previously qualified SVOCs were required. Analytical data associated with MS/MSD RPD alone outside evaluation criteria did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW11-ROX-040920	PAHs	Benzo[a]anthracene	UJ
MW11-ROX-040920	PAHs	Benzo[a]pyrene	UJ
MW11-ROX-040920	PAHs	Benzo[b]fluoranthene	UJ
MW11-ROX-040920	PAHs	Benzo[g,h,i]perylene	UJ
MW11-ROX-040920	PAHs	Benzo[k]fluoranthene	UJ
MW11-ROX-040920	PAHs	Chrysene	UJ
MW11-ROX-040920	PAHs	Dibenz(a,h)anthracene	UJ

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
MW11-ROX-040920	SVOCs	Perylene-d_{12}	**219366**	607311	303656-1214622
MW11-ROX-040920	PAHs	Perylene-d_{12}	**227010**	509984	254992-1019968

Analytical data that required qualification based on internal standard data are included in the table below. SVOCs in sample MW11-ROX-040920 were qualified in Section 3.0 of this data review due to holding time criteria, and several PAHs were qualified in Section 7.0 due to matrix spike/matrix spike duplicate criteria; no further qualification of previously qualified SVOCs/PAHs were required.

Sample ID	Parameter	Analyte	Qualification
MW11-ROX-040920	PAHs	Indeno[1,2,3-cd]pyrene	UJ

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186546-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/28/2020 12:44:51 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
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Reviewed 5/5/2020 LR

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186546-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186546-1

Comments
No additional comments.

Receipt
The samples were received on 4/10/2020 8:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.9° C, 2.3° C and 2.8° C.

GC/MS VOA
Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 400-486222 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-486222 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 preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-040920-8260 (400-186546-1), MW1-ROX-040920 (400-186546-3), MW24-ROX-040920 (400-186546-4), P54-ROX-040920 (400-186546-5) and MW11-ROX-040920 (400-186546-6). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-486081 and analytical batch 400-486423 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-485894 and analytical batch 400-486452 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: 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: (LCS 400-485894/3-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486452 recovered above the upper control limit for Hexachlorobenzene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-486835 and analytical batch 400-486944 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 400-486835 and analytical batch 400-486944 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-486835 and analytical batch 400-487181: Quinoline. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Job ID: 400-186546-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The laboratory control sample and/or the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-486835 and analytical batch 400-486944 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 400-486835 and analytical batch 400-486944 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: Surrogate recovery for the following samples were outside control limits: MW1-ROX-040920 (400-186546-3), P54-ROX-040920 (400-186546-5) and MW11-ROX-040920 (400-186546-6). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8270D: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-485894 and analytical batch 400-486452 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-485894 and analytical batch 400-486452 were outside control limits.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487181 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486425 recovered above the upper control limit for Pyrene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (MB 400-485894/1-A). These results have been reported and qualified.

Method 8270D LL: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 400-485894 and analytical batch 400-486425 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8270D LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-485894 and analytical batch 400-486425 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 LL: The internal standard Perylene-d12 response were outside of acceptance limits for the following sample: MW11-ROX-040920 (400-186546-6). Results for the affected analytes are possibly biased high, non-detect are qualified accordingly; therefore, the data have been reported.

Method 8270D LL: Surrogate recovery for the following sample was outside the upper control limit: MW11-ROX-040920 (400-186546-6). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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: MW24-ROX-040920 (400-186546-4). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486447 recovered above the upper control limit for Benzo[k]fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Job ID: 400-186546-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-486697 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 continuing calibration verification (CCV) associated with batch 400-486697 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: 400-186546-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186546-1	TB-ROX-040920-8260	Water	04/09/20 00:00	04/10/20 08:46	
400-186546-2	TB-ROX-040920-8011	Water	04/09/20 00:00	04/10/20 08:46	
400-186546-3	MW1-ROX-040920	Water	04/09/20 09:25	04/10/20 08:46	
400-186546-4	MW24-ROX-040920	Water	04/09/20 10:40	04/10/20 08:46	
400-186546-5	P54-ROX-040920	Water	04/09/20 11:25	04/10/20 08:46	
400-186546-6	MW11-ROX-040920	Water	04/09/20 13:00	04/10/20 08:46	

Detection Summary

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

Job ID: 400-186546-1

Client Sample ID: TB-ROX-040920-8260 — Lab Sample ID: 400-186546-1

No Detections.

Client Sample ID: TB-ROX-040920-8011 — Lab Sample ID: 400-186546-2

No Detections.

Client Sample ID: MW1-ROX-040920 — Lab Sample ID: 400-186546-3

No Detections.

Client Sample ID: MW24-ROX-040920 — Lab Sample ID: 400-186546-4

No Detections.

Client Sample ID: P54-ROX-040920 — Lab Sample ID: 400-186546-5

No Detections.

Client Sample ID: MW11-ROX-040920 — Lab Sample ID: 400-186546-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	25	10	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	5.1	J F2	9.7	4.9	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-040920-8260
Date Collected: 04/09/20 00:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-1
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			04/17/20 12:24	1
Acrolein	ND		20	10	ug/L			04/17/20 12:24	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 12:24	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 12:24	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 12:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 12:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 12:24	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 12:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 12:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 12:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 12:24	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 12:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 12:24	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 12:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 12:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 12:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 12:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 12:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 12:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 12:24	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 12:24	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 12:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 12:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 12:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 12:24	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 12:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 12:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 12:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 12:24	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 12:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 12:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 12:24	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/17/20 12:24	1

Client Sample ID: TB-ROX-040920-8260
Date Collected: 04/09/20 00:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-1
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			04/17/20 12:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 12:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 12:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 12:24	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 12:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 12:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 12:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 12:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 12:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 12:24	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 12:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 12:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 12:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 12:24	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 12:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 12:24	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*78 - 118*		*04/17/20 12:24*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*04/17/20 12:24*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/17/20 12:24*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.53	ug/L			04/20/20 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*78 - 118*		*04/20/20 19:26*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/20/20 19:26*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/20/20 19:26*	*1*

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

Job ID: 400-186546-1

Client Sample ID: TB-ROX-040920-8011
Date Collected: 04/09/20 00:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-2
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		0.032	0.0058	ug/L		04/20/20 09:04	04/22/20 16:05	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		04/20/20 09:04	04/22/20 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*04/20/20 09:04*	*04/22/20 16:05*	*1*

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

Job ID: 400-186546-1

Client Sample ID: MW1-ROX-040920
Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-3
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			04/17/20 17:12	1
Acrolein	ND		20	10	ug/L			04/17/20 17:12	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 17:12	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 17:12	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 17:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 17:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 17:12	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 17:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 17:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 17:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 17:12	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 17:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 17:12	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 17:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 17:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 17:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 17:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 17:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 17:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 17:12	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 17:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 17:12	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 17:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 17:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 17:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 17:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 17:12	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 17:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 17:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 17:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 17:12	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 17:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 17:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 17:12	1

Client Sample ID: MW1-ROX-040920
Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-3
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			04/17/20 17:12	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 17:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 17:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 17:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 17:12	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 17:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 17:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 17:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 17:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 17:12	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 17:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 17:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 17:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 17:12	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 17:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 17:12	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*04/17/20 17:12*	*1*
Dibromofluoromethane	*104*		*81 - 121*		*04/17/20 17:12*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/17/20 17:12*	*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		04/14/20 11:12	04/20/20 17:56	1
Acenaphthylene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 17:56	1
Anthracene	ND		0.19	0.030	ug/L		04/14/20 11:12	04/20/20 17:56	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		04/14/20 11:12	04/20/20 17:56	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/14/20 11:12	04/20/20 17:56	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 17:56	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/14/20 11:12	04/20/20 17:56	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/14/20 11:12	04/20/20 17:56	1
Chrysene	ND		0.19	0.072	ug/L		04/14/20 11:12	04/20/20 17:56	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		04/14/20 11:12	04/20/20 17:56	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 17:56	1
Fluorene	ND		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 17:56	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 17:56	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 17:56	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 17:56	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		04/14/20 11:12	04/20/20 17:56	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*115*		*33 - 138*	*04/14/20 11:12*	*04/20/20 17:56*	*1*
2-Fluorobiphenyl	*93*		*15 - 122*	*04/14/20 11:12*	*04/20/20 17:56*	*1*

Client Sample ID: MW1-ROX-040920
Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	86		19 - 130	04/14/20 11:12	04/20/20 17:56	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		04/14/20 11:12	04/20/20 22:56	1
Benzenethiol	ND	*	9.7	1.6	ug/L		04/14/20 11:12	04/20/20 22:56	1
Benzoic acid	ND		29	7.1	ug/L		04/14/20 11:12	04/20/20 22:56	1
Benzyl alcohol	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 22:56	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/14/20 11:12	04/20/20 22:56	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		04/14/20 11:12	04/20/20 22:56	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		04/14/20 11:12	04/20/20 22:56	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		04/14/20 11:12	04/20/20 22:56	1
Butyl benzyl phthalate	ND	*	9.7	0.67	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		04/14/20 11:12	04/20/20 22:56	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		04/14/20 11:12	04/20/20 22:56	1
2-Chlorophenol	ND		9.7	2.1	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 22:56	1
Dibenz[a,h]acridine	ND	*	9.7	2.9	ug/L		04/14/20 11:12	04/20/20 22:56	1
Dibenzofuran	ND		9.7	0.50	ug/L		04/14/20 11:12	04/20/20 22:56	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		04/14/20 11:12	04/20/20 22:56	1
Diethyl phthalate	ND	*	9.7	0.68	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 22:56	1
Dimethyl phthalate	ND	*	9.7	0.58	ug/L		04/14/20 11:12	04/20/20 22:56	1
Di-n-butyl phthalate	ND	*	9.7	2.6	ug/L		04/14/20 11:12	04/20/20 22:56	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		04/14/20 11:12	04/20/20 22:56	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		04/14/20 11:12	04/20/20 22:56	1
1,4-Dioxane	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 22:56	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 22:56	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		04/14/20 11:12	04/20/20 22:56	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/14/20 11:12	04/20/20 22:56	1
Hexachloroethane	ND		9.7	4.1	ug/L		04/14/20 11:12	04/20/20 22:56	1
Indene	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 22:56	1
Isophorone	ND		9.7	0.55	ug/L		04/14/20 11:12	04/20/20 22:56	1
2-Methylphenol	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 22:56	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/14/20 11:12	04/20/20 22:56	1
2-Nitroaniline	ND		9.7	2.1	ug/L		04/14/20 11:12	04/20/20 22:56	1
3-Nitroaniline	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Nitroaniline	ND		9.7	2.4	ug/L		04/14/20 11:12	04/20/20 22:56	1
Nitrobenzene	ND		9.7	0.53	ug/L		04/14/20 11:12	04/20/20 22:56	1
2-Nitrophenol	ND		9.7	0.63	ug/L		04/14/20 11:12	04/20/20 22:56	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/14/20 11:12	04/20/20 22:56	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 22:56	1

Client Sample ID: MW1-ROX-040920

Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-3

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		9.7	3.2	ug/L		04/14/20 11:12	04/20/20 22:56	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		04/14/20 11:12	04/20/20 22:56	1
Pentachlorophenol	ND		19	1.8	ug/L		04/14/20 11:12	04/20/20 22:56	1
Phenol	ND		9.7	2.5	ug/L		04/14/20 11:12	04/20/20 22:56	1
Pyridine	ND		9.7	3.1	ug/L		04/14/20 11:12	04/20/20 22:56	1
Quinoline	ND		9.7	5.8	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		04/14/20 11:12	04/20/20 22:56	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*34 - 120*	*04/14/20 11:12*	*04/20/20 22:56*	*1*
2-Fluorophenol	*3*	*X*	*10 - 120*	*04/14/20 11:12*	*04/20/20 22:56*	*1*
Nitrobenzene-d5	*83*		*27 - 120*	*04/14/20 11:12*	*04/20/20 22:56*	*1*
Phenol-d5	*9*	*X*	*10 - 120*	*04/14/20 11:12*	*04/20/20 22:56*	*1*
Terphenyl-d14	*104*		*53 - 125*	*04/14/20 11:12*	*04/20/20 22:56*	*1*
2,4,6-Tribromophenol	*18*		*15 - 135*	*04/14/20 11:12*	*04/20/20 22:56*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/24/20 23:11	1
Benzenethiol	ND	H **1	9.9	1.7	ug/L		04/23/20 13:48	04/24/20 23:11	1
Benzoic acid	ND	H	30	7.2	ug/L		04/23/20 13:48	04/24/20 23:11	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		04/23/20 13:48	04/24/20 23:11	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		04/23/20 13:48	04/24/20 23:11	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		04/23/20 13:48	04/24/20 23:11	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	5.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		04/23/20 13:48	04/24/20 23:11	1
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Chloro-3-methylphenol	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/24/20 23:11	1
2-Chloronaphthalene	ND	H	9.9	0.52	ug/L		04/23/20 13:48	04/24/20 23:11	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
Dibenzofuran	ND	H	9.9	0.52	ug/L		04/23/20 13:48	04/24/20 23:11	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4-Dimethylphenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:11	1
Dimethyl phthalate	ND	H	9.9	0.60	ug/L		04/23/20 13:48	04/24/20 23:11	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		04/23/20 13:48	04/24/20 23:11	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,6-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/24/20 23:11	1
Di-n-octyl phthalate	ND	H	9.9	0.44	ug/L		04/23/20 13:48	04/24/20 23:11	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:11	1

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

Job ID: 400-186546-1

Client Sample ID: MW1-ROX-040920
Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		04/23/20 13:48	04/24/20 23:11	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		04/23/20 13:48	04/24/20 23:11	1
Hexachloroethane	ND	H	9.9	4.2	ug/L		04/23/20 13:48	04/24/20 23:11	1
Indene	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:11	1
Isophorone	ND	H	9.9	0.57	ug/L		04/23/20 13:48	04/24/20 23:11	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/24/20 23:11	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/24/20 23:11	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Nitroaniline	ND	H	9.9	2.5	ug/L		04/23/20 13:48	04/24/20 23:11	1
Nitrobenzene	ND	H	9.9	0.55	ug/L		04/23/20 13:48	04/24/20 23:11	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		04/23/20 13:48	04/24/20 23:11	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		04/23/20 13:48	04/24/20 23:11	1
N-Nitrosodimethylamine	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:11	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		04/23/20 13:48	04/24/20 23:11	1
N-Nitrosodiphenylamine	ND	H	9.9	0.47	ug/L		04/23/20 13:48	04/24/20 23:11	1
Pentachlorophenol	ND	H	20	1.8	ug/L		04/23/20 13:48	04/24/20 23:11	1
Phenol	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/24/20 23:11	1
Pyridine	ND	H	9.9	3.2	ug/L		04/23/20 13:48	04/24/20 23:11	1
Quinoline	ND	H *	9.9	6.0	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4,5-Trichlorophenol	ND	H	9.9	3.7	ug/L		04/23/20 13:48	04/24/20 23:11	1
2,4,6-Trichlorophenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*04/23/20 13:48*	*04/24/20 23:11*	*1*
2-Fluorophenol	*12*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:11*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*04/23/20 13:48*	*04/24/20 23:11*	*1*
Phenol-d5	*30*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:11*	*1*
Terphenyl-d14	*94*		*53 - 125*	*04/23/20 13:48*	*04/24/20 23:11*	*1*
2,4,6-Tribromophenol	*48*		*15 - 135*	*04/23/20 13:48*	*04/24/20 23:11*	*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	0.0056	ug/L		04/20/20 09:04	04/22/20 16:25	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		04/20/20 09:04	04/22/20 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/20/20 09:04*	*04/22/20 16:25*	*1*

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

Job ID: 400-186546-1

Client Sample ID: MW24-ROX-040920
Date Collected: 04/09/20 10:40
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-4
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			04/17/20 17:37	1
Acrolein	ND		20	10	ug/L			04/17/20 17:37	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 17:37	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 17:37	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 17:37	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 17:37	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 17:37	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 17:37	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 17:37	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 17:37	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 17:37	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 17:37	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 17:37	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 17:37	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 17:37	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 17:37	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 17:37	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 17:37	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 17:37	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 17:37	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 17:37	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 17:37	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 17:37	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 17:37	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 17:37	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 17:37	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 17:37	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 17:37	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 17:37	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 17:37	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 17:37	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 17:37	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 17:37	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 17:37	1

Client Sample ID: MW24-ROX-040920

Date Collected: 04/09/20 10:40
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-4

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			04/17/20 17:37	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 17:37	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 17:37	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 17:37	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 17:37	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 17:37	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 17:37	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 17:37	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 17:37	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 17:37	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 17:37	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 17:37	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 17:37	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 17:37	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 17:37	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 17:37	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 17:37	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*04/17/20 17:37*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*04/17/20 17:37*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/17/20 17:37*	*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		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 05:06	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 05:06	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 05:06	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 05:06	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 05:06	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 05:06	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 05:06	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/15/20 15:55	04/21/20 05:06	1
Chrysene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 05:06	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 05:06	1
Fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 05:06	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 05:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 05:06	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 05:06	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 05:06	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 05:06	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/15/20 15:55	04/21/20 05:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*145*	*X*	*33 - 138*	*04/15/20 15:55*	*04/21/20 05:06*	*1*
2-Fluorobiphenyl	*88*		*15 - 122*	*04/15/20 15:55*	*04/21/20 05:06*	*1*

Client Sample ID: MW24-ROX-040920
Date Collected: 04/09/20 10:40
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*73*		*19 - 130*	*04/15/20 15:55*	*04/21/20 05:06*	*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		04/15/20 15:55	04/20/20 18:46	1
Benzenethiol	ND	*1	10	1.7	ug/L		04/15/20 15:55	04/20/20 18:46	1
Benzoic acid	ND		30	7.3	ug/L		04/15/20 15:55	04/20/20 18:46	1
Benzyl alcohol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 18:46	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/15/20 15:55	04/20/20 18:46	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/15/20 15:55	04/20/20 18:46	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/15/20 15:55	04/20/20 18:46	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Chloroaniline	ND		10	3.4	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 18:46	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 18:46	1
2-Chlorophenol	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Dibenzofuran	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 18:46	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Diethyl phthalate	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 18:46	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/15/20 15:55	04/20/20 18:46	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/15/20 15:55	04/20/20 18:46	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 18:46	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/15/20 15:55	04/20/20 18:46	1
1,4-Dioxane	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/15/20 15:55	04/20/20 18:46	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 18:46	1
Hexachloroethane	ND		10	4.2	ug/L		04/15/20 15:55	04/20/20 18:46	1
Indene	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
Isophorone	ND		10	0.57	ug/L		04/15/20 15:55	04/20/20 18:46	1
2-Methylphenol	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 18:46	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
2-Nitroaniline	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 18:46	1
3-Nitroaniline	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Nitroaniline	ND		10	2.5	ug/L		04/15/20 15:55	04/20/20 18:46	1
Nitrobenzene	ND		10	0.55	ug/L		04/15/20 15:55	04/20/20 18:46	1
2-Nitrophenol	ND		10	0.65	ug/L		04/15/20 15:55	04/20/20 18:46	1
4-Nitrophenol	ND		10	2.1	ug/L		04/15/20 15:55	04/20/20 18:46	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 18:46	1

Client Sample ID: MW24-ROX-040920
Date Collected: 04/09/20 10:40
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-4
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		04/15/20 15:55	04/20/20 18:46	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/15/20 15:55	04/20/20 18:46	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 18:46	1
Phenol	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 18:46	1
Pyridine	ND		10	3.2	ug/L		04/15/20 15:55	04/20/20 18:46	1
Quinoline	ND		10	6.0	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/15/20 15:55	04/20/20 18:46	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*54*		*34 - 120*	*04/15/20 15:55*	*04/20/20 18:46*	*1*
2-Fluorophenol	*29*		*10 - 120*	*04/15/20 15:55*	*04/20/20 18:46*	*1*
Nitrobenzene-d5	*63*		*27 - 120*	*04/15/20 15:55*	*04/20/20 18:46*	*1*
Phenol-d5	*44*		*10 - 120*	*04/15/20 15:55*	*04/20/20 18:46*	*1*
Terphenyl-d14	*57*		*53 - 125*	*04/15/20 15:55*	*04/20/20 18:46*	*1*
2,4,6-Tribromophenol	*36*		*15 - 135*	*04/15/20 15:55*	*04/20/20 18:46*	*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	0.0056	ug/L		04/20/20 09:04	04/22/20 16:45	1
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		04/20/20 09:04	04/22/20 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*04/20/20 09:04*	*04/22/20 16:45*	*1*

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

Job ID: 400-186546-1

Client Sample ID: P54-ROX-040920
Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
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			04/17/20 18:02	1
Acrolein	ND		20	10	ug/L			04/17/20 18:02	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 18:02	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 18:02	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 18:02	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 18:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 18:02	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 18:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 18:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 18:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 18:02	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 18:02	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 18:02	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 18:02	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 18:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 18:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 18:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 18:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 18:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 18:02	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 18:02	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 18:02	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 18:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 18:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 18:02	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 18:02	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 18:02	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 18:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 18:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 18:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 18:02	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 18:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 18:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 18:02	1

Client Sample ID: P54-ROX-040920
Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
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			04/17/20 18:02	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 18:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 18:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 18:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 18:02	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 18:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 18:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 18:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 18:02	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 18:02	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 18:02	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 18:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 18:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 18:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 18:02	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 18:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 18:02	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/17/20 18:02*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*04/17/20 18:02*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/17/20 18:02*	*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		04/14/20 11:12	04/20/20 18:27	1
Acenaphthylene	ND		0.19	0.044	ug/L		04/14/20 11:12	04/20/20 18:27	1
Anthracene	ND		0.19	0.030	ug/L		04/14/20 11:12	04/20/20 18:27	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		04/14/20 11:12	04/20/20 18:27	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/14/20 11:12	04/20/20 18:27	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 18:27	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/14/20 11:12	04/20/20 18:27	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/14/20 11:12	04/20/20 18:27	1
Chrysene	ND		0.19	0.072	ug/L		04/14/20 11:12	04/20/20 18:27	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		04/14/20 11:12	04/20/20 18:27	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 18:27	1
Fluorene	ND		0.19	0.11	ug/L		04/14/20 11:12	04/20/20 18:27	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/14/20 11:12	04/20/20 18:27	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 18:27	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 18:27	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		04/14/20 11:12	04/20/20 18:27	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*133*		*33 - 138*	*04/14/20 11:12*	*04/20/20 18:27*	*1*
2-Fluorobiphenyl	*96*		*15 - 122*	*04/14/20 11:12*	*04/20/20 18:27*	*1*

Client Sample ID: P54-ROX-040920
Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		19 - 130	04/14/20 11:12	04/20/20 18:27	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		04/14/20 11:12	04/20/20 23:38	1
Benzenethiol	ND	*	9.7	1.7	ug/L		04/14/20 11:12	04/20/20 23:38	1
Benzoic acid	ND		29	7.1	ug/L		04/14/20 11:12	04/20/20 23:38	1
Benzyl alcohol	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/14/20 11:12	04/20/20 23:38	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		04/14/20 11:12	04/20/20 23:38	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		04/14/20 11:12	04/20/20 23:38	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		04/14/20 11:12	04/20/20 23:38	1
Butyl benzyl phthalate	ND	*	9.7	0.67	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		04/14/20 11:12	04/20/20 23:38	1
2-Chloronaphthalene	ND		9.7	0.51	ug/L		04/14/20 11:12	04/20/20 23:38	1
2-Chlorophenol	ND		9.7	2.1	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
Dibenz[a,h]acridine	ND	*	9.7	2.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
Dibenzofuran	ND		9.7	0.51	ug/L		04/14/20 11:12	04/20/20 23:38	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
Diethyl phthalate	ND	*	9.7	0.68	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 23:38	1
Dimethyl phthalate	ND	*	9.7	0.58	ug/L		04/14/20 11:12	04/20/20 23:38	1
Di-n-butyl phthalate	ND	*	9.7	2.6	ug/L		04/14/20 11:12	04/20/20 23:38	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		04/14/20 11:12	04/20/20 23:38	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		04/14/20 11:12	04/20/20 23:38	1
1,4-Dioxane	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 23:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 23:38	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		04/14/20 11:12	04/20/20 23:38	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/14/20 11:12	04/20/20 23:38	1
Hexachloroethane	ND		9.7	4.1	ug/L		04/14/20 11:12	04/20/20 23:38	1
Indene	ND		9.7	0.97	ug/L		04/14/20 11:12	04/20/20 23:38	1
Isophorone	ND		9.7	0.55	ug/L		04/14/20 11:12	04/20/20 23:38	1
2-Methylphenol	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 23:38	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/14/20 11:12	04/20/20 23:38	1
2-Nitroaniline	ND		9.7	2.1	ug/L		04/14/20 11:12	04/20/20 23:38	1
3-Nitroaniline	ND		9.7	1.7	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Nitroaniline	ND		9.7	2.4	ug/L		04/14/20 11:12	04/20/20 23:38	1
Nitrobenzene	ND		9.7	0.53	ug/L		04/14/20 11:12	04/20/20 23:38	1
2-Nitrophenol	ND		9.7	0.63	ug/L		04/14/20 11:12	04/20/20 23:38	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/14/20 11:12	04/20/20 23:38	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 23:38	1

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

Job ID: 400-186546-1

Client Sample ID: P54-ROX-040920
Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
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		04/14/20 11:12	04/20/20 23:38	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		04/14/20 11:12	04/20/20 23:38	1
Pentachlorophenol	ND		19	1.8	ug/L		04/14/20 11:12	04/20/20 23:38	1
Phenol	ND		9.7	2.5	ug/L		04/14/20 11:12	04/20/20 23:38	1
Pyridine	ND		9.7	3.1	ug/L		04/14/20 11:12	04/20/20 23:38	1
Quinoline	ND		9.7	5.8	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		04/14/20 11:12	04/20/20 23:38	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		04/14/20 11:12	04/20/20 23:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*34 - 120*	*04/14/20 11:12*	*04/20/20 23:38*	*1*
2-Fluorophenol	*79*		*10 - 120*	*04/14/20 11:12*	*04/20/20 23:38*	*1*
Nitrobenzene-d5	*88*		*27 - 120*	*04/14/20 11:12*	*04/20/20 23:38*	*1*
Phenol-d5	*76*		*10 - 120*	*04/14/20 11:12*	*04/20/20 23:38*	*1*
Terphenyl-d14	*128*	*X*	*53 - 125*	*04/14/20 11:12*	*04/20/20 23:38*	*1*
2,4,6-Tribromophenol	*94*		*15 - 135*	*04/14/20 11:12*	*04/20/20 23:38*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/24/20 23:36	1
Benzenethiol	ND	H **1	9.9	1.7	ug/L		04/23/20 13:48	04/24/20 23:36	1
Benzoic acid	ND	H	30	7.3	ug/L		04/23/20 13:48	04/24/20 23:36	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.69	ug/L		04/23/20 13:48	04/24/20 23:36	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.74	ug/L		04/23/20 13:48	04/24/20 23:36	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		04/23/20 13:48	04/24/20 23:36	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	5.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		04/23/20 13:48	04/24/20 23:36	1
Butyl benzyl phthalate	ND	H	9.9	0.69	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Chloro-3-methylphenol	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/24/20 23:36	1
2-Chloronaphthalene	ND	H	9.9	0.52	ug/L		04/23/20 13:48	04/24/20 23:36	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
Dibenzofuran	ND	H	9.9	0.52	ug/L		04/23/20 13:48	04/24/20 23:36	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
Diethyl phthalate	ND	H	9.9	0.70	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4-Dimethylphenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:36	1
Dimethyl phthalate	ND	H	9.9	0.60	ug/L		04/23/20 13:48	04/24/20 23:36	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		04/23/20 13:48	04/24/20 23:36	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,6-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/24/20 23:36	1
Di-n-octyl phthalate	ND	H	9.9	0.44	ug/L		04/23/20 13:48	04/24/20 23:36	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:36	1

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

Job ID: 400-186546-1

Client Sample ID: P54-ROX-040920
Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		04/23/20 13:48	04/24/20 23:36	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		04/23/20 13:48	04/24/20 23:36	1
Hexachloroethane	ND	H	9.9	4.2	ug/L		04/23/20 13:48	04/24/20 23:36	1
Indene	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/24/20 23:36	1
Isophorone	ND	H	9.9	0.57	ug/L		04/23/20 13:48	04/24/20 23:36	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/24/20 23:36	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/24/20 23:36	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Nitroaniline	ND	H	9.9	2.5	ug/L		04/23/20 13:48	04/24/20 23:36	1
Nitrobenzene	ND	H	9.9	0.55	ug/L		04/23/20 13:48	04/24/20 23:36	1
2-Nitrophenol	ND	H	9.9	0.65	ug/L		04/23/20 13:48	04/24/20 23:36	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		04/23/20 13:48	04/24/20 23:36	1
N-Nitrosodimethylamine	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:36	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		04/23/20 13:48	04/24/20 23:36	1
N-Nitrosodiphenylamine	ND	H	9.9	0.47	ug/L		04/23/20 13:48	04/24/20 23:36	1
Pentachlorophenol	ND	H	20	1.8	ug/L		04/23/20 13:48	04/24/20 23:36	1
Phenol	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/24/20 23:36	1
Pyridine	ND	H	9.9	3.2	ug/L		04/23/20 13:48	04/24/20 23:36	1
Quinoline	ND	H *	9.9	6.0	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4,5-Trichlorophenol	ND	H	9.9	3.7	ug/L		04/23/20 13:48	04/24/20 23:36	1
2,4,6-Trichlorophenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/24/20 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*04/23/20 13:48*	*04/24/20 23:36*	*1*
2-Fluorophenol	*17*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:36*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*04/23/20 13:48*	*04/24/20 23:36*	*1*
Phenol-d5	*48*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:36*	*1*
Terphenyl-d14	*105*		*53 - 125*	*04/23/20 13:48*	*04/24/20 23:36*	*1*
2,4,6-Tribromophenol	*67*		*15 - 135*	*04/23/20 13:48*	*04/24/20 23:36*	*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		0.033	0.0060	ug/L		04/20/20 09:04	04/22/20 17:05	1
1,2-Dibromoethane	ND		0.022	0.0054	ug/L		04/20/20 09:04	04/22/20 17:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*04/20/20 09:04*	*04/22/20 17:05*	*1*

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

Job ID: 400-186546-1

Client Sample ID: MW11-ROX-040920
Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**13**	**J**	25	10	ug/L			04/17/20 10:04	1
Acrolein	ND		20	10	ug/L			04/17/20 10:04	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 10:04	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 10:04	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 10:04	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 10:04	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 10:04	1
Bromomethane	ND	F1	1.0	0.98	ug/L			04/17/20 10:04	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 10:04	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Chloroethane	ND	F2	1.0	0.76	ug/L			04/17/20 10:04	1
2-Chloroethyl vinyl ether	ND	F2	5.0	2.0	ug/L			04/17/20 10:04	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 10:04	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 10:04	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 10:04	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 10:04	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 10:04	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 10:04	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 10:04	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 10:04	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 10:04	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 10:04	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 10:04	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 10:04	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 10:04	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 10:04	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 10:04	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 10:04	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 10:04	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 10:04	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 10:04	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 10:04	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 10:04	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 10:04	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/17/20 10:04	1

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

Job ID: 400-186546-1

Client Sample ID: MW11-ROX-040920
Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
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			04/17/20 10:04	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 10:04	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 10:04	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 10:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 10:04	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 10:04	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 10:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 10:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 10:04	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 10:04	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 10:04	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 10:04	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 10:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 10:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 10:04	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 10:04	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 10:04	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*04/17/20 10:04*	*1*
Dibromofluoromethane	*103*		*81 - 121*		*04/17/20 10:04*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/17/20 10:04*	*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	F2	0.19	0.031	ug/L		04/14/20 11:12	04/20/20 17:41	1
Acenaphthylene	ND	F2	0.19	0.044	ug/L		04/14/20 11:12	04/20/20 17:41	1
Anthracene	ND	F2	0.19	0.030	ug/L		04/14/20 11:12	04/20/20 17:41	1
Benzo[a]anthracene	ND	F1 UJ	0.19	0.045	ug/L		04/14/20 11:12	04/20/20 17:41	1
Benzo[a]pyrene	ND	F1 *3 UJ	0.19	0.041	ug/L		04/14/20 11:12	04/20/20 17:41	1
Benzo[b]fluoranthene	ND	F1 *3 UJ	0.19	0.066	ug/L		04/14/20 11:12	04/20/20 17:41	1
Benzo[g,h,i]perylene	ND	F1 *3 UJ	0.19	0.13	ug/L		04/14/20 11:12	04/20/20 17:41	1
Benzo[k]fluoranthene	ND	F1 *3 UJ	0.19	0.097	ug/L		04/14/20 11:12	04/20/20 17:41	1
Chrysene	ND	F1 UJ	0.19	0.072	ug/L		04/14/20 11:12	04/20/20 17:41	1
Dibenz(a,h)anthracene	ND	F1 *3 UJ	0.19	0.045	ug/L		04/14/20 11:12	04/20/20 17:41	1
Fluoranthene	ND		0.19	0.066	ug/L		04/14/20 11:12	04/20/20 17:41	1
Fluorene	ND	F2	0.19	0.11	ug/L		04/14/20 11:12	04/20/20 17:41	1
Indeno[1,2,3-cd]pyrene	ND	*3 UJ	0.19	0.12	ug/L		04/14/20 11:12	04/20/20 17:41	1
Phenanthrene	ND		0.19	0.035	ug/L		04/14/20 11:12	04/20/20 17:41	1
Pyrene	ND		0.19	0.039	ug/L		04/14/20 11:12	04/20/20 17:41	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		04/14/20 11:12	04/20/20 17:41	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/14/20 11:12	04/20/20 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*225*	*X*	*33 - 138*	*04/14/20 11:12*	*04/20/20 17:41*	*1*
2-Fluorobiphenyl	*169*	*X*	*15 - 122*	*04/14/20 11:12*	*04/20/20 17:41*	*1*

Client Sample ID: MW11-ROX-040920
Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	155	X	19 - 130	04/14/20 11:12	04/20/20 17:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	F2	9.7	3.7	ug/L		04/14/20 11:12	04/21/20 00:42	1
Benzenethiol	ND	*	9.7	1.7	ug/L		04/14/20 11:12	04/21/20 00:42	1
Benzoic acid	ND		29	7.1	ug/L		04/14/20 11:12	04/21/20 00:42	1
Benzyl alcohol	ND	F2	9.7	1.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/14/20 11:12	04/21/20 00:42	1
Bis(2-chloroethyl)ether	ND	F2	9.7	0.72	ug/L		04/14/20 11:12	04/21/20 00:42	1
bis (2-chloroisopropyl) ether	ND	F2	9.7	0.79	ug/L		04/14/20 11:12	04/21/20 00:42	1
Bis(2-ethylhexyl) phthalate	**5.1**	**J F2**	9.7	4.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Bromophenyl phenyl ether	ND	F2	9.7	0.31	ug/L		04/14/20 11:12	04/21/20 00:42	1
Butyl benzyl phthalate	ND	F1 F2 *	9.7	0.67	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Chloro-3-methylphenol	ND	F2	9.7	3.7	ug/L		04/14/20 11:12	04/21/20 00:42	1
2-Chloronaphthalene	ND	F2	9.7	0.50	ug/L		04/14/20 11:12	04/21/20 00:42	1
2-Chlorophenol	ND	F2	9.7	2.1	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Chlorophenyl phenyl ether	ND	F2	9.7	1.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
Dibenz[a,h]acridine	ND	*3 F2 F1 *	9.7	2.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
Dibenzofuran	ND	F2	9.7	0.50	ug/L		04/14/20 11:12	04/21/20 00:42	1
3,3'-Dichlorobenzidine	ND	F2	9.7	2.5	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4-Dichlorophenol	ND	F2	9.7	2.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
Diethyl phthalate	ND	F1 *	9.7	0.68	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4-Dimethylphenol	ND	F2	9.7	3.4	ug/L		04/14/20 11:12	04/21/20 00:42	1
Dimethyl phthalate	ND	F1 *	9.7	0.58	ug/L		04/14/20 11:12	04/21/20 00:42	1
Di-n-butyl phthalate	ND	F2 F1 *	9.7	2.6	ug/L		04/14/20 11:12	04/21/20 00:42	1
4,6-Dinitro-ortho-cresol	ND	F2	9.7	1.9	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4-Dinitrophenol	ND	F2	29	3.3	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4-Dinitrotoluene	ND	F2	9.7	1.8	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,6-Dinitrotoluene	ND	F2	9.7	1.8	ug/L		04/14/20 11:12	04/21/20 00:42	1
Di-n-octyl phthalate	ND	F2	9.7	0.43	ug/L		04/14/20 11:12	04/21/20 00:42	1
1,4-Dioxane	ND	F2	9.7	0.97	ug/L		04/14/20 11:12	04/21/20 00:42	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	9.7	0.97	ug/L		04/14/20 11:12	04/21/20 00:42	1
Hexachlorobenzene	ND	F2	9.7	0.24	ug/L		04/14/20 11:12	04/21/20 00:42	1
Hexachlorocyclopentadiene	ND	F2	19	2.5	ug/L		04/14/20 11:12	04/21/20 00:42	1
Hexachloroethane	ND	F2	9.7	4.1	ug/L		04/14/20 11:12	04/21/20 00:42	1
Indene	ND	F2	9.7	0.97	ug/L		04/14/20 11:12	04/21/20 00:42	1
Isophorone	ND	F2	9.7	0.55	ug/L		04/14/20 11:12	04/21/20 00:42	1
2-Methylphenol	ND	F2	9.7	1.7	ug/L		04/14/20 11:12	04/21/20 00:42	1
3 & 4 Methylphenol	ND	F2	19	1.0	ug/L		04/14/20 11:12	04/21/20 00:42	1
2-Nitroaniline	ND	F2	9.7	2.1	ug/L		04/14/20 11:12	04/21/20 00:42	1
3-Nitroaniline	ND	F2	9.7	1.7	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Nitroaniline	ND	F2	9.7	2.4	ug/L		04/14/20 11:12	04/21/20 00:42	1
Nitrobenzene	ND	F2	9.7	0.53	ug/L		04/14/20 11:12	04/21/20 00:42	1
2-Nitrophenol	ND		9.7	0.63	ug/L		04/14/20 11:12	04/21/20 00:42	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/14/20 11:12	04/21/20 00:42	1
N-Nitrosodimethylamine	ND	F2	9.7	3.4	ug/L		04/14/20 11:12	04/21/20 00:42	1

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

Job ID: 400-186546-1

Client Sample ID: MW11-ROX-040920
Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
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	F2	9.7	3.2	ug/L		04/14/20 11:12	04/21/20 00:42	1
N-Nitrosodiphenylamine	ND	F2	9.7	0.46	ug/L		04/14/20 11:12	04/21/20 00:42	1
Pentachlorophenol	ND	F2	19	1.8	ug/L		04/14/20 11:12	04/21/20 00:42	1
Phenol	ND	F2	9.7	2.5	ug/L		04/14/20 11:12	04/21/20 00:42	1
Pyridine	ND	F2	9.7	3.1	ug/L		04/14/20 11:12	04/21/20 00:42	1
Quinoline	ND	F2	9.7	5.8	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4,5-Trichlorophenol	ND	F2	9.7	3.6	ug/L		04/14/20 11:12	04/21/20 00:42	1
2,4,6-Trichlorophenol	ND	F2	9.7	3.4	ug/L		04/14/20 11:12	04/21/20 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*194*	*X*	*34 - 120*	*04/14/20 11:12*	*04/21/20 00:42*	*1*
2-Fluorophenol	*4*	*X*	*10 - 120*	*04/14/20 11:12*	*04/21/20 00:42*	*1*
Nitrobenzene-d5	*160*	*X*	*27 - 120*	*04/14/20 11:12*	*04/21/20 00:42*	*1*
Phenol-d5	*8*	*X*	*10 - 120*	*04/14/20 11:12*	*04/21/20 00:42*	*1*
Terphenyl-d14	*264*	*X*	*53 - 125*	*04/14/20 11:12*	*04/21/20 00:42*	*1*
2,4,6-Tribromophenol	*15*		*15 - 135*	*04/14/20 11:12*	*04/21/20 00:42*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/25/20 00:02	1
Benzenethiol	ND	H *1	9.9	1.7	ug/L		04/23/20 13:48	04/25/20 00:02	1
Benzoic acid	ND	H	30	7.2	ug/L		04/23/20 13:48	04/25/20 00:02	1
Benzyl alcohol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
Bis(2-chloroethoxy)methane	ND	H	9.9	0.68	ug/L		04/23/20 13:48	04/25/20 00:02	1
Bis(2-chloroethyl)ether	ND	H	9.9	0.73	ug/L		04/23/20 13:48	04/25/20 00:02	1
bis (2-chloroisopropyl) ether	ND	H	9.9	0.80	ug/L		04/23/20 13:48	04/25/20 00:02	1
Bis(2-ethylhexyl) phthalate	ND	H	9.9	4.9	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Bromophenyl phenyl ether	ND	H	9.9	0.32	ug/L		04/23/20 13:48	04/25/20 00:02	1
Butyl benzyl phthalate	ND	H	9.9	0.68	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Chloroaniline	ND	H	9.9	3.4	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Chloro-3-methylphenol	ND	H	9.9	3.8	ug/L		04/23/20 13:48	04/25/20 00:02	1
2-Chloronaphthalene	ND	H	9.9	0.51	ug/L		04/23/20 13:48	04/25/20 00:02	1
2-Chlorophenol	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Chlorophenyl phenyl ether	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
Dibenz[a,h]acridine	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
Dibenzofuran	ND	H	9.9	0.51	ug/L		04/23/20 13:48	04/25/20 00:02	1
3,3'-Dichlorobenzidine	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4-Dichlorophenol	ND	H	9.9	3.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
Diethyl phthalate	ND	H	9.9	0.69	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4-Dimethylphenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/25/20 00:02	1
Dimethyl phthalate	ND	H	9.9	0.59	ug/L		04/23/20 13:48	04/25/20 00:02	1
Di-n-butyl phthalate	ND	H	9.9	2.7	ug/L		04/23/20 13:48	04/25/20 00:02	1
4,6-Dinitro-ortho-cresol	ND	H	9.9	2.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4-Dinitrophenol	ND	H	30	3.4	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,6-Dinitrotoluene	ND	H	9.9	1.9	ug/L		04/23/20 13:48	04/25/20 00:02	1
Di-n-octyl phthalate	ND	H	9.9	0.43	ug/L		04/23/20 13:48	04/25/20 00:02	1
1,4-Dioxane	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/25/20 00:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/25/20 00:02	1

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

Job ID: 400-186546-1

Client Sample ID: MW11-ROX-040920
Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND	H	9.9	0.25	ug/L		04/23/20 13:48	04/25/20 00:02	1
Hexachlorocyclopentadiene	ND	H	20	2.6	ug/L		04/23/20 13:48	04/25/20 00:02	1
Hexachloroethane	ND	H	9.9	4.1	ug/L		04/23/20 13:48	04/25/20 00:02	1
Indene	ND	H	9.9	0.99	ug/L		04/23/20 13:48	04/25/20 00:02	1
Isophorone	ND	H	9.9	0.56	ug/L		04/23/20 13:48	04/25/20 00:02	1
2-Methylphenol	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/25/20 00:02	1
3 & 4 Methylphenol	ND	H	20	1.0	ug/L		04/23/20 13:48	04/25/20 00:02	1
2-Nitroaniline	ND	H	9.9	2.2	ug/L		04/23/20 13:48	04/25/20 00:02	1
3-Nitroaniline	ND	H	9.9	1.8	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Nitroaniline	ND	H	9.9	2.4	ug/L		04/23/20 13:48	04/25/20 00:02	1
Nitrobenzene	ND	H	9.9	0.54	ug/L		04/23/20 13:48	04/25/20 00:02	1
2-Nitrophenol	ND	H	9.9	0.64	ug/L		04/23/20 13:48	04/25/20 00:02	1
4-Nitrophenol	ND	H	9.9	2.1	ug/L		04/23/20 13:48	04/25/20 00:02	1
N-Nitrosodimethylamine	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/25/20 00:02	1
N-Nitrosodi-n-propylamine	ND	H	9.9	3.3	ug/L		04/23/20 13:48	04/25/20 00:02	1
N-Nitrosodiphenylamine	ND	H	9.9	0.46	ug/L		04/23/20 13:48	04/25/20 00:02	1
Pentachlorophenol	ND	H	20	1.8	ug/L		04/23/20 13:48	04/25/20 00:02	1
Phenol	ND	H	9.9	2.6	ug/L		04/23/20 13:48	04/25/20 00:02	1
Pyridine	ND	H	9.9	3.2	ug/L		04/23/20 13:48	04/25/20 00:02	1
Quinoline	ND	H *	9.9	5.9	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4,5-Trichlorophenol	ND	H	9.9	3.7	ug/L		04/23/20 13:48	04/25/20 00:02	1
2,4,6-Trichlorophenol	ND	H	9.9	3.5	ug/L		04/23/20 13:48	04/25/20 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*04/23/20 13:48*	*04/25/20 00:02*	*1*
2-Fluorophenol	*19*		*10 - 120*	*04/23/20 13:48*	*04/25/20 00:02*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*04/23/20 13:48*	*04/25/20 00:02*	*1*
Phenol-d5	*54*		*10 - 120*	*04/23/20 13:48*	*04/25/20 00:02*	*1*
Terphenyl-d14	*95*		*53 - 125*	*04/23/20 13:48*	*04/25/20 00:02*	*1*
2,4,6-Tribromophenol	*71*		*15 - 135*	*04/23/20 13:48*	*04/25/20 00:02*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		04/20/20 09:04	04/21/20 13:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*114*		*51 - 149*	*04/20/20 09:04*	*04/21/20 13:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0056	ug/L		04/20/20 09:04	04/23/20 12:09	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 or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186546-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (78-118)	DBFM (81-121)	TOL (80-120)
400-186546-1	TB-ROX-040920-8260	102	104	96
400-186546-1 - RA	TB-ROX-040920-8260	81	94	103
400-186546-3	MW1-ROX-040920	97	104	97
400-186546-4	MW24-ROX-040920	100	106	97
400-186546-5	P54-ROX-040920	99	108	96
400-186546-6	MW11-ROX-040920	101	103	98
400-186546-6 MS	MW11-ROX-040920	99	105	97
400-186546-6 MSD	MW11-ROX-040920	98	106	98
LCS 400-486222/1002	Lab Control Sample	98	106	97
LCS 400-486405/1002	Lab Control Sample	91	95	98
MB 400-486222/4	Method Blank	99	106	96
MB 400-486405/4	Method Blank	85	89	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)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
400-186546-3	MW1-ROX-040920	92	3 X	83	9 X	104	18
400-186546-3 - RERA	MW1-ROX-040920	77	12	67	30	94	48
400-186546-4	MW24-ROX-040920	54	29	63	44	57	36
400-186546-5	P54-ROX-040920	101	79	88	76	128 X	94
400-186546-5 - RERA	P54-ROX-040920	83	17	72	48	105	67
400-186546-6	MW11-ROX-040920	194 X	4 X	160 X	8 X	264 X	15
400-186546-6 - RERA	MW11-ROX-040920	83	19	73	54	95	71
400-186546-6 MS	MW11-ROX-040920	61	48	54	48	80	74
400-186546-6 MSD	MW11-ROX-040920	91	66	81	65	92	100
LCS 400-485894/2-A	Lab Control Sample	60	50	61	49	72	64
LCS 400-485894/3-A	Lab Control Sample	112	90	102	99	136 X	81
LCS 400-486081/2-A	Lab Control Sample	54	48	70	58	58	66
LCS 400-486081/4-A	Lab Control Sample	51	38	62	53	57	43
LCS 400-486835/2-A	Lab Control Sample	73	43	72	60	74	79
LCS 400-486835/4-A	Lab Control Sample	55	31	52	48	58	53
LCSD 400-485894/4-A	Lab Control Sample Dup	95	77	90	79	121	66
LCSD 400-486081/3-A	Lab Control Sample Dup	50	43	64	52	56	59
LCSD 400-486081/5-A	Lab Control Sample Dup	53	44	64	55	57	38
LCSD 400-486835/3-A	Lab Control Sample Dup	58	28	58	47	66	63
LCSD 400-486835/5-A	Lab Control Sample Dup	61	27	56	49	63	56
MB 400-485894/1-A	Method Blank	108	94	103	92	136 X	92
MB 400-486081/1-A	Method Blank	55	51	65	58	58	29
MB 400-486835/1-A	Method Blank	57	34	52	49	57	58

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol

Surrogate Summary

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

Job ID: 400-186546-1

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186546-3	MW1-ROX-040920	115	93	86
400-186546-4	MW24-ROX-040920	145 X	88	73
400-186546-5	P54-ROX-040920	133	96	82
400-186546-6	MW11-ROX-040920	225 X	169 X	155 X
400-186546-6 MS	MW11-ROX-040920	75	57	50
400-186546-6 MSD	MW11-ROX-040920	86	86	68
LCS 400-485894/2-A	Lab Control Sample	107	78	52
LCS 400-486081/2-A	Lab Control Sample	119	89	63
LCSD 400-486081/3-A	Lab Control Sample Dup	110	81	66
MB 400-485894/1-A	Method Blank	142 X	89	82
MB 400-486081/1-A	Method Blank	156 X	94	83

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186546-2	TB-ROX-040920-8011	109
400-186546-3	MW1-ROX-040920	108
400-186546-4	MW24-ROX-040920	106
400-186546-5	P54-ROX-040920	103
400-186546-6	MW11-ROX-040920	114
400-186546-6 MS	MW11-ROX-040920	103
400-186546-6 MSD	MW11-ROX-040920	102
LCS 400-486391/2-A	Lab Control Sample	132
LCSD 400-486391/3-A	Lab Control Sample Dup	109
MB 400-486391/1-A	Method Blank	101

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186546-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-040920-8260

Lab Sample ID: 400-186546-1

Date Collected: 04/09/20 00:00
Date Received: 04/10/20 08:46

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	486405	04/20/20 19:26	SAB	TAL PEN
Total/NA	Analysis	8260B		1	5 mL	5 mL	486222	04/17/20 12:24	WPD	TAL PEN

Client Sample ID: TB-ROX-040920-8011

Lab Sample ID: 400-186546-2

Date Collected: 04/09/20 00:00
Date Received: 04/10/20 08:46

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			33.3 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 16:05	DS	TAL PEN

Client Sample ID: MW1-ROX-040920

Lab Sample ID: 400-186546-3

Date Collected: 04/09/20 09:25
Date Received: 04/10/20 08:46

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	486222	04/17/20 17:12	WPD	TAL PEN
Total/NA	Prep	3520C			1032 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 22:56	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1008.2 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 23:11	VC1	TAL PEN
Total/NA	Prep	3520C			1032 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 17:56	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 16:25	DS	TAL PEN

Client Sample ID: MW24-ROX-040920

Lab Sample ID: 400-186546-4

Date Collected: 04/09/20 10:40
Date Received: 04/10/20 08:46

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	486222	04/17/20 17:37	WPD	TAL PEN
Total/NA	Prep	3520C			1001.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 18:46	VC1	TAL PEN
Total/NA	Prep	3520C			1001.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 05:06	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 16:45	DS	TAL PEN

Client Sample ID: P54-ROX-040920

Lab Sample ID: 400-186546-5

Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

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	486222	04/17/20 18:02	WPD	TAL PEN

Client Sample ID: P54-ROX-040920

Date Collected: 04/09/20 11:25
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-5
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			1029.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 23:38	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1006.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/24/20 23:36	VC1	TAL PEN
Total/NA	Prep	3520C			1029.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 18:27	PP1	TAL PEN
Total/NA	Prep	8011			32.2 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 17:05	DS	TAL PEN

Client Sample ID: MW11-ROX-040920

Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6
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	486222	04/17/20 10:04	WPD	TAL PEN
Total/NA	Prep	3520C			1030.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/21/20 00:42	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1012.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	RERA	1			486944	04/25/20 00:02	VC1	TAL PEN
Total/NA	Prep	3520C			1030.2 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 17:41	PP1	TAL PEN
Total/NA	Prep	8011			34.5 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 13:54	DS	TAL PEN
Total/NA	Prep	8011	RA		34.5 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/23/20 12:09	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-485894/1-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 16:55	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486425	04/20/20 13:10	PP1	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486081/1-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:02	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 04:19	PP1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486222/4
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	486222	04/17/20 08:55	WPD	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486391/1-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	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 13:45	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486405/4
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	486405	04/20/20 16:23	SAB	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486835/1-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 16:43	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485894/2-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:16	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 13:25	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-485894/3-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:38	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186546-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486081/2-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:23	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486447	04/21/20 04:35	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486081/4-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 18:05	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486222/1002
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	486222	04/17/20 08:01	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486391/2-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	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486454	04/20/20 16:05	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486405/1002
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	486405	04/20/20 15:23	SAB	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486835/2-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 17:08	S1B	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486835/4-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:46	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-485894/4-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			1000 mL	1 mL	485894	04/14/20 11:11	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 17:59	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486081/3-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:44	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486447	04/21/20 04:50	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486081/5-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 18:25	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486391/3-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	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486454	04/20/20 16:24	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486835/3-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:21	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486835/5-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 17:12	VC1	TAL PEN

Client Sample ID: MW11-ROX-040920

Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6 MS
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486222	04/17/20 11:15	WPD	TAL PEN
Total/NA	Prep	3520C			1030.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/20/20 23:59	VC1	TAL PEN
Total/NA	Prep	3520C			1030.8 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 17:09	PP1	TAL PEN
Total/NA	Prep	8011			34.2 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 14:14	DS	TAL PEN

Client Sample ID: MW11-ROX-040920

Date Collected: 04/09/20 13:00
Date Received: 04/10/20 08:46

Lab Sample ID: 400-186546-6 MSD
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486222	04/17/20 11:38	WPD	TAL PEN
Total/NA	Prep	3520C			1025.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486452	04/21/20 00:21	VC1	TAL PEN
Total/NA	Prep	3520C			1025.6 mL	1 mL	485894	04/14/20 11:12	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486425	04/20/20 17:25	PP1	TAL PEN
Total/NA	Prep	8011			34.7 mL	35 mL	486391	04/20/20 09:04	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 14:34	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 486222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-1	TB-ROX-040920-8260	Total/NA	Water	8260B	
400-186546-3	MW1-ROX-040920	Total/NA	Water	8260B	
400-186546-4	MW24-ROX-040920	Total/NA	Water	8260B	
400-186546-5	P54-ROX-040920	Total/NA	Water	8260B	
400-186546-6	MW11-ROX-040920	Total/NA	Water	8260B	
MB 400-486222/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486222/1002	Lab Control Sample	Total/NA	Water	8260B	
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	8260B	
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	8260B	

Analysis Batch: 486405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-1 - RA	TB-ROX-040920-8260	Total/NA	Water	8260B	
MB 400-486405/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486405/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 485894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-3	MW1-ROX-040920	Total/NA	Water	3520C	
400-186546-5	P54-ROX-040920	Total/NA	Water	3520C	
400-186546-6	MW11-ROX-040920	Total/NA	Water	3520C	
MB 400-485894/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	3520C	
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	3520C	

Prep Batch: 486081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-4	MW24-ROX-040920	Total/NA	Water	3520C	
MB 400-486081/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486081/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486081/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-4	MW24-ROX-040920	Total/NA	Water	8270D	486081
MB 400-486081/1-A	Method Blank	Total/NA	Water	8270D	486081
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	8270D	486081
LCS 400-486081/4-A	Lab Control Sample	Total/NA	Water	8270D	486081
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486081
LCSD 400-486081/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486081

Analysis Batch: 486425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-3	MW1-ROX-040920	Total/NA	Water	8270D LL	485894

GC/MS Semi VOA (Continued)

Analysis Batch: 486425 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-5	P54-ROX-040920	Total/NA	Water	8270D LL	485894
400-186546-6	MW11-ROX-040920	Total/NA	Water	8270D LL	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D LL	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D LL	485894
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	8270D LL	485894
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	8270D LL	485894

Analysis Batch: 486447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-4	MW24-ROX-040920	Total/NA	Water	8270D LL	486081
MB 400-486081/1-A	Method Blank	Total/NA	Water	8270D LL	486081
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486081
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486081

Analysis Batch: 486452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-3	MW1-ROX-040920	Total/NA	Water	8270D	485894
400-186546-5	P54-ROX-040920	Total/NA	Water	8270D	485894
400-186546-6	MW11-ROX-040920	Total/NA	Water	8270D	485894
MB 400-485894/1-A	Method Blank	Total/NA	Water	8270D	485894
LCS 400-485894/2-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCS 400-485894/3-A	Lab Control Sample	Total/NA	Water	8270D	485894
LCSD 400-485894/4-A	Lab Control Sample Dup	Total/NA	Water	8270D	485894
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	8270D	485894
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	8270D	485894

Prep Batch: 486835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-3 - RERA	MW1-ROX-040920	Total/NA	Water	3520C	
400-186546-5 - RERA	P54-ROX-040920	Total/NA	Water	3520C	
400-186546-6 - RERA	MW11-ROX-040920	Total/NA	Water	3520C	
MB 400-486835/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486835/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486835/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-3 - RERA	MW1-ROX-040920	Total/NA	Water	8270D	486835
400-186546-5 - RERA	P54-ROX-040920	Total/NA	Water	8270D	486835
400-186546-6 - RERA	MW11-ROX-040920	Total/NA	Water	8270D	486835
LCS 400-486835/4-A	Lab Control Sample	Total/NA	Water	8270D	486835
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835
LCSD 400-486835/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-486835/1-A	Method Blank	Total/NA	Water	8270D	486835
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	8270D	486835

QC Association Summary

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

Job ID: 400-186546-1

GC Semi VOA

Prep Batch: 486391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-2	TB-ROX-040920-8011	Total/NA	Water	8011	
400-186546-3	MW1-ROX-040920	Total/NA	Water	8011	
400-186546-4	MW24-ROX-040920	Total/NA	Water	8011	
400-186546-5	P54-ROX-040920	Total/NA	Water	8011	
400-186546-6 - RA	MW11-ROX-040920	Total/NA	Water	8011	
400-186546-6	MW11-ROX-040920	Total/NA	Water	8011	
MB 400-486391/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486391/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486391/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	8011	
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	8011	

Analysis Batch: 486454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-486391/2-A	Lab Control Sample	Total/NA	Water	8011	486391
LCSD 400-486391/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486391

Analysis Batch: 486521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-6	MW11-ROX-040920	Total/NA	Water	8011	486391
400-186546-6 MS	MW11-ROX-040920	Total/NA	Water	8011	486391
400-186546-6 MSD	MW11-ROX-040920	Total/NA	Water	8011	486391

Analysis Batch: 486697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186546-2	TB-ROX-040920-8011	Total/NA	Water	8011	486391
400-186546-3	MW1-ROX-040920	Total/NA	Water	8011	486391
400-186546-4	MW24-ROX-040920	Total/NA	Water	8011	486391
400-186546-5	P54-ROX-040920	Total/NA	Water	8011	486391
400-186546-6 - RA	MW11-ROX-040920	Total/NA	Water	8011	486391
MB 400-486391/1-A	Method Blank	Total/NA	Water	8011	486391

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

Lab Sample ID: MB 400-486222/4
Matrix: Water
Analysis Batch: 486222

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			04/17/20 08:55	1
Acrolein	ND		20	10	ug/L			04/17/20 08:55	1
Acrylonitrile	ND		10	2.8	ug/L			04/17/20 08:55	1
Benzene	ND		1.0	0.38	ug/L			04/17/20 08:55	1
Bromobenzene	ND		1.0	0.54	ug/L			04/17/20 08:55	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Bromoform	ND		5.0	0.71	ug/L			04/17/20 08:55	1
Bromomethane	ND		1.0	0.98	ug/L			04/17/20 08:55	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/17/20 08:55	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Chloroethane	ND		1.0	0.76	ug/L			04/17/20 08:55	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/17/20 08:55	1
Chloroform	ND		1.0	0.60	ug/L			04/17/20 08:55	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/17/20 08:55	1
Chloromethane	ND		1.0	0.83	ug/L			04/17/20 08:55	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/17/20 08:55	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/17/20 08:55	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/17/20 08:55	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/17/20 08:55	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/17/20 08:55	1
2-Hexanone	ND		25	3.1	ug/L			04/17/20 08:55	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/17/20 08:55	1
Methylene bromide	ND		5.0	0.59	ug/L			04/17/20 08:55	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/17/20 08:55	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/17/20 08:55	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/17/20 08:55	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/17/20 08:55	1
Naphthalene	ND		1.0	1.0	ug/L			04/17/20 08:55	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/17/20 08:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/17/20 08:55	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/17/20 08:55	1
o-Xylene	ND		5.0	0.60	ug/L			04/17/20 08:55	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/17/20 08:55	1

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

Lab Sample ID: MB 400-486222/4
Matrix: Water
Analysis Batch: 486222

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			04/17/20 08:55	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/17/20 08:55	1
Styrene	ND		1.0	1.0	ug/L			04/17/20 08:55	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/17/20 08:55	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/17/20 08:55	1
Toluene	ND		1.0	0.41	ug/L			04/17/20 08:55	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/17/20 08:55	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/17/20 08:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/17/20 08:55	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/17/20 08:55	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/17/20 08:55	1
Trichloroethene	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/17/20 08:55	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/17/20 08:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/17/20 08:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/17/20 08:55	1
Vinyl acetate	ND		25	2.0	ug/L			04/17/20 08:55	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/17/20 08:55	1
Xylenes, Total	ND		10	1.6	ug/L			04/17/20 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/17/20 08:55*	*1*
Dibromofluoromethane	*106*		*81 - 121*		*04/17/20 08:55*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/17/20 08:55*	*1*

Lab Sample ID: LCS 400-486222/1002
Matrix: Water
Analysis Batch: 486222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	235		ug/L		117	43 - 160
Acrolein	250	229		ug/L		92	38 - 160
Acrylonitrile	500	492		ug/L		98	64 - 142
Benzene	50.0	46.6		ug/L		93	70 - 130
Bromobenzene	50.0	47.6		ug/L		95	70 - 132
Bromochloromethane	50.0	48.6		ug/L		97	70 - 130
Bromodichloromethane	50.0	49.8		ug/L		100	67 - 133
Bromoform	50.0	55.6		ug/L		111	57 - 140
Bromomethane	25.0	35.8		ug/L		143	10 - 160
2-Butanone (MEK)	200	198		ug/L		99	61 - 145
Carbon disulfide	50.0	44.8		ug/L		90	61 - 137
Carbon tetrachloride	50.0	51.1		ug/L		102	61 - 137
Chlorobenzene	50.0	47.8		ug/L		96	70 - 130
Dibromochloromethane	50.0	52.7		ug/L		105	67 - 135
Chloroethane	25.0	30.0		ug/L		120	55 - 141

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

Lab Sample ID: LCS 400-486222/1002
Matrix: Water
Analysis Batch: 486222

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	20.4		ug/L		82	10 - 160
Chloroform	50.0	49.1		ug/L		98	69 - 130
1-Chlorohexane	50.0	44.4		ug/L		89	69 - 130
Chloromethane	25.0	15.1		ug/L		61	58 - 137
cis-1,2-Dichloroethene	50.0	50.7		ug/L		101	68 - 130
cis-1,3-Dichloropropene	50.0	47.7		ug/L		95	69 - 132
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	48.5		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 130
Dichlorodifluoromethane	25.0	17.0		ug/L		68	41 - 146
1,1-Dichloroethane	50.0	50.4		ug/L		101	70 - 130
1,2-Dichloroethane	50.0	52.1		ug/L		104	69 - 130
1,1-Dichloroethene	50.0	49.2		ug/L		98	63 - 134
1,2-Dichloropropane	50.0	46.1		ug/L		92	70 - 130
1,3-Dichloropropane	50.0	47.9		ug/L		96	70 - 130
2,2-Dichloropropane	50.0	54.5		ug/L		109	52 - 135
1,1-Dichloropropene	50.0	50.9		ug/L		102	70 - 130
Ethylbenzene	50.0	47.9		ug/L		96	70 - 130
Ethyl methacrylate	50.0	47.2		ug/L		94	68 - 130
Hexachlorobutadiene	50.0	51.2		ug/L		102	53 - 140
2-Hexanone	200	191		ug/L		95	65 - 137
Isopropylbenzene	50.0	48.8		ug/L		98	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	40.2		ug/L		80	66 - 135
4-Methyl-2-pentanone (MIBK)	200	183		ug/L		91	69 - 138
Methyl tert-butyl ether	50.0	50.6		ug/L		101	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	49.6		ug/L		99	67 - 130
N-Propylbenzene	50.0	49.5		ug/L		99	70 - 130
o-Chlorotoluene	50.0	48.0		ug/L		96	70 - 130
o-Xylene	50.0	48.1		ug/L		96	70 - 130
p-Chlorotoluene	50.0	48.5		ug/L		97	70 - 130
p-Isopropyltoluene	50.0	48.6		ug/L		97	65 - 130
sec-Butylbenzene	50.0	48.8		ug/L		98	66 - 130
Styrene	50.0	47.6		ug/L		95	70 - 130
tert-Butylbenzene	50.0	46.2		ug/L		92	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.6		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/L		93	70 - 131
Tetrachloroethene	50.0	46.3		ug/L		93	65 - 130
Toluene	50.0	47.6		ug/L		95	70 - 130
trans-1,2-Dichloroethene	50.0	49.3		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	52.2		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	50.3		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	50.5		ug/L		101	68 - 130
1,1,2-Trichloroethane	50.0	48.3		ug/L		97	70 - 130
Trichloroethene	50.0	48.6		ug/L		97	70 - 130
Trichlorofluoromethane	25.0	26.6		ug/L		106	65 - 138

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

Lab Sample ID: LCS 400-486222/1002
Matrix: Water
Analysis Batch: 486222

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	46.8		ug/L		94	70 - 130
1,2,4-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	48.7		ug/L		97	69 - 130
Vinyl acetate	50.0	49.5		ug/L		99	26 - 160
Vinyl chloride	25.0	23.8		ug/L		95	59 - 136
Xylenes, Total	100	97.2		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486222

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	13	J	200	168		ug/L		77	43 - 150
Acrolein	ND		250	203		ug/L		81	38 - 150
Acrylonitrile	ND		500	458		ug/L		92	62 - 149
Benzene	ND		50.0	47.5		ug/L		95	56 - 142
Bromobenzene	ND		50.0	46.0		ug/L		92	59 - 136
Bromochloromethane	ND		50.0	46.7		ug/L		93	64 - 140
Bromodichloromethane	ND		50.0	48.0		ug/L		96	59 - 143
Bromoform	ND		50.0	54.3		ug/L		109	50 - 140
Bromomethane	ND	F1	25.0	33.3		ug/L		133	10 - 150
2-Butanone (MEK)	ND		200	175		ug/L		88	55 - 150
Carbon disulfide	ND		50.0	42.2		ug/L		83	48 - 150
Carbon tetrachloride	ND		50.0	50.0		ug/L		100	55 - 145
Chlorobenzene	ND		50.0	45.4		ug/L		91	64 - 130
Dibromochloromethane	ND		50.0	49.3		ug/L		99	56 - 143
Chloroethane	ND	F2	25.0	25.4		ug/L		102	50 - 150
2-Chloroethyl vinyl ether	ND	F2	25.0	11.6		ug/L		47	10 - 150
Chloroform	ND		50.0	46.5		ug/L		93	60 - 141
1-Chlorohexane	ND		50.0	41.9		ug/L		84	56 - 136
Chloromethane	ND		25.0	13.8		ug/L		55	49 - 148
cis-1,2-Dichloroethene	ND		50.0	49.5		ug/L		99	59 - 143
cis-1,3-Dichloropropene	ND		50.0	46.0		ug/L		92	57 - 140
1,2-Dichlorobenzene	ND		50.0	45.9		ug/L		92	52 - 137
1,3-Dichlorobenzene	ND		50.0	47.1		ug/L		94	54 - 135
1,4-Dichlorobenzene	ND		50.0	44.3		ug/L		89	53 - 135
Dichlorodifluoromethane	ND		25.0	17.0		ug/L		68	16 - 150
1,1-Dichloroethane	ND		50.0	49.0		ug/L		98	61 - 144
1,2-Dichloroethane	ND		50.0	51.2		ug/L		102	60 - 141
1,1-Dichloroethene	ND		50.0	48.9		ug/L		98	54 - 147
1,2-Dichloropropane	ND		50.0	43.7		ug/L		87	66 - 137
1,3-Dichloropropane	ND		50.0	45.1		ug/L		90	66 - 133
2,2-Dichloropropane	ND		50.0	52.7		ug/L		105	42 - 144

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

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486222

Client Sample ID: MW11-ROX-040920
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	48.8		ug/L		98	65 - 136
Ethylbenzene	ND		50.0	46.3		ug/L		93	58 - 131
Ethyl methacrylate	ND		50.0	43.9		ug/L		88	64 - 130
Hexachlorobutadiene	ND		50.0	50.5		ug/L		101	31 - 149
2-Hexanone	ND		200	178		ug/L		89	65 - 140
Isopropylbenzene	ND		50.0	48.0		ug/L		96	56 - 133
Methylene bromide	ND		50.0	46.8		ug/L		94	63 - 138
Methylene Chloride	ND		50.0	38.6		ug/L		77	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	173		ug/L		87	63 - 146
Methyl tert-butyl ether	ND		50.0	49.6		ug/L		99	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.1		ug/L		98	57 - 130
Naphthalene	ND		50.0	44.8		ug/L		90	25 - 150
n-Butylbenzene	ND		50.0	47.2		ug/L		94	41 - 142
N-Propylbenzene	ND		50.0	47.9		ug/L		96	51 - 138
o-Chlorotoluene	ND		50.0	46.2		ug/L		92	53 - 134
o-Xylene	ND		50.0	47.5		ug/L		95	61 - 130
p-Chlorotoluene	ND		50.0	47.2		ug/L		94	54 - 133
p-Isopropyltoluene	ND		50.0	47.1		ug/L		94	48 - 139
sec-Butylbenzene	ND		50.0	47.1		ug/L		94	50 - 138
Styrene	ND		50.0	45.5		ug/L		91	58 - 131
tert-Butylbenzene	ND		50.0	45.0		ug/L		90	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	49.7		ug/L		99	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	45.2		ug/L		90	66 - 135
Tetrachloroethene	ND		50.0	43.4		ug/L		87	52 - 133
Toluene	ND		50.0	50.8		ug/L		102	65 - 130
trans-1,2-Dichloroethene	ND		50.0	49.6		ug/L		99	61 - 143
trans-1,3-Dichloropropene	ND		50.0	50.2		ug/L		100	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	46.6		ug/L		93	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	49.0		ug/L		98	39 - 148
1,1,1-Trichloroethane	ND		50.0	49.2		ug/L		98	57 - 142
1,1,2-Trichloroethane	ND		50.0	45.5		ug/L		91	66 - 131
Trichloroethene	ND		50.0	45.6		ug/L		91	64 - 136
Trichlorofluoromethane	ND		25.0	25.2		ug/L		101	54 - 150
1,2,3-Trichloropropane	ND		50.0	46.1		ug/L		92	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	47.8		ug/L		96	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	47.7		ug/L		95	52 - 135
Vinyl acetate	ND		50.0	46.5		ug/L		93	26 - 150
Vinyl chloride	ND		25.0	22.2		ug/L		89	46 - 150
Xylenes, Total	ND		100	96.6		ug/L		97	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*99*		*78 - 118*
Dibromofluoromethane	*105*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486222

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	13	J	200	166		ug/L		77	43 - 150	1	30
Acrolein	ND		250	264		ug/L		106	38 - 150	26	31
Acrylonitrile	ND		500	450		ug/L		90	62 - 149	2	30
Benzene	ND		50.0	42.9		ug/L		86	56 - 142	10	30
Bromobenzene	ND		50.0	42.8		ug/L		86	59 - 136	7	30
Bromochloromethane	ND		50.0	44.5		ug/L		89	64 - 140	5	30
Bromodichloromethane	ND		50.0	46.1		ug/L		92	59 - 143	4	30
Bromoform	ND		50.0	50.7		ug/L		101	50 - 140	7	30
Bromomethane	ND	F1	25.0	44.9	F1	ug/L		180	10 - 150	30	50
2-Butanone (MEK)	ND		200	172		ug/L		86	55 - 150	2	30
Carbon disulfide	ND		50.0	40.7		ug/L		80	48 - 150	4	30
Carbon tetrachloride	ND		50.0	49.2		ug/L		98	55 - 145	2	30
Chlorobenzene	ND		50.0	42.5		ug/L		85	64 - 130	7	30
Dibromochloromethane	ND		50.0	49.1		ug/L		98	56 - 143	0	30
Chloroethane	ND	F2	25.0	36.8	F2	ug/L		147	50 - 150	37	30
2-Chloroethyl vinyl ether	ND	F2	25.0	6.09	F2	ug/L		24	10 - 150	63	50
Chloroform	ND		50.0	44.6		ug/L		89	60 - 141	4	30
1-Chlorohexane	ND		50.0	39.2		ug/L		78	56 - 136	7	30
Chloromethane	ND		25.0	18.1		ug/L		72	49 - 148	27	31
cis-1,2-Dichloroethene	ND		50.0	46.5		ug/L		93	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	43.1		ug/L		86	57 - 140	6	30
1,2-Dichlorobenzene	ND		50.0	40.2		ug/L		80	52 - 137	13	30
1,3-Dichlorobenzene	ND		50.0	41.3		ug/L		83	54 - 135	13	30
1,4-Dichlorobenzene	ND		50.0	40.0		ug/L		80	53 - 135	10	30
Dichlorodifluoromethane	ND		25.0	20.1		ug/L		80	16 - 150	17	31
1,1-Dichloroethane	ND		50.0	44.4		ug/L		89	61 - 144	10	30
1,2-Dichloroethane	ND		50.0	48.5		ug/L		97	60 - 141	5	30
1,1-Dichloroethene	ND		50.0	47.5		ug/L		95	54 - 147	3	30
1,2-Dichloropropane	ND		50.0	41.7		ug/L		83	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	43.5		ug/L		87	66 - 133	4	30
2,2-Dichloropropane	ND		50.0	50.2		ug/L		100	42 - 144	5	31
1,1-Dichloropropene	ND		50.0	45.3		ug/L		91	65 - 136	7	30
Ethylbenzene	ND		50.0	43.0		ug/L		86	58 - 131	7	30
Ethyl methacrylate	ND		50.0	43.1		ug/L		86	64 - 130	2	30
Hexachlorobutadiene	ND		50.0	44.1		ug/L		88	31 - 149	13	36
2-Hexanone	ND		200	174		ug/L		87	65 - 140	2	30
Isopropylbenzene	ND		50.0	45.2		ug/L		90	56 - 133	6	30
Methylene bromide	ND		50.0	44.2		ug/L		88	63 - 138	6	30
Methylene Chloride	ND		50.0	36.6		ug/L		73	60 - 146	5	32
4-Methyl-2-pentanone (MIBK)	ND		200	168		ug/L		84	63 - 146	3	30
Methyl tert-butyl ether	ND		50.0	47.2		ug/L		94	59 - 137	5	30
m-Xylene & p-Xylene	ND		50.0	44.6		ug/L		89	57 - 130	10	30
Naphthalene	ND		50.0	41.7		ug/L		83	25 - 150	7	30
n-Butylbenzene	ND		50.0	41.9		ug/L		84	41 - 142	12	31
N-Propylbenzene	ND		50.0	43.3		ug/L		87	51 - 138	10	30
o-Chlorotoluene	ND		50.0	42.4		ug/L		85	53 - 134	9	30
o-Xylene	ND		50.0	43.8		ug/L		88	61 - 130	8	30
p-Chlorotoluene	ND		50.0	42.5		ug/L		85	54 - 133	10	30

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

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486222

Client Sample ID: MW11-ROX-040920
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	41.4		ug/L		83	48 - 139	13	30
sec-Butylbenzene	ND		50.0	41.5		ug/L		83	50 - 138	13	30
Styrene	ND		50.0	41.9		ug/L		84	58 - 131	8	30
tert-Butylbenzene	ND		50.0	49.5		ug/L		99	54 - 146	10	30
1,1,1,2-Tetrachloroethane	ND		50.0	48.1		ug/L		96	59 - 137	3	30
1,1,2,2-Tetrachloroethane	ND		50.0	44.5		ug/L		89	66 - 135	2	30
Tetrachloroethene	ND		50.0	42.0		ug/L		84	52 - 133	3	30
Toluene	ND		50.0	43.5		ug/L		87	65 - 130	15	30
trans-1,2-Dichloroethene	ND		50.0	45.3		ug/L		91	61 - 143	9	30
trans-1,3-Dichloropropene	ND		50.0	47.7		ug/L		95	53 - 133	5	30
1,2,3-Trichlorobenzene	ND		50.0	40.0		ug/L		80	43 - 145	15	30
1,2,4-Trichlorobenzene	ND		50.0	41.9		ug/L		84	39 - 148	16	30
1,1,1-Trichloroethane	ND		50.0	46.0		ug/L		92	57 - 142	7	30
1,1,2-Trichloroethane	ND		50.0	44.3		ug/L		89	66 - 131	3	30
Trichloroethene	ND		50.0	44.3		ug/L		89	64 - 136	3	30
Trichlorofluoromethane	ND		25.0	32.5		ug/L		130	54 - 150	25	30
1,2,3-Trichloropropane	ND		50.0	46.2		ug/L		92	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	41.8		ug/L		84	50 - 139	13	30
1,3,5-Trimethylbenzene	ND		50.0	42.3		ug/L		85	52 - 135	12	30
Vinyl acetate	ND		50.0	59.3		ug/L		119	26 - 150	24	33
Vinyl chloride	ND		25.0	27.2		ug/L		109	46 - 150	20	30
Xylenes, Total	ND		100	88.4		ug/L		88	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*98*		*78 - 118*
Dibromofluoromethane	*106*		*81 - 121*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: MB 400-486405/4
Matrix: Water
Analysis Batch: 486405

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.53	ug/L			04/20/20 16:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*78 - 118*		*04/20/20 16:23*	*1*
Dibromofluoromethane	*89*		*81 - 121*		*04/20/20 16:23*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/20/20 16:23*	*1*

Lab Sample ID: LCS 400-486405/1002
Matrix: Water
Analysis Batch: 486405

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Isopropylbenzene	50.0	46.7		ug/L		93	70 - 130

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

Lab Sample ID: LCS 400-486405/1002
Matrix: Water
Analysis Batch: 486405

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	91		78 - 118
Dibromofluoromethane	95		81 - 121
Toluene-d8 (Surr)	98		80 - 120

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzenethiol	ND		10	1.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzoic acid	ND		30	7.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
Benzyl alcohol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/14/20 11:11	04/20/20 16:55	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/14/20 11:11	04/20/20 16:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/14/20 11:11	04/20/20 16:55	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloroaniline	ND		10	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Chlorophenol	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dibenzofuran	ND		10	0.52	ug/L		04/14/20 11:11	04/20/20 16:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Diethyl phthalate	ND		10	0.70	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/14/20 11:11	04/20/20 16:55	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,4-Dioxane	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Hexachloroethane	ND		10	4.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Indene	ND		10	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
Isophorone	ND		10	0.57	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Methylphenol	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/14/20 11:11	04/20/20 16:55	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	ND		10	2.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
3-Nitroaniline	ND		10	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitroaniline	ND		10	2.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
Nitrobenzene	ND		10	0.55	ug/L		04/14/20 11:11	04/20/20 16:55	1
2-Nitrophenol	ND		10	0.65	ug/L		04/14/20 11:11	04/20/20 16:55	1
4-Nitrophenol	ND		10	2.1	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/14/20 11:11	04/20/20 16:55	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pentachlorophenol	ND		20	1.8	ug/L		04/14/20 11:11	04/20/20 16:55	1
Phenol	ND		10	2.6	ug/L		04/14/20 11:11	04/20/20 16:55	1
Pyridine	ND		10	3.2	ug/L		04/14/20 11:11	04/20/20 16:55	1
Quinoline	ND		10	6.0	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/14/20 11:11	04/20/20 16:55	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/14/20 11:11	04/20/20 16:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*34 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2-Fluorophenol	*94*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Nitrobenzene-d5	*103*		*27 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Phenol-d5	*92*		*10 - 120*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
Terphenyl-d14	*136*	*X*	*53 - 125*	*04/14/20 11:11*	*04/20/20 16:55*	*1*
2,4,6-Tribromophenol	*92*		*15 - 135*	*04/14/20 11:11*	*04/20/20 16:55*	*1*

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	20.0		ug/L		67	29 - 120
Benzoic acid	116	74.9		ug/L		64	10 - 150
Benzyl alcohol	30.0	24.7		ug/L		82	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.8		ug/L		66	45 - 120
Bis(2-chloroethyl)ether	30.0	17.8		ug/L		59	48 - 120
bis (2-chloroisopropyl) ether	30.0	15.1		ug/L		50	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.5		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	22.2		ug/L		74	55 - 122
Butyl benzyl phthalate	30.0	7.38	J *	ug/L		25	46 - 145
4-Chloroaniline	30.0	19.4		ug/L		65	30 - 120
4-Chloro-3-methylphenol	30.0	21.8		ug/L		73	39 - 140
2-Chloronaphthalene	30.0	20.4		ug/L		68	52 - 120
2-Chlorophenol	30.0	19.8		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.1		ug/L		70	58 - 124
Dibenz[a,h]acridine	29.6	11.0	*	ug/L		37	46 - 149
Dibenzofuran	30.0	20.9		ug/L		70	58 - 123
3,3'-Dichlorobenzidine	40.0	38.9		ug/L		97	39 - 135
2,4-Dichlorophenol	30.0	21.2		ug/L		71	39 - 128
Diethyl phthalate	30.0	5.08	J *	ug/L		17	44 - 146

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

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	30.0	23.0		ug/L		77	44 - 120
Dimethyl phthalate	30.0	2.99	J *	ug/L		10	50 - 131
Di-n-butyl phthalate	30.0	9.02	J *	ug/L		30	55 - 131
4,6-Dinitro-ortho-cresol	60.0	37.4		ug/L		62	10 - 150
2,4-Dinitrophenol	60.0	42.6		ug/L		71	10 - 150
2,4-Dinitrotoluene	30.0	23.8		ug/L		79	58 - 140
2,6-Dinitrotoluene	30.0	25.2		ug/L		84	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	12.0		ug/L		40	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.0		ug/L		57	47 - 123
Hexachlorobenzene	30.0	22.6		ug/L		75	52 - 131
Hexachlorocyclopentadiene	30.0	7.05	J	ug/L		24	10 - 129
Hexachloroethane	30.0	15.8		ug/L		53	20 - 120
Indene	30.0	21.3		ug/L		71	47 - 120
Isophorone	30.0	20.3		ug/L		68	49 - 120
2-Methylphenol	30.0	19.3		ug/L		64	39 - 123
3 & 4 Methylphenol	30.0	18.3	J	ug/L		61	38 - 121
2-Nitroaniline	30.0	20.3		ug/L		68	47 - 150
3-Nitroaniline	30.0	19.2		ug/L		64	34 - 132
4-Nitroaniline	30.0	18.6		ug/L		62	41 - 135
Nitrobenzene	30.0	20.6		ug/L		69	47 - 120
2-Nitrophenol	30.0	18.0		ug/L		60	28 - 136
4-Nitrophenol	60.0	37.2		ug/L		62	10 - 150
N-Nitrosodimethylamine	30.0	19.2		ug/L		64	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.2		ug/L		64	44 - 120
N-Nitrosodiphenylamine	29.8	21.9		ug/L		74	56 - 120
Pentachlorophenol	60.0	37.6		ug/L		63	15 - 141
Phenol	30.0	17.0		ug/L		57	33 - 120
Pyridine	60.0	23.0		ug/L		38	26 - 120
Quinoline	29.6	23.6		ug/L		80	51 - 129
2,4,5-Trichlorophenol	30.0	20.4		ug/L		68	38 - 147
2,4,6-Trichlorophenol	30.0	20.9		ug/L		70	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*60*		*34 - 120*
2-Fluorophenol	*50*		*10 - 120*
Nitrobenzene-d5	*61*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*72*		*53 - 125*
2,4,6-Tribromophenol	*64*		*15 - 135*

Lab Sample ID: LCS 400-485894/3-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

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

Lab Sample ID: LCS 400-485894/3-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	112		34 - 120
2-Fluorophenol	90		10 - 120
Nitrobenzene-d5	102		27 - 120
Phenol-d5	99		10 - 120
Terphenyl-d14	136	X	53 - 125
2,4,6-Tribromophenol	81		15 - 135

Lab Sample ID: LCSD 400-485894/4-A
Matrix: Water
Analysis Batch: 486452

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	14	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	95		34 - 120
2-Fluorophenol	77		10 - 120
Nitrobenzene-d5	90		27 - 120
Phenol-d5	79		10 - 120
Terphenyl-d14	121		53 - 125
2,4,6-Tribromophenol	66		15 - 135

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND	F2	29.1	9.34	J	ug/L		32	10 - 143
Benzoic acid	ND		113	56.1		ug/L		50	10 - 134
Benzyl alcohol	ND	F2	29.1	13.9		ug/L		48	10 - 154
Bis(2-chloroethoxy)methane	ND		29.1	11.9		ug/L		41	14 - 147
Bis(2-chloroethyl)ether	ND	F2	29.1	11.0		ug/L		38	28 - 130
bis (2-chloroisopropyl) ether	ND	F2	29.1	8.37	J	ug/L		29	10 - 141
Bis(2-ethylhexyl) phthalate	5.1	J F2	29.1	18.6		ug/L		46	43 - 160
4-Bromophenyl phenyl ether	ND	F2	29.1	17.8		ug/L		61	26 - 159
Butyl benzyl phthalate	ND	F1 F2 *	29.1	8.74	J F1	ug/L		30	43 - 151
4-Chloroaniline	ND		29.1	7.60	J	ug/L		26	10 - 152
4-Chloro-3-methylphenol	ND	F2	29.1	14.4		ug/L		50	17 - 156
2-Chloronaphthalene	ND	F2	29.1	13.8		ug/L		47	10 - 155
2-Chlorophenol	ND	F2	29.1	13.6		ug/L		47	19 - 130
4-Chlorophenyl phenyl ether	ND	F2	29.1	15.5		ug/L		53	25 - 161
Dibenz[a,h]acridine	ND	*3 F2 F1 *	28.7	11.8	F1	ug/L		41	42 - 147
Dibenzofuran	ND	F2	29.1	14.6		ug/L		50	18 - 157
3,3'-Dichlorobenzidine	ND	F2	38.8	16.5		ug/L		43	10 - 172
2,4-Dichlorophenol	ND	F2	29.1	15.5		ug/L		53	16 - 147
Diethyl phthalate	ND	F1 *	29.1	3.41	J F1	ug/L		12	23 - 160
2,4-Dimethylphenol	ND	F2	29.1	14.2		ug/L		49	25 - 146
Dimethyl phthalate	ND	F1 *	29.1	2.28	J F1	ug/L		8	11 - 158

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

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Di-n-butyl phthalate	ND	F2 F1 *	29.1	7.57	J F1	ug/L		26	28 - 162
4,6-Dinitro-ortho-cresol	ND	F2	58.2	12.6		ug/L		22	10 - 168
2,4-Dinitrophenol	ND	F2	58.2	10.1	J	ug/L		17	10 - 166
2,4-Dinitrotoluene	ND	F2	29.1	14.8		ug/L		51	26 - 158
2,6-Dinitrotoluene	ND	F2	29.1	15.5		ug/L		53	19 - 157
Di-n-octyl phthalate	ND	F2	29.1	14.5		ug/L		50	42 - 150
1,4-Dioxane	ND	F2	29.1	6.58	J	ug/L		23	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	29.1	11.9		ug/L		41	19 - 162
Hexachlorobenzene	ND	F2	29.1	17.1		ug/L		59	45 - 145
Hexachlorocyclopentadiene	ND	F2	29.1	6.52	J	ug/L		22	10 - 151
Hexachloroethane	ND	F2	29.1	9.18	J	ug/L		32	29 - 130
Indene	ND	F2	29.1	11.3		ug/L		39	22 - 130
Isophorone	ND	F2	29.1	11.9		ug/L		41	24 - 144
2-Methylphenol	ND	F2	29.1	11.2		ug/L		38	22 - 130
3 & 4 Methylphenol	ND	F2	29.1	11.6	J	ug/L		40	31 - 130
2-Nitroaniline	ND	F2	29.1	12.5		ug/L		43	10 - 162
3-Nitroaniline	ND	F2	29.1	10.4		ug/L		36	10 - 163
4-Nitroaniline	ND	F2	29.1	11.2		ug/L		38	10 - 162
Nitrobenzene	ND	F2	29.1	11.8		ug/L		41	34 - 135
2-Nitrophenol	ND		29.1	13.6		ug/L		47	27 - 134
4-Nitrophenol	ND		58.2	24.1		ug/L		41	10 - 175
N-Nitrosodimethylamine	ND	F2	29.1	10.4		ug/L		36	10 - 139
N-Nitrosodi-n-propylamine	ND	F2	29.1	11.7		ug/L		40	13 - 147
N-Nitrosodiphenylamine	ND	F2	28.9	15.4		ug/L		53	31 - 150
Pentachlorophenol	ND	F2	58.2	28.0		ug/L		48	10 - 180
Phenol	ND	F2	29.1	10.9		ug/L		37	23 - 130
Pyridine	ND	F2	58.2	7.52	J	ug/L		13	10 - 130
Quinoline	ND	F2	28.7	13.5		ug/L		47	10 - 180
2,4,5-Trichlorophenol	ND	F2	29.1	16.0		ug/L		55	43 - 137
2,4,6-Trichlorophenol	ND	F2	29.1	15.6		ug/L		53	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*48*		*10 - 120*
Nitrobenzene-d5	*54*		*27 - 120*
Phenol-d5	*48*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*
2,4,6-Tribromophenol	*74*		*15 - 135*

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND	F2	29.3	16.7		ug/L		57	10 - 143	56	63
Benzoic acid	ND		114	61.6		ug/L		54	10 - 134	9	49
Benzyl alcohol	ND	F2	29.3	26.8	F2	ug/L		91	10 - 154	63	37
Bis(2-chloroethoxy)methane	ND		29.3	20.9		ug/L		72	14 - 147	55	70

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

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	ND	F2	29.3	19.7	F2	ug/L		67	28 - 130	57	42
bis (2-chloroisopropyl) ether	ND	F2	29.3	15.1	F2	ug/L		52	10 - 141	57	41
Bis(2-ethylhexyl) phthalate	5.1	J F2	29.3	31.0	F2	ug/L		89	43 - 160	50	35
4-Bromophenyl phenyl ether	ND	F2	29.3	31.5	F2	ug/L		108	26 - 159	55	30
Butyl benzyl phthalate	ND	F1 F2 *	29.3	12.3	F1 F2	ug/L		42	43 - 151	34	32
4-Chloroaniline	ND		29.3	14.3		ug/L		49	10 - 152	61	94
4-Chloro-3-methylphenol	ND	F2	29.3	24.0	F2	ug/L		82	17 - 156	50	40
2-Chloronaphthalene	ND	F2	29.3	25.7	F2	ug/L		88	10 - 155	60	29
2-Chlorophenol	ND	F2	29.3	22.3	F2	ug/L		76	19 - 130	48	42
4-Chlorophenyl phenyl ether	ND	F2	29.3	28.4	F2	ug/L		97	25 - 161	59	27
Dibenz[a,h]acridine	ND	*3 F2 F1 *	28.9	21.4	F2	ug/L		74	42 - 147	57	40
Dibenzofuran	ND	F2	29.3	26.5	F2	ug/L		91	18 - 157	58	29
3,3'-Dichlorobenzidine	ND	F2	39.0	39.5	F2	ug/L		101	10 - 172	82	58
2,4-Dichlorophenol	ND	F2	29.3	24.9	F2	ug/L		85	16 - 147	46	43
Diethyl phthalate	ND	F1 *	29.3	4.54	J F1	ug/L		16	23 - 160	28	40
2,4-Dimethylphenol	ND	F2	29.3	24.5	F2	ug/L		84	25 - 146	53	47
Dimethyl phthalate	ND	F1 *	29.3	3.11	J	ug/L		11	11 - 158	31	36
Di-n-butyl phthalate	ND	F2 F1 *	29.3	11.5	F2	ug/L		39	28 - 162	41	32
4,6-Dinitro-ortho-cresol	ND	F2	58.5	32.0	F2	ug/L		55	10 - 168	87	42
2,4-Dinitrophenol	ND	F2	58.5	30.8	F2	ug/L		53	10 - 166	101	36
2,4-Dinitrotoluene	ND	F2	29.3	27.6	F2	ug/L		94	26 - 158	60	28
2,6-Dinitrotoluene	ND	F2	29.3	29.5	F2	ug/L		101	19 - 157	62	28
Di-n-octyl phthalate	ND	F2	29.3	20.8	F2	ug/L		71	42 - 150	36	35
1,4-Dioxane	ND	F2	29.3	11.5	F2	ug/L		39	10 - 130	54	40
1,2-Diphenylhydrazine (as Azobenzene)	ND	F2	29.3	21.5	F2	ug/L		74	19 - 162	58	40
Hexachlorobenzene	ND	F2	29.3	29.1	F2	ug/L		99	45 - 145	52	33
Hexachlorocyclopentadiene	ND	F2	29.3	11.2	J F2	ug/L		38	10 - 151	53	50
Hexachloroethane	ND	F2	29.3	16.4	F2	ug/L		56	29 - 130	56	41
Indene	ND	F2	29.3	20.0	F2	ug/L		68	22 - 130	56	40
Isophorone	ND	F2	29.3	21.0	F2	ug/L		72	24 - 144	55	33
2-Methylphenol	ND	F2	29.3	19.9	F2	ug/L		68	22 - 130	56	47
3 & 4 Methylphenol	ND	F2	29.3	19.7	J F2	ug/L		67	31 - 130	52	47
2-Nitroaniline	ND	F2	29.3	23.0	F2	ug/L		79	10 - 162	59	33
3-Nitroaniline	ND	F2	29.3	20.3	F2	ug/L		70	10 - 163	65	39
4-Nitroaniline	ND	F2	29.3	23.2	F2	ug/L		79	10 - 162	70	50
Nitrobenzene	ND	F2	29.3	21.0	F2	ug/L		72	34 - 135	56	35
2-Nitrophenol	ND		29.3	19.8		ug/L		68	27 - 134	37	43
4-Nitrophenol	ND		58.5	40.4		ug/L		69	10 - 175	50	82
N-Nitrosodimethylamine	ND	F2	29.3	18.0		ug/L		62	10 - 139	53	62
N-Nitrosodi-n-propylamine	ND	F2	29.3	20.5	F2	ug/L		70	13 - 147	55	36
N-Nitrosodiphenylamine	ND	F2	29.0	27.9	F2	ug/L		96	31 - 150	58	34
Pentachlorophenol	ND	F2	58.5	42.0		ug/L		72	10 - 180	40	42
Phenol	ND	F2	29.3	20.6	F2	ug/L		71	23 - 130	62	52
Pyridine	ND	F2	58.5	20.7	F2	ug/L		35	10 - 130	94	55
Quinoline	ND	F2	28.9	24.8	F2	ug/L		86	10 - 180	59	40
2,4,5-Trichlorophenol	ND	F2	29.3	25.7	F2	ug/L		88	43 - 137	46	42
2,4,6-Trichlorophenol	ND	F2	29.3	25.8	F2	ug/L		88	42 - 135	50	44

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

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486452

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	91		34 - 120
2-Fluorophenol	66		10 - 120
Nitrobenzene-d5	81		27 - 120
Phenol-d5	65		10 - 120
Terphenyl-d14	92		53 - 125
2,4,6-Tribromophenol	100		15 - 135

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzenethiol	ND		10	1.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzoic acid	ND		30	7.3	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzyl alcohol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/15/20 15:55	04/20/20 17:02	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/15/20 15:55	04/20/20 17:02	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chloroaniline	ND		10	3.4	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Chlorophenol	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dibenzofuran	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 17:02	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Diethyl phthalate	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/15/20 15:55	04/20/20 17:02	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 17:02	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/15/20 15:55	04/20/20 17:02	1
1,4-Dioxane	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachloroethane	ND		10	4.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
Indene	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Isophorone	ND		10	0.57	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Methylphenol	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1

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

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Nitroaniline	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
3-Nitroaniline	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Nitroaniline	ND		10	2.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
Nitrobenzene	ND		10	0.55	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Nitrophenol	ND		10	0.65	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Nitrophenol	ND		10	2.1	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/15/20 15:55	04/20/20 17:02	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
Phenol	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
Pyridine	ND		10	3.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
Quinoline	ND		10	6.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
2-Fluorophenol	*51*		*10 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Phenol-d5	*58*		*10 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Terphenyl-d14	*58*		*53 - 125*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
2,4,6-Tribromophenol	*29*		*15 - 135*	*04/15/20 15:55*	*04/20/20 17:02*	*1*

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	18.6		ug/L		62	29 - 120
Benzoic acid	116	61.1		ug/L		52	10 - 150
Benzyl alcohol	30.0	20.3		ug/L		68	19 - 125
Bis(2-chloroethoxy)methane	30.0	18.1		ug/L		60	45 - 120
Bis(2-chloroethyl)ether	30.0	16.0		ug/L		53	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.8		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	16.6		ug/L		55	48 - 150
4-Bromophenyl phenyl ether	30.0	18.6		ug/L		62	55 - 122
Butyl benzyl phthalate	30.0	17.2		ug/L		57	46 - 145
4-Chloroaniline	30.0	17.2		ug/L		57	30 - 120
4-Chloro-3-methylphenol	30.0	21.7		ug/L		72	39 - 140
2-Chloronaphthalene	30.0	17.8		ug/L		59	52 - 120
2-Chlorophenol	30.0	18.3		ug/L		61	34 - 120
4-Chlorophenyl phenyl ether	30.0	19.6		ug/L		65	58 - 124
Dibenz[a,h]acridine	29.6	15.4		ug/L		52	46 - 149
Dibenzofuran	30.0	19.4		ug/L		65	58 - 123
3,3'-Dichlorobenzidine	40.0	34.0		ug/L		85	39 - 135
2,4-Dichlorophenol	30.0	20.7		ug/L		69	39 - 128

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

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diethyl phthalate	30.0	20.5		ug/L		68	44 - 146
2,4-Dimethylphenol	30.0	19.2		ug/L		64	44 - 120
Dimethyl phthalate	30.0	19.8		ug/L		66	50 - 131
Di-n-butyl phthalate	30.0	18.7		ug/L		62	55 - 131
4,6-Dinitro-ortho-cresol	60.0	44.7		ug/L		75	10 - 150
2,4-Dinitrophenol	60.0	54.3		ug/L		90	10 - 150
2,4-Dinitrotoluene	30.0	20.7		ug/L		69	58 - 140
2,6-Dinitrotoluene	30.0	20.1		ug/L		67	57 - 130
Di-n-octyl phthalate	30.0	19.2		ug/L		64	50 - 150
1,4-Dioxane	30.0	13.8		ug/L		46	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.7		ug/L		59	47 - 123
Hexachlorobenzene	30.0	18.7		ug/L		62	52 - 131
Hexachlorocyclopentadiene	30.0	12.1	J	ug/L		40	10 - 129
Hexachloroethane	30.0	15.1		ug/L		50	20 - 120
Indene	30.0	17.4		ug/L		58	47 - 120
Isophorone	30.0	19.8		ug/L		66	49 - 120
2-Methylphenol	30.0	20.0		ug/L		67	39 - 123
3 & 4 Methylphenol	30.0	19.4	J	ug/L		65	38 - 121
2-Nitroaniline	30.0	22.8		ug/L		76	47 - 150
3-Nitroaniline	30.0	20.4		ug/L		68	34 - 132
4-Nitroaniline	30.0	23.2		ug/L		77	41 - 135
Nitrobenzene	30.0	20.2		ug/L		67	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	38.8		ug/L		65	10 - 150
N-Nitrosodimethylamine	30.0	18.4		ug/L		61	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.7		ug/L		66	44 - 120
N-Nitrosodiphenylamine	29.8	18.8		ug/L		63	56 - 120
Pentachlorophenol	60.0	35.6		ug/L		59	15 - 141
Phenol	30.0	18.2		ug/L		61	33 - 120
Pyridine	60.0	28.3		ug/L		47	26 - 120
Quinoline	29.6	20.6		ug/L		69	51 - 129
2,4,5-Trichlorophenol	30.0	20.7		ug/L		69	38 - 147
2,4,6-Trichlorophenol	30.0	20.7		ug/L		69	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*34 - 120*
2-Fluorophenol	*48*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*66*		*15 - 135*

Lab Sample ID: LCS 400-486081/4-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	5.36	J	ug/L		18	10 - 120

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	51		34 - 120
2-Fluorophenol	38		10 - 120
Nitrobenzene-d5	62		27 - 120
Phenol-d5	53		10 - 120
Terphenyl-d14	57		53 - 125
2,4,6-Tribromophenol	43		15 - 135

Lab Sample ID: LCSD 400-486081/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 486423 — **Prep Batch: 486081**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	16.3		ug/L		54	29 - 120	14	30
Benzoic acid	116	56.1		ug/L		48	10 - 150	8	30
Benzyl alcohol	30.0	18.2		ug/L		61	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	16.6		ug/L		55	45 - 120	9	30
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120	6	30
bis (2-chloroisopropyl) ether	30.0	18.9		ug/L		63	30 - 125	10	30
Bis(2-ethylhexyl) phthalate	30.0	16.2		ug/L		54	48 - 150	3	30
4-Bromophenyl phenyl ether	30.0	17.5		ug/L		58	55 - 122	6	30
Butyl benzyl phthalate	30.0	17.2		ug/L		57	46 - 145	0	30
4-Chloroaniline	30.0	15.8		ug/L		53	30 - 120	8	30
4-Chloro-3-methylphenol	30.0	19.8		ug/L		66	39 - 140	9	30
2-Chloronaphthalene	30.0	16.6		ug/L		55	52 - 120	7	30
2-Chlorophenol	30.0	16.6		ug/L		55	34 - 120	10	30
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124	8	30
Dibenz[a,h]acridine	29.6	14.9		ug/L		50	46 - 149	3	30
Dibenzofuran	30.0	17.7		ug/L		59	58 - 123	9	30
3,3'-Dichlorobenzidine	40.0	31.4		ug/L		78	39 - 135	8	30
2,4-Dichlorophenol	30.0	18.9		ug/L		63	39 - 128	9	30
Diethyl phthalate	30.0	18.9		ug/L		63	44 - 146	8	30
2,4-Dimethylphenol	30.0	17.7		ug/L		59	44 - 120	8	30
Dimethyl phthalate	30.0	18.5		ug/L		62	50 - 131	7	30
Di-n-butyl phthalate	30.0	17.5		ug/L		58	55 - 131	6	30
4,6-Dinitro-ortho-cresol	60.0	39.7		ug/L		66	10 - 150	12	30
2,4-Dinitrophenol	60.0	47.8		ug/L		80	10 - 150	13	30
2,4-Dinitrotoluene	30.0	18.8		ug/L		63	58 - 140	10	30
2,6-Dinitrotoluene	30.0	18.8		ug/L		63	57 - 130	7	30
Di-n-octyl phthalate	30.0	18.9		ug/L		63	50 - 150	2	30
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	16.8		ug/L		56	47 - 123	5	30
Hexachlorobenzene	30.0	16.8		ug/L		56	52 - 131	11	30
Hexachlorocyclopentadiene	30.0	11.5	J	ug/L		38	10 - 129	5	30
Hexachloroethane	30.0	14.0		ug/L		47	20 - 120	8	30
Indene	30.0	16.2		ug/L		54	47 - 120	7	30
Isophorone	30.0	18.5		ug/L		62	49 - 120	7	30
2-Methylphenol	30.0	17.8		ug/L		59	39 - 123	12	30
3 & 4 Methylphenol	30.0	17.7	J	ug/L		59	38 - 121	9	30
2-Nitroaniline	30.0	20.9		ug/L		70	47 - 150	9	30
3-Nitroaniline	30.0	19.1		ug/L		64	34 - 132	6	30
4-Nitroaniline	30.0	20.8		ug/L		69	41 - 135	11	30

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

Lab Sample ID: LCSD 400-486081/3-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	30.0	18.2		ug/L		61	47 - 120	10	30
2-Nitrophenol	30.0	16.9		ug/L		56	28 - 136	7	30
4-Nitrophenol	60.0	33.2		ug/L		55	10 - 150	15	30
N-Nitrosodimethylamine	30.0	16.2		ug/L		54	22 - 148	13	30
N-Nitrosodi-n-propylamine	30.0	18.1		ug/L		60	44 - 120	8	30
N-Nitrosodiphenylamine	29.8	17.7		ug/L		60	56 - 120	6	30
Pentachlorophenol	60.0	30.8		ug/L		51	15 - 141	14	30
Phenol	30.0	16.3		ug/L		54	33 - 120	11	30
Pyridine	60.0	25.9		ug/L		43	26 - 120	9	30
Quinoline	29.6	18.5		ug/L		62	51 - 129	11	30
2,4,5-Trichlorophenol	30.0	19.3		ug/L		64	38 - 147	7	30
2,4,6-Trichlorophenol	30.0	19.1		ug/L		64	36 - 139	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*52*		*10 - 120*
Terphenyl-d14	*56*		*53 - 125*
2,4,6-Tribromophenol	*59*		*15 - 135*

Lab Sample ID: LCSD 400-486081/5-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	7.59	J *1	ug/L		25	10 - 120	34	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*53*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*55*		*10 - 120*
Terphenyl-d14	*57*		*53 - 125*
2,4,6-Tribromophenol	*38*		*15 - 135*

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzenethiol	ND		10	1.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzoic acid	ND		30	7.3	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzyl alcohol	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/23/20 13:48	04/27/20 16:43	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/23/20 13:48	04/27/20 16:43	1

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/23/20 13:48	04/27/20 16:43	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chloroaniline	ND		10	3.4	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Chlorophenol	ND		10	2.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dibenzofuran	ND		10	0.52	ug/L		04/23/20 13:48	04/27/20 16:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/23/20 13:48	04/27/20 16:43	1
1,4-Dioxane	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachloroethane	ND		10	4.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
Indene	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Isophorone	ND		10	0.57	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Methylphenol	ND		10	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Nitroaniline	ND		10	2.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
3-Nitroaniline	ND		10	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Nitroaniline	ND		10	2.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
Nitrobenzene	ND		10	0.55	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Nitrophenol	ND		10	0.65	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Nitrophenol	ND		10	2.1	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/23/20 13:48	04/27/20 16:43	1
Pentachlorophenol	ND		20	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
Phenol	ND		10	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
Pyridine	ND		10	3.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
Quinoline	ND		10	6.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	57		34 - 120	04/23/20 13:48	04/27/20 16:43	1
2-Fluorophenol	34		10 - 120	04/23/20 13:48	04/27/20 16:43	1
Nitrobenzene-d5	52		27 - 120	04/23/20 13:48	04/27/20 16:43	1
Phenol-d5	49		10 - 120	04/23/20 13:48	04/27/20 16:43	1
Terphenyl-d14	57		53 - 125	04/23/20 13:48	04/27/20 16:43	1
2,4,6-Tribromophenol	58		15 - 135	04/23/20 13:48	04/27/20 16:43	1

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.2		ug/L		81	29 - 120
Benzoic acid	116	76.9		ug/L		66	10 - 150
Benzyl alcohol	30.0	23.2		ug/L		77	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.8		ug/L		73	45 - 120
Bis(2-chloroethyl)ether	30.0	19.6		ug/L		65	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.0		ug/L		67	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.3		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	23.7		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	25.1		ug/L		84	46 - 145
4-Chloroaniline	30.0	21.0		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	24.1		ug/L		80	39 - 140
2-Chloronaphthalene	30.0	23.1		ug/L		77	52 - 120
2-Chlorophenol	30.0	19.9		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	24.0		ug/L		80	58 - 124
Dibenz[a,h]acridine	29.6	20.5		ug/L		69	46 - 149
Dibenzofuran	30.0	23.8		ug/L		79	58 - 123
3,3'-Dichlorobenzidine	40.0	38.0		ug/L		95	39 - 135
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128
Diethyl phthalate	30.0	25.2		ug/L		84	44 - 146
2,4-Dimethylphenol	30.0	24.3		ug/L		81	44 - 120
Dimethyl phthalate	30.0	23.8		ug/L		79	50 - 131
Di-n-butyl phthalate	30.0	27.1		ug/L		90	55 - 131
4,6-Dinitro-ortho-cresol	60.0	52.9		ug/L		88	10 - 150
2,4-Dinitrophenol	60.0	64.3		ug/L		107	10 - 150
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140
2,6-Dinitrotoluene	30.0	24.9		ug/L		83	57 - 130
Di-n-octyl phthalate	30.0	28.4		ug/L		95	50 - 150
1,4-Dioxane	30.0	15.2		ug/L		51	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	21.8		ug/L		73	47 - 123
Hexachlorobenzene	30.0	23.1		ug/L		77	52 - 131
Hexachlorocyclopentadiene	30.0	13.4	J	ug/L		45	10 - 129
Hexachloroethane	30.0	16.9		ug/L		56	20 - 120
Indene	30.0	20.5		ug/L		68	47 - 120
Isophorone	30.0	22.3		ug/L		74	49 - 120
2-Methylphenol	30.0	22.0		ug/L		73	39 - 123
3 & 4 Methylphenol	30.0	21.9		ug/L		73	38 - 121

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

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Nitroaniline	30.0	23.8		ug/L		79	47 - 150
3-Nitroaniline	30.0	19.9		ug/L		66	34 - 132
4-Nitroaniline	30.0	24.7		ug/L		82	41 - 135
Nitrobenzene	30.0	21.6		ug/L		72	47 - 120
2-Nitrophenol	30.0	24.2		ug/L		81	28 - 136
4-Nitrophenol	60.0	52.2		ug/L		87	10 - 150
N-Nitrosodimethylamine	30.0	20.4		ug/L		68	22 - 148
N-Nitrosodi-n-propylamine	30.0	22.9		ug/L		76	44 - 120
N-Nitrosodiphenylamine	29.8	23.1		ug/L		78	56 - 120
Pentachlorophenol	60.0	52.7		ug/L		88	15 - 141
Phenol	30.0	19.1		ug/L		64	33 - 120
Pyridine	60.0	33.4		ug/L		56	26 - 120
Quinoline	29.6	13.7	*	ug/L		46	51 - 129
2,4,5-Trichlorophenol	30.0	25.5		ug/L		85	38 - 147
2,4,6-Trichlorophenol	30.0	25.8		ug/L		86	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*60*		*10 - 120*
Terphenyl-d14	*74*		*53 - 125*
2,4,6-Tribromophenol	*79*		*15 - 135*

Lab Sample ID: LCS 400-486835/4-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	5.66	J	ug/L		19	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*48*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*53*		*15 - 135*

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	20.0		ug/L		67	29 - 120	NaN	30
Benzoic acid	116	65.7		ug/L		56	10 - 150	NaN	30
Benzyl alcohol	30.0	18.8		ug/L		63	19 - 125	NaN	30
Bis(2-chloroethoxy)methane	30.0	17.7		ug/L		59	45 - 120	NaN	30

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

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	30.0	22.1		ug/L		74	48 - 120	NaN	30
bis (2-chloroisopropyl) ether	30.0	16.5		ug/L		55	30 - 125	NaN	30
Bis(2-ethylhexyl) phthalate	30.0	19.1		ug/L		64	48 - 150	NaN	30
4-Bromophenyl phenyl ether	30.0	18.0		ug/L		60	55 - 122	NaN	30
Butyl benzyl phthalate	30.0	19.7		ug/L		66	46 - 145	NaN	30
4-Chloroaniline	30.0	15.8		ug/L		53	30 - 120	NaN	30
4-Chloro-3-methylphenol	30.0	19.3		ug/L		64	39 - 140	NaN	30
2-Chloronaphthalene	30.0	18.5		ug/L		62	52 - 120	NaN	30
2-Chlorophenol	30.0	14.8		ug/L		49	34 - 120	NaN	30
4-Chlorophenyl phenyl ether	30.0	18.8		ug/L		63	58 - 124	NaN	30
Dibenz[a,h]acridine	29.6	16.6		ug/L		56	46 - 149	NaN	30
Dibenzofuran	30.0	18.7		ug/L		62	58 - 123	NaN	30
3,3'-Dichlorobenzidine	40.0	29.4		ug/L		74	39 - 135	NaN	30
2,4-Dichlorophenol	30.0	18.0		ug/L		60	39 - 128	NaN	30
Diethyl phthalate	30.0	20.2		ug/L		67	44 - 146	NaN	30
2,4-Dimethylphenol	30.0	19.2		ug/L		64	44 - 120	NaN	30
Dimethyl phthalate	30.0	18.9		ug/L		63	50 - 131	NaN	30
Di-n-butyl phthalate	30.0	20.2		ug/L		67	55 - 131	NaN	30
4,6-Dinitro-ortho-cresol	60.0	40.7		ug/L		68	10 - 150	NaN	30
2,4-Dinitrophenol	60.0	47.8		ug/L		80	10 - 150	NaN	30
2,4-Dinitrotoluene	30.0	20.7		ug/L		69	58 - 140	NaN	30
2,6-Dinitrotoluene	30.0	19.6		ug/L		65	57 - 130	NaN	30
Di-n-octyl phthalate	30.0	19.4		ug/L		65	50 - 150	NaN	30
1,4-Dioxane	30.0	12.9		ug/L		43	25 - 120	NaN	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.2		ug/L		57	47 - 123	NaN	30
Hexachlorobenzene	30.0	18.2		ug/L		61	52 - 131	NaN	30
Hexachlorocyclopentadiene	30.0	12.4	J	ug/L		41	10 - 129	NaN	30
Hexachloroethane	30.0	14.2		ug/L		47	20 - 120	NaN	30
Indene	30.0	16.8		ug/L		56	47 - 120	NaN	30
Isophorone	30.0	18.2		ug/L		61	49 - 120	NaN	30
2-Methylphenol	30.0	17.3		ug/L		58	39 - 123	NaN	30
3 & 4 Methylphenol	30.0	17.4	J	ug/L		58	38 - 121	NaN	30
2-Nitroaniline	30.0	18.7		ug/L		62	47 - 150	NaN	30
3-Nitroaniline	30.0	14.9		ug/L		50	34 - 132	NaN	30
4-Nitroaniline	30.0	18.5		ug/L		62	41 - 135	NaN	30
Nitrobenzene	30.0	17.3		ug/L		58	47 - 120	NaN	30
2-Nitrophenol	30.0	19.1		ug/L		64	28 - 136	NaN	30
4-Nitrophenol	60.0	38.1		ug/L		63	10 - 150	NaN	30
N-Nitrosodimethylamine	30.0	16.3		ug/L		54	22 - 148	NaN	30
N-Nitrosodi-n-propylamine	30.0	18.6		ug/L		62	44 - 120	NaN	30
N-Nitrosodiphenylamine	29.8	17.7		ug/L		60	56 - 120	NaN	30
Pentachlorophenol	60.0	41.6		ug/L		69	15 - 141	NaN	30
Phenol	30.0	14.9		ug/L		50	33 - 120	NaN	30
Pyridine	60.0	27.5		ug/L		46	26 - 120	NaN	30
Quinoline	29.6	15.6		ug/L		53	51 - 129	NaN	30
2,4,5-Trichlorophenol	30.0	20.0		ug/L		67	38 - 147	NaN	30
2,4,6-Trichlorophenol	30.0	20.1		ug/L		67	36 - 139	NaN	30

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

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	58		34 - 120
2-Fluorophenol	28		10 - 120
Nitrobenzene-d5	58		27 - 120
Phenol-d5	47		10 - 120
Terphenyl-d14	66		53 - 125
2,4,6-Tribromophenol	63		15 - 135

Lab Sample ID: LCSD 400-486835/5-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*1	ug/L		2	10 - 120	162	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	61		34 - 120
2-Fluorophenol	27		10 - 120
Nitrobenzene-d5	56		27 - 120
Phenol-d5	49		10 - 120
Terphenyl-d14	63		53 - 125
2,4,6-Tribromophenol	56		15 - 135

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/14/20 11:11	04/20/20 13:10	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/14/20 11:11	04/20/20 13:10	1
Anthracene	ND		0.20	0.031	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/14/20 11:11	04/20/20 13:10	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/14/20 11:11	04/20/20 13:10	1
Chrysene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluoranthene	ND		0.20	0.068	ug/L		04/14/20 11:11	04/20/20 13:10	1
Fluorene	ND		0.20	0.11	ug/L		04/14/20 11:11	04/20/20 13:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/14/20 11:11	04/20/20 13:10	1
Phenanthrene	ND		0.20	0.036	ug/L		04/14/20 11:11	04/20/20 13:10	1
Pyrene	ND		0.20	0.040	ug/L		04/14/20 11:11	04/20/20 13:10	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/14/20 11:11	04/20/20 13:10	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/14/20 11:11	04/20/20 13:10	1

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

Lab Sample ID: MB 400-485894/1-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 485894

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	142	X	33 - 138	04/14/20 11:11	04/20/20 13:10	1
2-Fluorobiphenyl	89		15 - 122	04/14/20 11:11	04/20/20 13:10	1
Nitrobenzene-d5	82		19 - 130	04/14/20 11:11	04/20/20 13:10	1

Lab Sample ID: LCS 400-485894/2-A
Matrix: Water
Analysis Batch: 486425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.8		ug/L		83	41 - 120
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120
Anthracene	30.0	24.1		ug/L		80	49 - 120
Benzo[a]anthracene	30.0	23.5		ug/L		78	61 - 135
Benzo[a]pyrene	30.0	22.0		ug/L		73	52 - 120
Benzo[b]fluoranthene	30.0	22.9		ug/L		76	53 - 134
Benzo[g,h,i]perylene	30.0	24.7		ug/L		82	47 - 133
Benzo[k]fluoranthene	30.0	23.8		ug/L		79	57 - 134
Chrysene	30.0	23.7		ug/L		79	55 - 122
Dibenz(a,h)anthracene	30.0	24.3		ug/L		81	48 - 146
Fluoranthene	30.0	20.9		ug/L		70	54 - 128
Fluorene	30.0	24.6		ug/L		82	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	24.2		ug/L		81	43 - 142
Phenanthrene	30.0	24.1		ug/L		80	48 - 120
Pyrene	30.0	27.7		ug/L		92	48 - 132
1-Methylnaphthalene	30.0	21.1		ug/L		70	41 - 120
2-Methylnaphthalene	30.0	20.7		ug/L		69	32 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14	107		33 - 138
2-Fluorobiphenyl	78		15 - 122
Nitrobenzene-d5	52		19 - 130

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND	F2	29.1	12.7		ug/L		44	35 - 113
Acenaphthylene	ND	F2	29.1	13.6		ug/L		47	41 - 118
Anthracene	ND	F2	29.1	14.2		ug/L		49	45 - 122
Benzo[a]anthracene	ND	F1	29.1	13.1	F1	ug/L		45	55 - 133
Benzo[a]pyrene	ND	F1 *3	29.1	12.1	F1	ug/L		42	50 - 108
Benzo[b]fluoranthene	ND	F1 *3	29.1	11.6	F1	ug/L		40	50 - 128
Benzo[g,h,i]perylene	ND	F1 *3	29.1	11.8	F1	ug/L		41	46 - 133
Benzo[k]fluoranthene	ND	F1 *3	29.1	13.8	F1	ug/L		47	52 - 128
Chrysene	ND	F1	29.1	13.6	F1	ug/L		47	52 - 116
Dibenz(a,h)anthracene	ND	F1 *3	29.1	13.1	F1	ug/L		45	52 - 143
Fluoranthene	ND		29.1	12.8		ug/L		44	32 - 150

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

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	ND	F2	29.1	13.9		ug/L		48	15 - 150
Indeno[1,2,3-cd]pyrene	ND	*3	29.1	12.5		ug/L		43	41 - 141
Phenanthrene	ND		29.1	13.4		ug/L		46	36 - 125
Pyrene	ND		29.1	15.4		ug/L		53	41 - 127
1-Methylnaphthalene	ND		29.1	11.8		ug/L		41	10 - 150
2-Methylnaphthalene	ND		29.1	11.8		ug/L		40	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*75*		*33 - 138*
2-Fluorobiphenyl	*57*		*15 - 122*
Nitrobenzene-d5	*50*		*19 - 130*

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486425

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 485894

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND	F2	29.3	24.5	F2	ug/L		84	35 - 113	63	49
Acenaphthylene	ND	F2	29.3	25.4	F2	ug/L		87	41 - 118	61	48
Anthracene	ND	F2	29.3	25.8	F2	ug/L		88	45 - 122	58	56
Benzo[a]anthracene	ND	F1	29.3	19.7		ug/L		67	55 - 133	40	57
Benzo[a]pyrene	ND	F1 *3	29.3	17.5		ug/L		60	50 - 108	36	59
Benzo[b]fluoranthene	ND	F1 *3	29.3	18.2		ug/L		62	50 - 128	44	62
Benzo[g,h,i]perylene	ND	F1 *3	29.3	15.5		ug/L		53	46 - 133	27	58
Benzo[k]fluoranthene	ND	F1 *3	29.3	19.5		ug/L		67	52 - 128	35	58
Chrysene	ND	F1	29.3	19.9		ug/L		68	52 - 116	38	59
Dibenz(a,h)anthracene	ND	F1 *3	29.3	17.9		ug/L		61	52 - 143	31	60
Fluoranthene	ND		29.3	22.8		ug/L		78	32 - 150	56	59
Fluorene	ND	F2	29.3	26.0	F2	ug/L		89	15 - 150	61	49
Indeno[1,2,3-cd]pyrene	ND	*3	29.3	17.0		ug/L		58	41 - 141	30	58
Phenanthrene	ND		29.3	24.9		ug/L		85	36 - 125	60	69
Pyrene	ND		29.3	26.2		ug/L		89	41 - 127	52	58
1-Methylnaphthalene	ND		29.3	20.3		ug/L		70	10 - 150	53	66
2-Methylnaphthalene	ND		29.3	20.5		ug/L		70	10 - 150	54	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*86*		*33 - 138*
2-Fluorobiphenyl	*86*		*15 - 122*
Nitrobenzene-d5	*68*		*19 - 130*

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 04:19	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 04:19	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 04:19	1

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

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/15/20 15:55	04/21/20 04:19	1
Chrysene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 04:19	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 04:19	1
Fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 04:19	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 04:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 04:19	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 04:19	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 04:19	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 04:19	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/15/20 15:55	04/21/20 04:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*156*	*X*	*33 - 138*	*04/15/20 15:55*	*04/21/20 04:19*	*1*
2-Fluorobiphenyl	*94*		*15 - 122*	*04/15/20 15:55*	*04/21/20 04:19*	*1*
Nitrobenzene-d5	*83*		*19 - 130*	*04/15/20 15:55*	*04/21/20 04:19*	*1*

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.0		ug/L		93	41 - 120
Acenaphthylene	30.0	28.4		ug/L		95	44 - 120
Anthracene	30.0	30.3		ug/L		101	49 - 120
Benzo[a]anthracene	30.0	28.6		ug/L		95	61 - 135
Benzo[a]pyrene	30.0	27.0		ug/L		90	52 - 120
Benzo[b]fluoranthene	30.0	28.9		ug/L		96	53 - 134
Benzo[g,h,i]perylene	30.0	24.2		ug/L		81	47 - 133
Benzo[k]fluoranthene	30.0	31.0		ug/L		103	57 - 134
Chrysene	30.0	29.1		ug/L		97	55 - 122
Dibenz(a,h)anthracene	30.0	27.6		ug/L		92	48 - 146
Fluoranthene	30.0	28.2		ug/L		94	54 - 128
Fluorene	30.0	30.1		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	27.0		ug/L		90	43 - 142
Phenanthrene	30.0	29.1		ug/L		97	48 - 120
Pyrene	30.0	31.7		ug/L		106	48 - 132
1-Methylnaphthalene	30.0	24.0		ug/L		80	41 - 120
2-Methylnaphthalene	30.0	24.0		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*119*		*33 - 138*
2-Fluorobiphenyl	*89*		*15 - 122*
Nitrobenzene-d5	*63*		*19 - 130*

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

Lab Sample ID: LCSD 400-486081/3-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	25.5		ug/L		85	41 - 120	9	56
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120	9	56
Anthracene	30.0	28.1		ug/L		94	49 - 120	8	51
Benzo[a]anthracene	30.0	26.0		ug/L		87	61 - 135	9	49
Benzo[a]pyrene	30.0	24.7		ug/L		82	52 - 120	9	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	10	54
Benzo[g,h,i]perylene	30.0	23.2		ug/L		77	47 - 133	4	50
Benzo[k]fluoranthene	30.0	28.9		ug/L		96	57 - 134	7	52
Chrysene	30.0	27.2		ug/L		91	55 - 122	7	50
Dibenz(a,h)anthracene	30.0	25.4		ug/L		85	48 - 146	9	50
Fluoranthene	30.0	25.8		ug/L		86	54 - 128	9	52
Fluorene	30.0	27.8		ug/L		93	45 - 125	8	56
Indeno[1,2,3-cd]pyrene	30.0	24.3		ug/L		81	43 - 142	11	51
Phenanthrene	30.0	26.5		ug/L		88	48 - 120	9	56
Pyrene	30.0	29.3		ug/L		98	48 - 132	8	52
1-Methylnaphthalene	30.0	21.9		ug/L		73	41 - 120	9	55
2-Methylnaphthalene	30.0	21.8		ug/L		73	32 - 124	9	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*110*		*33 - 138*
2-Fluorobiphenyl	*81*		*15 - 122*
Nitrobenzene-d5	*66*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486391/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/20/20 09:04	04/22/20 13:45	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/20/20 09:04	04/22/20 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*04/20/20 09:04*	*04/22/20 13:45*	*1*

Lab Sample ID: LCS 400-486391/2-A
Matrix: Water
Analysis Batch: 486454

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0893		ug/L		89	60 - 140
1,2-Dibromoethane	0.101	0.134		ug/L		133	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*132*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-486391/3-A
Matrix: Water
Analysis Batch: 486454

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486391

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0867		ug/L		86	60 - 140	3	30
1,2-Dibromoethane	0.101	0.136		ug/L		135	60 - 140	30	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*51 - 149*

Lab Sample ID: 400-186546-6 MS
Matrix: Water
Analysis Batch: 486521

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 486391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		0.103	0.0704		ug/L		68	65 - 135
1,2-Dibromoethane	ND		0.103	0.111		ug/L		108	65 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Lab Sample ID: 400-186546-6 MSD
Matrix: Water
Analysis Batch: 486521

Client Sample ID: MW11-ROX-040920
Prep Type: Total/NA
Prep Batch: 486391

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	ND		0.101	0.0696		ug/L		69	65 - 135	1	20
1,2-Dibromoethane	ND		0.102	0.108		ug/L		106	65 - 135	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*102*		*51 - 149*

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1364589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL

☐ CHEMICALS ☐ CONSULTANT ☐ LUBES

☐ TRANSPORTATION ☒ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60619901 - 1.03.002 | 60619901 - 1 03.0022

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/9/20

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 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B. Burkson B. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☒ SHELL CONTRACT RATE APPLIES

☐ STATE REIMBURSEMENT RATE APPLIES

☐ EDD NOT NEEDED

☒ RECEIPT VERIFICATION REQUESTED

☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002: VOC 8260; SVOC 8270

UNIT COST 60619901 - 1.03.0022: VOC 8011; PAH 8270LL

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 2.8C 0.9C; 2.3C IR9

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	SVOC 8270	VOC 8011	PAH 8270LL
	TB-ROX-040920-8260	4/9/20	0000	Water	2					2	X			
	TB-ROX-040920-8011		0000		2					2			X	
	MW1-ROX-040920		0925		6			2		8	X	X	X	X
	MW24-ROX-040920		1040		6			2		8	X	X	X	X
	P54-ROX-040920		1125		6			2		8	X	X	X	X
	MW11-ROX-040920		1300		6			2		8	X	X	X	X
	MW11-ROX-040920-MS		1300		6			2		8	X	X	X	X
	MW11-ROX-040920-MSD		1300		6			2		8	X	X	X	X

4/9/20

400-186546 COC

Relinquished by (Signature)	Received by (Signature)	Date	Time
	Fedex: 1680 3500 9251 / 1680 3500 9273 / 1680 3500 9262	4/9/20	1600
		4/10/20	8:46
		Date	Time

custody seal #: 1142177 1142176 / 1142175 1142174 / 1142173 1142172

Version 14Dec15

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4/28/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186546-1

Login Number: 186546
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1142176,1142177,1142173,1142172,1142175,1142174
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	2.8 °C, 0.9 °C, 2.3 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186546-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186589-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/8/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041020-8260	TB-ROX-041020-8011
MW26-ROX-041020	ROST3MW-ROX-041020
MW27-ROX-041020	MW9-ROX-041020
MW10-ROX-041020	

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 the LCS/LCD RPD for benzenethiol was outside evaluation criteria. The PAH surrogate recovery for terphenyl-d_{14} was outside criteria in sample MW27-ROX-041020 and the method blank. 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 400-486081/4-A/5-A	SVOCs	Benzenethiol	18/25	**34**	10-120/30

Analytical data associated with RPD alone outside evaluation criteria did not require qualification. No qualification of data was required.

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW27-ROX-041020	PAHs	Terphenyl-d_{14}	**141**	33-138
MB 400-486081/1-A	PAHs	Terphenyl-d_{14}	**156**	33-138

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

No

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186589-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/25/2020 8:12:06 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/8/2020 LR

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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: 400-186589-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186589-1

Comments
No additional comments.

Receipt
The samples were received on 4/11/2020 3:02 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.9° C and 2.6° C.

GC/MS VOA
Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: TB-ROX-041020-8260 (400-186589-1), MW26-ROX-041020 (400-186589-3), ROST3MW-ROX-041020 (400-186589-4), MW27-ROX-041020 (400-186589-5), MW9-ROX-041020 (400-186589-6) and MW10-ROX-041020 (400-186589-7). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-486081 and analytical batch 400-486423 recovered outside control limits for the following analytes: Benzenethiol.

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: MW27-ROX-041020 (400-186589-5). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486447 recovered above the upper control limit for Benzo[k]fluoranthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-486697 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: 400-186589-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186589-1	TB-ROX-041020-8260	Water	04/10/20 00:00	04/11/20 15:02	
400-186589-2	TB-ROX-041020-8011	Water	04/10/20 00:00	04/11/20 15:02	
400-186589-3	MW26-ROX-041020	Water	04/10/20 09:15	04/11/20 15:02	
400-186589-4	ROST3MW-ROX-041020	Water	04/10/20 10:10	04/11/20 15:02	
400-186589-5	MW27-ROX-041020	Water	04/10/20 11:05	04/11/20 15:02	
400-186589-6	MW9-ROX-041020	Water	04/10/20 12:45	04/11/20 15:02	
400-186589-7	MW10-ROX-041020	Water	04/10/20 13:25	04/11/20 15:02	

Detection Summary

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

Job ID: 400-186589-1

Client Sample ID: TB-ROX-041020-8260 — Lab Sample ID: 400-186589-1

No Detections.

Client Sample ID: TB-ROX-041020-8011 — Lab Sample ID: 400-186589-2

No Detections.

Client Sample ID: MW26-ROX-041020 — Lab Sample ID: 400-186589-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	7.9	J	30	7.4	ug/L	1		8270D	Total/NA

Client Sample ID: ROST3MW-ROX-041020 — Lab Sample ID: 400-186589-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.064	J	0.20	0.032	ug/L	1		8270D LL	Total/NA

Client Sample ID: MW27-ROX-041020 — Lab Sample ID: 400-186589-5

No Detections.

Client Sample ID: MW9-ROX-041020 — Lab Sample ID: 400-186589-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.9		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW10-ROX-041020 — Lab Sample ID: 400-186589-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.6		1.0	0.38	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: 400-186589-1

Client Sample ID: TB-ROX-041020-8260
Date Collected: 04/10/20 00:00
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-1
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			04/16/20 15:00	1
Acrolein	ND		20	10	ug/L			04/16/20 15:00	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 15:00	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 15:00	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 15:00	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 15:00	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 15:00	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 15:00	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 15:00	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 15:00	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 15:00	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 15:00	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 15:00	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 15:00	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 15:00	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 15:00	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 15:00	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 15:00	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 15:00	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 15:00	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 15:00	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 15:00	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 15:00	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 15:00	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 15:00	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 15:00	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 15:00	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 15:00	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 15:00	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 15:00	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 15:00	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 15:00	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 15:00	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 15:00	1

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

Job ID: 400-186589-1

Client Sample ID: TB-ROX-041020-8260
Date Collected: 04/10/20 00:00
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-1
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			04/16/20 15:00	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 15:00	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 15:00	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 15:00	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 15:00	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 15:00	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 15:00	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 15:00	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 15:00	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:00	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 15:00	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 15:00	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 15:00	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 15:00	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 15:00	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 15:00	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 15:00	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/16/20 15:00*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/16/20 15:00*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/16/20 15:00*	*1*

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

Job ID: 400-186589-1

Client Sample ID: TB-ROX-041020-8011
Date Collected: 04/10/20 00:00
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-2
Matrix: Water

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/21/20 09:06	04/21/20 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*04/21/20 09:06*	*04/21/20 18:54*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0054	ug/L		04/21/20 09:06	04/22/20 17:45	1

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

Job ID: 400-186589-1

Client Sample ID: MW26-ROX-041020
Date Collected: 04/10/20 09:15
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-3
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			04/16/20 15:41	1
Acrolein	ND		20	10	ug/L			04/16/20 15:41	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 15:41	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 15:41	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 15:41	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 15:41	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 15:41	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 15:41	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 15:41	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 15:41	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 15:41	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 15:41	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 15:41	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 15:41	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 15:41	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 15:41	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 15:41	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 15:41	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 15:41	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 15:41	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 15:41	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 15:41	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 15:41	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 15:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 15:41	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 15:41	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 15:41	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 15:41	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 15:41	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 15:41	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 15:41	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 15:41	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 15:41	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 15:41	1

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

Job ID: 400-186589-1

Client Sample ID: MW26-ROX-041020
Date Collected: 04/10/20 09:15
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-3
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			04/16/20 15:41	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 15:41	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 15:41	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 15:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 15:41	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 15:41	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 15:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 15:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 15:41	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 15:41	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 15:41	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 15:41	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 15:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 15:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 15:41	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 15:41	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 15:41	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*78 - 118*		*04/16/20 15:41*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/16/20 15:41*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/16/20 15:41*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 06:39	1
Acenaphthylene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 06:39	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 06:39	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		04/15/20 15:55	04/21/20 06:39	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		04/15/20 15:55	04/21/20 06:39	1
Benzo[b]fluoranthene	ND		0.20	0.069	ug/L		04/15/20 15:55	04/21/20 06:39	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 06:39	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/15/20 15:55	04/21/20 06:39	1
Chrysene	ND		0.20	0.075	ug/L		04/15/20 15:55	04/21/20 06:39	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		04/15/20 15:55	04/21/20 06:39	1
Fluoranthene	ND		0.20	0.069	ug/L		04/15/20 15:55	04/21/20 06:39	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 06:39	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 06:39	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 06:39	1
Pyrene	ND		0.20	0.041	ug/L		04/15/20 15:55	04/21/20 06:39	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		04/15/20 15:55	04/21/20 06:39	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		04/15/20 15:55	04/21/20 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*135*		*33 - 138*	*04/15/20 15:55*	*04/21/20 06:39*	*1*
2-Fluorobiphenyl	*82*		*15 - 122*	*04/15/20 15:55*	*04/21/20 06:39*	*1*

Client Sample ID: MW26-ROX-041020
Date Collected: 04/10/20 09:15
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*71*		*19 - 130*	*04/15/20 15:55*	*04/21/20 06:39*	*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		04/15/20 15:55	04/20/20 20:50	1
Benzenethiol	ND	*1	10	1.7	ug/L		04/15/20 15:55	04/20/20 20:50	1
Benzoic acid	**7.9**	**J**	30	7.4	ug/L		04/15/20 15:55	04/20/20 20:50	1
Benzyl alcohol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 20:50	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		04/15/20 15:55	04/20/20 20:50	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		04/15/20 15:55	04/20/20 20:50	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/15/20 15:55	04/20/20 20:50	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Chloroaniline	ND		10	3.4	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 20:50	1
2-Chloronaphthalene	ND		10	0.53	ug/L		04/15/20 15:55	04/20/20 20:50	1
2-Chlorophenol	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Dibenzofuran	ND		10	0.53	ug/L		04/15/20 15:55	04/20/20 20:50	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Diethyl phthalate	ND		10	0.71	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 20:50	1
Dimethyl phthalate	ND		10	0.61	ug/L		04/15/20 15:55	04/20/20 20:50	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/15/20 15:55	04/20/20 20:50	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 20:50	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		04/15/20 15:55	04/20/20 20:50	1
1,4-Dioxane	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/15/20 15:55	04/20/20 20:50	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 20:50	1
Hexachloroethane	ND		10	4.3	ug/L		04/15/20 15:55	04/20/20 20:50	1
Indene	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 20:50	1
Isophorone	ND		10	0.58	ug/L		04/15/20 15:55	04/20/20 20:50	1
2-Methylphenol	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 20:50	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		04/15/20 15:55	04/20/20 20:50	1
2-Nitroaniline	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 20:50	1
3-Nitroaniline	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Nitroaniline	ND		10	2.5	ug/L		04/15/20 15:55	04/20/20 20:50	1
Nitrobenzene	ND		10	0.56	ug/L		04/15/20 15:55	04/20/20 20:50	1
2-Nitrophenol	ND		10	0.66	ug/L		04/15/20 15:55	04/20/20 20:50	1
4-Nitrophenol	ND		10	2.1	ug/L		04/15/20 15:55	04/20/20 20:50	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 20:50	1

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

Job ID: 400-186589-1

Client Sample ID: MW26-ROX-041020
Date Collected: 04/10/20 09:15
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-3
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		04/15/20 15:55	04/20/20 20:50	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		04/15/20 15:55	04/20/20 20:50	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 20:50	1
Phenol	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 20:50	1
Pyridine	ND		10	3.2	ug/L		04/15/20 15:55	04/20/20 20:50	1
Quinoline	ND		10	6.1	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/15/20 15:55	04/20/20 20:50	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 20:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*04/15/20 15:55*	*04/20/20 20:50*	*1*
2-Fluorophenol	*28*		*10 - 120*	*04/15/20 15:55*	*04/20/20 20:50*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*04/15/20 15:55*	*04/20/20 20:50*	*1*
Phenol-d5	*35*		*10 - 120*	*04/15/20 15:55*	*04/20/20 20:50*	*1*
Terphenyl-d14	*60*		*53 - 125*	*04/15/20 15:55*	*04/20/20 20:50*	*1*
2,4,6-Tribromophenol	*35*		*15 - 135*	*04/15/20 15:55*	*04/20/20 20:50*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/21/20 09:06	04/21/20 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*04/21/20 09:06*	*04/21/20 19:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/21/20 09:06	04/22/20 18:04	1

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

Job ID: 400-186589-1

Client Sample ID: ROST3MW-ROX-041020
Date Collected: 04/10/20 10:10
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-4
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			04/16/20 16:01	1
Acrolein	ND		20	10	ug/L			04/16/20 16:01	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 16:01	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 16:01	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 16:01	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 16:01	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 16:01	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 16:01	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 16:01	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 16:01	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 16:01	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 16:01	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 16:01	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 16:01	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:01	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 16:01	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 16:01	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 16:01	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 16:01	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 16:01	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 16:01	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 16:01	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 16:01	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 16:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 16:01	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 16:01	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 16:01	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 16:01	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 16:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 16:01	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 16:01	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 16:01	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 16:01	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 16:01	1

Client Sample ID: ROST3MW-ROX-041020
Date Collected: 04/10/20 10:10
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-4
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			04/16/20 16:01	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 16:01	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 16:01	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 16:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 16:01	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 16:01	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:01	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 16:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 16:01	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:01	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 16:01	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 16:01	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 16:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 16:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 16:01	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 16:01	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 16:01	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*04/16/20 16:01*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/16/20 16:01*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/16/20 16:01*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.064**	**J**	0.20	0.032	ug/L		04/15/20 15:55	04/21/20 06:55	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 06:55	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 06:55	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 06:55	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 06:55	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 06:55	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 06:55	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/15/20 15:55	04/21/20 06:55	1
Chrysene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 06:55	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 06:55	1
Fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 06:55	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 06:55	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 06:55	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 06:55	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 06:55	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 06:55	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/15/20 15:55	04/21/20 06:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*124*		*33 - 138*	*04/15/20 15:55*	*04/21/20 06:55*	*1*
2-Fluorobiphenyl	*75*		*15 - 122*	*04/15/20 15:55*	*04/21/20 06:55*	*1*

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

Job ID: 400-186589-1

Client Sample ID: ROST3MW-ROX-041020
Date Collected: 04/10/20 10:10
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		19 - 130	04/15/20 15:55	04/21/20 06:55	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		04/15/20 15:55	04/20/20 21:11	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		04/15/20 15:55	04/20/20 21:11	1
Benzoic acid	ND		30	7.3	ug/L		04/15/20 15:55	04/20/20 21:11	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/15/20 15:55	04/20/20 21:11	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/15/20 15:55	04/20/20 21:11	1
bis (2-chloroisopropyl) ether	ND		9.9	0.81	ug/L		04/15/20 15:55	04/20/20 21:11	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/15/20 15:55	04/20/20 21:11	1
Butyl benzyl phthalate	ND		9.9	0.69	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/15/20 15:55	04/20/20 21:11	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/15/20 15:55	04/20/20 21:11	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/15/20 15:55	04/20/20 21:11	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:11	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/15/20 15:55	04/20/20 21:11	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/15/20 15:55	04/20/20 21:11	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 21:11	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/15/20 15:55	04/20/20 21:11	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:11	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:11	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/15/20 15:55	04/20/20 21:11	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 21:11	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/15/20 15:55	04/20/20 21:11	1
Indene	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:11	1
Isophorone	ND		9.9	0.57	ug/L		04/15/20 15:55	04/20/20 21:11	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 21:11	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 21:11	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/15/20 15:55	04/20/20 21:11	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/15/20 15:55	04/20/20 21:11	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/15/20 15:55	04/20/20 21:11	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/15/20 15:55	04/20/20 21:11	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:11	1

Client Sample ID: ROST3MW-ROX-041020
Date Collected: 04/10/20 10:10
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-4
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		9.9	3.3	ug/L		04/15/20 15:55	04/20/20 21:11	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/15/20 15:55	04/20/20 21:11	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 21:11	1
Phenol	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 21:11	1
Pyridine	ND		9.9	3.2	ug/L		04/15/20 15:55	04/20/20 21:11	1
Quinoline	ND		9.9	6.0	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/15/20 15:55	04/20/20 21:11	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*56*		*34 - 120*	*04/15/20 15:55*	*04/20/20 21:11*	*1*
2-Fluorophenol	*40*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:11*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*04/15/20 15:55*	*04/20/20 21:11*	*1*
Phenol-d5	*56*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:11*	*1*
Terphenyl-d14	*68*		*53 - 125*	*04/15/20 15:55*	*04/20/20 21:11*	*1*
2,4,6-Tribromophenol	*57*		*15 - 135*	*04/15/20 15:55*	*04/20/20 21:11*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0051	ug/L		04/21/20 09:06	04/21/20 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*04/21/20 09:06*	*04/21/20 19:34*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0056	ug/L		04/21/20 09:06	04/22/20 18:24	1

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

Job ID: 400-186589-1

Client Sample ID: MW27-ROX-041020
Date Collected: 04/10/20 11:05
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-5
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			04/16/20 16:22	1
Acrolein	ND		20	10	ug/L			04/16/20 16:22	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 16:22	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 16:22	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 16:22	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 16:22	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 16:22	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 16:22	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 16:22	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 16:22	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 16:22	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 16:22	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 16:22	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 16:22	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:22	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 16:22	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 16:22	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 16:22	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 16:22	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 16:22	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 16:22	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 16:22	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 16:22	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 16:22	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 16:22	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 16:22	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 16:22	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 16:22	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 16:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 16:22	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 16:22	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 16:22	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 16:22	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 16:22	1

Client Sample ID: MW27-ROX-041020
Date Collected: 04/10/20 11:05
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-5
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			04/16/20 16:22	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 16:22	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 16:22	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 16:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 16:22	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 16:22	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:22	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 16:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 16:22	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:22	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 16:22	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 16:22	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 16:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 16:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 16:22	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 16:22	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 16:22	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/16/20 16:22*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/16/20 16:22*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/16/20 16:22*	*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		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 07:10	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/15/20 15:55	04/21/20 07:10	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 07:10	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 07:10	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 07:10	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/15/20 15:55	04/21/20 07:10	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 07:10	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/15/20 15:55	04/21/20 07:10	1
Chrysene	ND		0.20	0.073	ug/L		04/15/20 15:55	04/21/20 07:10	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 07:10	1
Fluoranthene	ND		0.20	0.067	ug/L		04/15/20 15:55	04/21/20 07:10	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 07:10	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 07:10	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 07:10	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 07:10	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/15/20 15:55	04/21/20 07:10	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/15/20 15:55	04/21/20 07:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*141*	*X*	*33 - 138*	*04/15/20 15:55*	*04/21/20 07:10*	*1*
2-Fluorobiphenyl	*88*		*15 - 122*	*04/15/20 15:55*	*04/21/20 07:10*	*1*

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

Job ID: 400-186589-1

Client Sample ID: MW27-ROX-041020
Date Collected: 04/10/20 11:05
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	75		19 - 130	04/15/20 15:55	04/21/20 07:10	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		04/15/20 15:55	04/20/20 21:31	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		04/15/20 15:55	04/20/20 21:31	1
Benzoic acid	ND		30	7.2	ug/L		04/15/20 15:55	04/20/20 21:31	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/15/20 15:55	04/20/20 21:31	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/15/20 15:55	04/20/20 21:31	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/15/20 15:55	04/20/20 21:31	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/15/20 15:55	04/20/20 21:31	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/15/20 15:55	04/20/20 21:31	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/15/20 15:55	04/20/20 21:31	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/15/20 15:55	04/20/20 21:31	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:31	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/15/20 15:55	04/20/20 21:31	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/15/20 15:55	04/20/20 21:31	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 21:31	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/15/20 15:55	04/20/20 21:31	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:31	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:31	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/15/20 15:55	04/20/20 21:31	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 21:31	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/15/20 15:55	04/20/20 21:31	1
Indene	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 21:31	1
Isophorone	ND		9.9	0.56	ug/L		04/15/20 15:55	04/20/20 21:31	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 21:31	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 21:31	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 21:31	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/15/20 15:55	04/20/20 21:31	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/15/20 15:55	04/20/20 21:31	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/15/20 15:55	04/20/20 21:31	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/15/20 15:55	04/20/20 21:31	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:31	1

Client Sample ID: MW27-ROX-041020
Date Collected: 04/10/20 11:05
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-5
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		04/15/20 15:55	04/20/20 21:31	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/15/20 15:55	04/20/20 21:31	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 21:31	1
Phenol	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 21:31	1
Pyridine	ND		9.9	3.2	ug/L		04/15/20 15:55	04/20/20 21:31	1
Quinoline	ND		9.9	5.9	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/15/20 15:55	04/20/20 21:31	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 21:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*04/15/20 15:55*	*04/20/20 21:31*	*1*
2-Fluorophenol	*48*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:31*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*04/15/20 15:55*	*04/20/20 21:31*	*1*
Phenol-d5	*58*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:31*	*1*
Terphenyl-d14	*69*		*53 - 125*	*04/15/20 15:55*	*04/20/20 21:31*	*1*
2,4,6-Tribromophenol	*44*		*15 - 135*	*04/15/20 15:55*	*04/20/20 21:31*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.021	0.0051	ug/L		04/21/20 09:06	04/21/20 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*04/21/20 09:06*	*04/21/20 19:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.031	0.0057	ug/L		04/21/20 09:06	04/22/20 19:04	1

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

Job ID: 400-186589-1

Client Sample ID: MW9-ROX-041020
Date Collected: 04/10/20 12:45
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-6
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			04/16/20 16:42	1
Acrolein	ND		20	10	ug/L			04/16/20 16:42	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 16:42	1
Benzene	**4.9**		1.0	0.38	ug/L			04/16/20 16:42	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 16:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 16:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 16:42	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 16:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 16:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 16:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 16:42	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 16:42	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 16:42	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 16:42	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 16:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 16:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 16:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 16:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 16:42	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 16:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 16:42	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 16:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 16:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 16:42	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 16:42	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 16:42	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 16:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 16:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 16:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 16:42	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 16:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 16:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 16:42	1

Client Sample ID: MW9-ROX-041020
Date Collected: 04/10/20 12:45
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-6
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			04/16/20 16:42	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 16:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 16:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 16:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 16:42	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 16:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 16:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 16:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 16:42	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 16:42	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 16:42	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 16:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 16:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 16:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 16:42	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 16:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 16:42	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/16/20 16:42*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/16/20 16:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/16/20 16:42*	*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		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 07:26	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 07:26	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 07:26	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 07:26	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 07:26	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 07:26	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 07:26	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/15/20 15:55	04/21/20 07:26	1
Chrysene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 07:26	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 07:26	1
Fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 07:26	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 07:26	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 07:26	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 07:26	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 07:26	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 07:26	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/15/20 15:55	04/21/20 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*128*		*33 - 138*	*04/15/20 15:55*	*04/21/20 07:26*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*04/15/20 15:55*	*04/21/20 07:26*	*1*

Client Sample ID: MW9-ROX-041020
Date Collected: 04/10/20 12:45
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	72		19 - 130	04/15/20 15:55	04/21/20 07:26	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		04/15/20 15:55	04/20/20 21:52	1
Benzenethiol	ND	*1	10	1.7	ug/L		04/15/20 15:55	04/20/20 21:52	1
Benzoic acid	ND		30	7.3	ug/L		04/15/20 15:55	04/20/20 21:52	1
Benzyl alcohol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 21:52	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/15/20 15:55	04/20/20 21:52	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/15/20 15:55	04/20/20 21:52	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/15/20 15:55	04/20/20 21:52	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Chloroaniline	ND		10	3.4	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 21:52	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 21:52	1
2-Chlorophenol	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Dibenzofuran	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 21:52	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Diethyl phthalate	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 21:52	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/15/20 15:55	04/20/20 21:52	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/15/20 15:55	04/20/20 21:52	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 21:52	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/15/20 15:55	04/20/20 21:52	1
1,4-Dioxane	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/15/20 15:55	04/20/20 21:52	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 21:52	1
Hexachloroethane	ND		10	4.2	ug/L		04/15/20 15:55	04/20/20 21:52	1
Indene	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
Isophorone	ND		10	0.57	ug/L		04/15/20 15:55	04/20/20 21:52	1
2-Methylphenol	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 21:52	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
2-Nitroaniline	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 21:52	1
3-Nitroaniline	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Nitroaniline	ND		10	2.5	ug/L		04/15/20 15:55	04/20/20 21:52	1
Nitrobenzene	ND		10	0.55	ug/L		04/15/20 15:55	04/20/20 21:52	1
2-Nitrophenol	ND		10	0.65	ug/L		04/15/20 15:55	04/20/20 21:52	1
4-Nitrophenol	ND		10	2.1	ug/L		04/15/20 15:55	04/20/20 21:52	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 21:52	1

Client Sample ID: MW9-ROX-041020
Date Collected: 04/10/20 12:45
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-6
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		04/15/20 15:55	04/20/20 21:52	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/15/20 15:55	04/20/20 21:52	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 21:52	1
Phenol	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 21:52	1
Pyridine	ND		10	3.2	ug/L		04/15/20 15:55	04/20/20 21:52	1
Quinoline	ND		10	6.0	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/15/20 15:55	04/20/20 21:52	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*04/15/20 15:55*	*04/20/20 21:52*	*1*
2-Fluorophenol	*61*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:52*	*1*
Nitrobenzene-d5	*82*		*27 - 120*	*04/15/20 15:55*	*04/20/20 21:52*	*1*
Phenol-d5	*76*		*10 - 120*	*04/15/20 15:55*	*04/20/20 21:52*	*1*
Terphenyl-d14	*90*		*53 - 125*	*04/15/20 15:55*	*04/20/20 21:52*	*1*
2,4,6-Tribromophenol	*62*		*15 - 135*	*04/15/20 15:55*	*04/20/20 21:52*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/21/20 09:06	04/21/20 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*04/21/20 09:06*	*04/21/20 20:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		04/21/20 09:06	04/22/20 19:24	1

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

Job ID: 400-186589-1

Client Sample ID: MW10-ROX-041020
Date Collected: 04/10/20 13:25
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-7
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			04/16/20 17:03	1
Acrolein	ND		20	10	ug/L			04/16/20 17:03	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 17:03	1
Benzene	**3.6**		1.0	0.38	ug/L			04/16/20 17:03	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 17:03	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 17:03	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 17:03	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 17:03	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 17:03	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 17:03	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 17:03	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 17:03	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 17:03	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 17:03	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 17:03	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 17:03	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 17:03	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 17:03	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 17:03	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 17:03	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 17:03	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 17:03	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 17:03	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 17:03	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 17:03	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 17:03	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 17:03	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 17:03	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 17:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 17:03	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 17:03	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 17:03	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 17:03	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/16/20 17:03	1

Client Sample ID: MW10-ROX-041020
Date Collected: 04/10/20 13:25
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-7
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			04/16/20 17:03	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 17:03	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 17:03	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 17:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 17:03	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 17:03	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 17:03	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 17:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 17:03	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 17:03	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 17:03	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 17:03	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 17:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 17:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 17:03	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 17:03	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 17:03	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 17:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*78 - 118*		*04/16/20 17:03*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/16/20 17:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/16/20 17:03*	*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		04/15/20 15:55	04/21/20 07:42	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/15/20 15:55	04/21/20 07:42	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 07:42	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 07:42	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/15/20 15:55	04/21/20 07:42	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/15/20 15:55	04/21/20 07:42	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 07:42	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/15/20 15:55	04/21/20 07:42	1
Chrysene	ND		0.20	0.073	ug/L		04/15/20 15:55	04/21/20 07:42	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 07:42	1
Fluoranthene	ND		0.20	0.067	ug/L		04/15/20 15:55	04/21/20 07:42	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 07:42	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 07:42	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 07:42	1
Pyrene	ND		0.20	0.039	ug/L		04/15/20 15:55	04/21/20 07:42	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/15/20 15:55	04/21/20 07:42	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/15/20 15:55	04/21/20 07:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*138*		*33 - 138*	*04/15/20 15:55*	*04/21/20 07:42*	*1*
2-Fluorobiphenyl	*83*		*15 - 122*	*04/15/20 15:55*	*04/21/20 07:42*	*1*

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

Job ID: 400-186589-1

Client Sample ID: MW10-ROX-041020
Date Collected: 04/10/20 13:25
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	04/15/20 15:55	04/21/20 07:42	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		04/15/20 15:55	04/20/20 22:13	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		04/15/20 15:55	04/20/20 22:13	1
Benzoic acid	ND		30	7.2	ug/L		04/15/20 15:55	04/20/20 22:13	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/15/20 15:55	04/20/20 22:13	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/15/20 15:55	04/20/20 22:13	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/15/20 15:55	04/20/20 22:13	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/15/20 15:55	04/20/20 22:13	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/15/20 15:55	04/20/20 22:13	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/15/20 15:55	04/20/20 22:13	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/15/20 15:55	04/20/20 22:13	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 22:13	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/15/20 15:55	04/20/20 22:13	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/15/20 15:55	04/20/20 22:13	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/15/20 15:55	04/20/20 22:13	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/15/20 15:55	04/20/20 22:13	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 22:13	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 22:13	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/15/20 15:55	04/20/20 22:13	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 22:13	1
Hexachloroethane	ND		9.9	4.1	ug/L		04/15/20 15:55	04/20/20 22:13	1
Indene	ND		9.9	0.99	ug/L		04/15/20 15:55	04/20/20 22:13	1
Isophorone	ND		9.9	0.56	ug/L		04/15/20 15:55	04/20/20 22:13	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 22:13	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 22:13	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/15/20 15:55	04/20/20 22:13	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Nitroaniline	ND		9.9	2.4	ug/L		04/15/20 15:55	04/20/20 22:13	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/15/20 15:55	04/20/20 22:13	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/15/20 15:55	04/20/20 22:13	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/15/20 15:55	04/20/20 22:13	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 22:13	1

Client Sample ID: MW10-ROX-041020
Date Collected: 04/10/20 13:25
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-7
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		04/15/20 15:55	04/20/20 22:13	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/15/20 15:55	04/20/20 22:13	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 22:13	1
Phenol	ND		9.9	2.6	ug/L		04/15/20 15:55	04/20/20 22:13	1
Pyridine	ND		9.9	3.2	ug/L		04/15/20 15:55	04/20/20 22:13	1
Quinoline	ND		9.9	5.9	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/15/20 15:55	04/20/20 22:13	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/15/20 15:55	04/20/20 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*04/15/20 15:55*	*04/20/20 22:13*	*1*
2-Fluorophenol	*47*		*10 - 120*	*04/15/20 15:55*	*04/20/20 22:13*	*1*
Nitrobenzene-d5	*74*		*27 - 120*	*04/15/20 15:55*	*04/20/20 22:13*	*1*
Phenol-d5	*61*		*10 - 120*	*04/15/20 15:55*	*04/20/20 22:13*	*1*
Terphenyl-d14	*67*		*53 - 125*	*04/15/20 15:55*	*04/20/20 22:13*	*1*
2,4,6-Tribromophenol	*54*		*15 - 135*	*04/15/20 15:55*	*04/20/20 22:13*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/21/20 09:06	04/21/20 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*04/21/20 09:06*	*04/21/20 20:33*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.029	0.0053	ug/L		04/21/20 09:06	04/22/20 19:44	1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
*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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186589-1

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	(78-118)	(81-121)	(80-120)
400-186589-1	TB-ROX-041020-8260	92	92	98
400-186589-3	MW26-ROX-041020	90	93	98
400-186589-4	ROST3MW-ROX-041020	91	94	99
400-186589-5	MW27-ROX-041020	92	93	99
400-186589-6	MW9-ROX-041020	92	94	97
400-186589-7	MW10-ROX-041020	91	94	98
LCS 400-486117/1002	Lab Control Sample	92	100	99
MB 400-486117/6	Method Blank	92	96	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186589-3	MW26-ROX-041020	56	28	67	35	60	35
400-186589-4	ROST3MW-ROX-041020	56	40	67	56	68	57
400-186589-5	MW27-ROX-041020	63	48	71	58	69	44
400-186589-6	MW9-ROX-041020	74	61	82	76	90	62
400-186589-7	MW10-ROX-041020	63	47	74	61	67	54
LCS 400-486081/2-A	Lab Control Sample	54	48	70	58	58	66
LCS 400-486081/4-A	Lab Control Sample	51	38	62	53	57	43
LCSD 400-486081/3-A	Lab Control Sample Dup	50	43	64	52	56	59
LCSD 400-486081/5-A	Lab Control Sample Dup	53	44	64	55	57	38
MB 400-486081/1-A	Method Blank	55	51	65	58	58	29

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186589-3	MW26-ROX-041020	135	82	71
400-186589-4	ROST3MW-ROX-041020	124	75	66
400-186589-5	MW27-ROX-041020	141 X	88	75
400-186589-6	MW9-ROX-041020	128	83	72
400-186589-7	MW10-ROX-041020	138	83	71
LCS 400-486081/2-A	Lab Control Sample	119	89	63

Surrogate Summary

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

Job ID: 400-186589-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
LCSD 400-486081/3-A	Lab Control Sample Dup	110	81	66
MB 400-486081/1-A	Method Blank	156 X	94	83

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186589-2	TB-ROX-041020-8011	100
400-186589-3	MW26-ROX-041020	105
400-186589-4	ROST3MW-ROX-041020	101
400-186589-5	MW27-ROX-041020	101
400-186589-6	MW9-ROX-041020	106
400-186589-7	MW10-ROX-041020	100
LCS 400-486494/2-A	Lab Control Sample	114
LCSD 400-486494/3-A	Lab Control Sample Dup	108
MB 400-486494/1-A	Method Blank	102

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186589-1

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 TestAmerica, 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: 400-186589-1

Client Sample ID: TB-ROX-041020-8260

Date Collected: 04/10/20 00:00
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-1
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	486117	04/16/20 15:00	AMB	TAL PEN

Client Sample ID: TB-ROX-041020-8011

Date Collected: 04/10/20 00:00
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-2
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			35.8 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 18:54	DS	TAL PEN
Total/NA	Prep	8011	RA		35.8 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 17:45	DS	TAL PEN

Client Sample ID: MW26-ROX-041020

Date Collected: 04/10/20 09:15
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-3
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	486117	04/16/20 15:41	AMB	TAL PEN
Total/NA	Prep	3520C			987.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 20:50	VC1	TAL PEN
Total/NA	Prep	3520C			987.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 06:39	PP1	TAL PEN
Total/NA	Prep	8011			35.1 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 19:14	DS	TAL PEN
Total/NA	Prep	8011	RA		35.1 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 18:04	DS	TAL PEN

Client Sample ID: ROST3MW-ROX-041020

Date Collected: 04/10/20 10:10
Date Received: 04/11/20 15:02

Lab Sample ID: 400-186589-4
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	486117	04/16/20 16:01	AMB	TAL PEN
Total/NA	Prep	3520C			1005.6 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 21:11	VC1	TAL PEN
Total/NA	Prep	3520C			1005.6 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 06:55	PP1	TAL PEN
Total/NA	Prep	8011			34.4 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 19:34	DS	TAL PEN
Total/NA	Prep	8011	RA		34.4 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 18:24	DS	TAL PEN

Client Sample ID: MW27-ROX-041020 — **Lab Sample ID: 400-186589-5**
Date Collected: 04/10/20 11:05 — **Matrix: Water**
Date Received: 04/11/20 15:02

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	486117	04/16/20 16:22	AMB	TAL PEN
Total/NA	Prep	3520C			1011.4 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 21:31	VC1	TAL PEN
Total/NA	Prep	3520C			1011.4 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 07:10	PP1	TAL PEN
Total/NA	Prep	8011			34 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 19:53	DS	TAL PEN
Total/NA	Prep	8011	RA		34 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 19:04	DS	TAL PEN

Client Sample ID: MW9-ROX-041020 — **Lab Sample ID: 400-186589-6**
Date Collected: 04/10/20 12:45 — **Matrix: Water**
Date Received: 04/11/20 15:02

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	486117	04/16/20 16:42	AMB	TAL PEN
Total/NA	Prep	3520C			1004 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 21:52	VC1	TAL PEN
Total/NA	Prep	3520C			1004 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 07:26	PP1	TAL PEN
Total/NA	Prep	8011			36.6 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 20:13	DS	TAL PEN
Total/NA	Prep	8011	RA		36.6 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 19:24	DS	TAL PEN

Client Sample ID: MW10-ROX-041020 — **Lab Sample ID: 400-186589-7**
Date Collected: 04/10/20 13:25 — **Matrix: Water**
Date Received: 04/11/20 15:02

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	486117	04/16/20 17:03	AMB	TAL PEN
Total/NA	Prep	3520C			1013.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 22:13	VC1	TAL PEN
Total/NA	Prep	3520C			1013.2 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 07:42	PP1	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 20:33	DS	TAL PEN
Total/NA	Prep	8011	RA		36.3 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011	RA	1			486697	04/22/20 19:44	DS	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-486081/1-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:02	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486447	04/21/20 04:19	PP1	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-486117/6**
Date Collected: N/A — **Matrix: Water**
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486117	04/16/20 10:44	AMB	TAL PEN

Client Sample ID: Method Blank — **Lab Sample ID: MB 400-486494/1-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	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 15:14	DS	TAL PEN
Total/NA	Prep	8011			35 mL	35 mL	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 17:25	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486081/2-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:23	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486447	04/21/20 04:35	PP1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486081/4-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 18:05	VC1	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486117/1002**
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	486117	04/16/20 08:46	AMB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-486494/2-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	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 15:34	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486081/3-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 17:44	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486447	04/21/20 04:50	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486081/5-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			1000 mL	1 mL	486081	04/15/20 15:55	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486423	04/20/20 18:25	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486494/3-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	486494	04/21/20 09:06	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486521	04/21/20 15:54	DS	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 486117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-1	TB-ROX-041020-8260	Total/NA	Water	8260B	
400-186589-3	MW26-ROX-041020	Total/NA	Water	8260B	
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	8260B	
400-186589-5	MW27-ROX-041020	Total/NA	Water	8260B	
400-186589-6	MW9-ROX-041020	Total/NA	Water	8260B	
400-186589-7	MW10-ROX-041020	Total/NA	Water	8260B	
MB 400-486117/6	Method Blank	Total/NA	Water	8260B	
LCS 400-486117/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-3	MW26-ROX-041020	Total/NA	Water	3520C	
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	3520C	
400-186589-5	MW27-ROX-041020	Total/NA	Water	3520C	
400-186589-6	MW9-ROX-041020	Total/NA	Water	3520C	
400-186589-7	MW10-ROX-041020	Total/NA	Water	3520C	
MB 400-486081/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486081/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486081/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-3	MW26-ROX-041020	Total/NA	Water	8270D	486081
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	8270D	486081
400-186589-5	MW27-ROX-041020	Total/NA	Water	8270D	486081
400-186589-6	MW9-ROX-041020	Total/NA	Water	8270D	486081
400-186589-7	MW10-ROX-041020	Total/NA	Water	8270D	486081
MB 400-486081/1-A	Method Blank	Total/NA	Water	8270D	486081
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	8270D	486081
LCS 400-486081/4-A	Lab Control Sample	Total/NA	Water	8270D	486081
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486081
LCSD 400-486081/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486081

Analysis Batch: 486447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-3	MW26-ROX-041020	Total/NA	Water	8270D LL	486081
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	8270D LL	486081
400-186589-5	MW27-ROX-041020	Total/NA	Water	8270D LL	486081
400-186589-6	MW9-ROX-041020	Total/NA	Water	8270D LL	486081
400-186589-7	MW10-ROX-041020	Total/NA	Water	8270D LL	486081
MB 400-486081/1-A	Method Blank	Total/NA	Water	8270D LL	486081
LCS 400-486081/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486081
LCSD 400-486081/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486081

QC Association Summary

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

Job ID: 400-186589-1

GC Semi VOA

Prep Batch: 486494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-2 - RA	TB-ROX-041020-8011	Total/NA	Water	8011	
400-186589-2	TB-ROX-041020-8011	Total/NA	Water	8011	
400-186589-3	MW26-ROX-041020	Total/NA	Water	8011	
400-186589-3 - RA	MW26-ROX-041020	Total/NA	Water	8011	
400-186589-4 - RA	ROST3MW-ROX-041020	Total/NA	Water	8011	
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	8011	
400-186589-5 - RA	MW27-ROX-041020	Total/NA	Water	8011	
400-186589-5	MW27-ROX-041020	Total/NA	Water	8011	
400-186589-6	MW9-ROX-041020	Total/NA	Water	8011	
400-186589-6 - RA	MW9-ROX-041020	Total/NA	Water	8011	
400-186589-7	MW10-ROX-041020	Total/NA	Water	8011	
400-186589-7 - RA	MW10-ROX-041020	Total/NA	Water	8011	
MB 400-486494/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486494/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486494/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 486521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-2	TB-ROX-041020-8011	Total/NA	Water	8011	486494
400-186589-3	MW26-ROX-041020	Total/NA	Water	8011	486494
400-186589-4	ROST3MW-ROX-041020	Total/NA	Water	8011	486494
400-186589-5	MW27-ROX-041020	Total/NA	Water	8011	486494
400-186589-6	MW9-ROX-041020	Total/NA	Water	8011	486494
400-186589-7	MW10-ROX-041020	Total/NA	Water	8011	486494
MB 400-486494/1-A	Method Blank	Total/NA	Water	8011	486494
LCS 400-486494/2-A	Lab Control Sample	Total/NA	Water	8011	486494
LCSD 400-486494/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486494

Analysis Batch: 486697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186589-2 - RA	TB-ROX-041020-8011	Total/NA	Water	8011	486494
400-186589-3 - RA	MW26-ROX-041020	Total/NA	Water	8011	486494
400-186589-4 - RA	ROST3MW-ROX-041020	Total/NA	Water	8011	486494
400-186589-5 - RA	MW27-ROX-041020	Total/NA	Water	8011	486494
400-186589-6 - RA	MW9-ROX-041020	Total/NA	Water	8011	486494
400-186589-7 - RA	MW10-ROX-041020	Total/NA	Water	8011	486494
MB 400-486494/1-A	Method Blank	Total/NA	Water	8011	486494

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

Lab Sample ID: MB 400-486117/6
Matrix: Water
Analysis Batch: 486117

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			04/16/20 10:44	1
Acrolein	ND		20	10	ug/L			04/16/20 10:44	1
Acrylonitrile	ND		10	2.8	ug/L			04/16/20 10:44	1
Benzene	ND		1.0	0.38	ug/L			04/16/20 10:44	1
Bromobenzene	ND		1.0	0.54	ug/L			04/16/20 10:44	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/16/20 10:44	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Bromoform	ND		5.0	0.71	ug/L			04/16/20 10:44	1
Bromomethane	ND		1.0	0.98	ug/L			04/16/20 10:44	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/16/20 10:44	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Chloroethane	ND		1.0	0.76	ug/L			04/16/20 10:44	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/16/20 10:44	1
Chloroform	ND		1.0	0.60	ug/L			04/16/20 10:44	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/16/20 10:44	1
Chloromethane	ND		1.0	0.83	ug/L			04/16/20 10:44	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 10:44	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/16/20 10:44	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/16/20 10:44	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/16/20 10:44	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/16/20 10:44	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/16/20 10:44	1
2-Hexanone	ND		25	3.1	ug/L			04/16/20 10:44	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/16/20 10:44	1
Methylene bromide	ND		5.0	0.59	ug/L			04/16/20 10:44	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/16/20 10:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/16/20 10:44	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/16/20 10:44	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/16/20 10:44	1
Naphthalene	ND		1.0	1.0	ug/L			04/16/20 10:44	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/16/20 10:44	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/16/20 10:44	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/16/20 10:44	1
o-Xylene	ND		5.0	0.60	ug/L			04/16/20 10:44	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/16/20 10:44	1

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

Lab Sample ID: MB 400-486117/6
Matrix: Water
Analysis Batch: 486117

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			04/16/20 10:44	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/16/20 10:44	1
Styrene	ND		1.0	1.0	ug/L			04/16/20 10:44	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/16/20 10:44	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/16/20 10:44	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/16/20 10:44	1
Toluene	ND		1.0	0.41	ug/L			04/16/20 10:44	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/16/20 10:44	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/16/20 10:44	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/16/20 10:44	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/16/20 10:44	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/16/20 10:44	1
Trichloroethene	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/16/20 10:44	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/16/20 10:44	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/16/20 10:44	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/16/20 10:44	1
Vinyl acetate	ND		25	2.0	ug/L			04/16/20 10:44	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/16/20 10:44	1
Xylenes, Total	ND		10	1.6	ug/L			04/16/20 10:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*04/16/20 10:44*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/16/20 10:44*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/16/20 10:44*	*1*

Lab Sample ID: LCS 400-486117/1002
Matrix: Water
Analysis Batch: 486117

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		105	43 - 160
Acrolein	500	475		ug/L		95	38 - 160
Acrylonitrile	500	489		ug/L		98	64 - 142
Benzene	50.0	42.8		ug/L		86	70 - 130
Bromobenzene	50.0	46.8		ug/L		94	70 - 132
Bromochloromethane	50.0	45.6		ug/L		91	70 - 130
Bromodichloromethane	50.0	41.4		ug/L		83	67 - 133
Bromoform	50.0	42.4		ug/L		85	57 - 140
Bromomethane	50.0	46.1		ug/L		92	10 - 160
2-Butanone (MEK)	200	207		ug/L		104	61 - 145
Carbon disulfide	50.0	34.4		ug/L		69	61 - 137
Carbon tetrachloride	50.0	42.5		ug/L		85	61 - 137
Chlorobenzene	50.0	43.8		ug/L		88	70 - 130
Dibromochloromethane	50.0	44.1		ug/L		88	67 - 135
Chloroethane	50.0	46.9		ug/L		94	55 - 141

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

Lab Sample ID: LCS 400-486117/1002
Matrix: Water
Analysis Batch: 486117

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	48.0		ug/L		96	10 - 160
Chloroform	50.0	43.4		ug/L		87	69 - 130
1-Chlorohexane	50.0	46.9		ug/L		94	69 - 130
Chloromethane	50.0	42.9		ug/L		86	58 - 137
cis-1,2-Dichloroethene	50.0	43.3		ug/L		87	68 - 130
cis-1,3-Dichloropropene	50.0	43.6		ug/L		87	69 - 132
1,2-Dichlorobenzene	50.0	45.4		ug/L		91	67 - 130
1,3-Dichlorobenzene	50.0	45.7		ug/L		91	70 - 130
1,4-Dichlorobenzene	50.0	43.8		ug/L		88	70 - 130
Dichlorodifluoromethane	50.0	43.3		ug/L		87	41 - 146
1,1-Dichloroethane	50.0	43.7		ug/L		87	70 - 130
1,2-Dichloroethane	50.0	43.4		ug/L		87	69 - 130
1,1-Dichloroethene	50.0	45.4		ug/L		91	63 - 134
1,2-Dichloropropane	50.0	42.6		ug/L		85	70 - 130
1,3-Dichloropropane	50.0	45.0		ug/L		90	70 - 130
2,2-Dichloropropane	50.0	40.0		ug/L		80	52 - 135
1,1-Dichloropropene	50.0	43.7		ug/L		87	70 - 130
Ethylbenzene	50.0	44.3		ug/L		89	70 - 130
Ethyl methacrylate	50.0	47.5		ug/L		95	68 - 130
Hexachlorobutadiene	50.0	53.6		ug/L		107	53 - 140
2-Hexanone	200	204		ug/L		102	65 - 137
Isopropylbenzene	50.0	45.0		ug/L		90	70 - 130
Methylene bromide	50.0	45.4		ug/L		91	70 - 130
Methylene Chloride	50.0	45.3		ug/L		91	66 - 135
4-Methyl-2-pentanone (MIBK)	200	199		ug/L		99	69 - 138
Methyl tert-butyl ether	50.0	43.4		ug/L		87	66 - 130
m-Xylene & p-Xylene	50.0	43.4		ug/L		87	70 - 130
Naphthalene	50.0	48.7		ug/L		97	47 - 149
n-Butylbenzene	50.0	44.3		ug/L		89	67 - 130
N-Propylbenzene	50.0	44.8		ug/L		90	70 - 130
o-Chlorotoluene	50.0	42.2		ug/L		84	70 - 130
o-Xylene	50.0	43.9		ug/L		88	70 - 130
p-Chlorotoluene	50.0	42.4		ug/L		85	70 - 130
p-Isopropyltoluene	50.0	45.2		ug/L		90	65 - 130
sec-Butylbenzene	50.0	44.2		ug/L		88	66 - 130
Styrene	50.0	44.9		ug/L		90	70 - 130
tert-Butylbenzene	50.0	41.9		ug/L		84	64 - 139
1,1,1,2-Tetrachloroethane	50.0	45.7		ug/L		91	67 - 131
1,1,2,2-Tetrachloroethane	50.0	47.0		ug/L		94	70 - 131
Tetrachloroethene	50.0	45.8		ug/L		92	65 - 130
Toluene	50.0	42.5		ug/L		85	70 - 130
trans-1,2-Dichloroethene	50.0	44.4		ug/L		89	70 - 130
trans-1,3-Dichloropropene	50.0	44.2		ug/L		88	63 - 130
1,2,3-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	50.7		ug/L		101	60 - 140
1,1,1-Trichloroethane	50.0	42.3		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	45.3		ug/L		91	70 - 130
Trichloroethene	50.0	45.8		ug/L		92	70 - 130
Trichlorofluoromethane	50.0	42.7		ug/L		85	65 - 138

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

Lab Sample ID: LCS 400-486117/1002
Matrix: Water
Analysis Batch: 486117

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	48.2		ug/L		96	70 - 130
1,2,4-Trimethylbenzene	50.0	43.4		ug/L		87	70 - 130
1,3,5-Trimethylbenzene	50.0	43.8		ug/L		88	69 - 130
Vinyl acetate	100	99.0		ug/L		99	26 - 160
Vinyl chloride	50.0	44.3		ug/L		89	59 - 136
Xylenes, Total	100	87.3		ug/L		87	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*100*		*81 - 121*
Toluene-d8 (Surr)	*99*		*80 - 120*

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

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzenethiol	ND		10	1.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzoic acid	ND		30	7.3	ug/L		04/15/20 15:55	04/20/20 17:02	1
Benzyl alcohol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/15/20 15:55	04/20/20 17:02	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/15/20 15:55	04/20/20 17:02	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/15/20 15:55	04/20/20 17:02	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chloroaniline	ND		10	3.4	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Chlorophenol	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dibenzofuran	ND		10	0.52	ug/L		04/15/20 15:55	04/20/20 17:02	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Diethyl phthalate	ND		10	0.70	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/15/20 15:55	04/20/20 17:02	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/15/20 15:55	04/20/20 17:02	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/15/20 15:55	04/20/20 17:02	1
1,4-Dioxane	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1

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

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
Hexachloroethane	ND		10	4.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
Indene	ND		10	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
Isophorone	ND		10	0.57	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Methylphenol	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Nitroaniline	ND		10	2.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
3-Nitroaniline	ND		10	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Nitroaniline	ND		10	2.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
Nitrobenzene	ND		10	0.55	ug/L		04/15/20 15:55	04/20/20 17:02	1
2-Nitrophenol	ND		10	0.65	ug/L		04/15/20 15:55	04/20/20 17:02	1
4-Nitrophenol	ND		10	2.1	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/15/20 15:55	04/20/20 17:02	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/15/20 15:55	04/20/20 17:02	1
Pentachlorophenol	ND		20	1.8	ug/L		04/15/20 15:55	04/20/20 17:02	1
Phenol	ND		10	2.6	ug/L		04/15/20 15:55	04/20/20 17:02	1
Pyridine	ND		10	3.2	ug/L		04/15/20 15:55	04/20/20 17:02	1
Quinoline	ND		10	6.0	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/15/20 15:55	04/20/20 17:02	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/15/20 15:55	04/20/20 17:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
2-Fluorophenol	*51*		*10 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Nitrobenzene-d5	*65*		*27 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Phenol-d5	*58*		*10 - 120*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
Terphenyl-d14	*58*		*53 - 125*	*04/15/20 15:55*	*04/20/20 17:02*	*1*
2,4,6-Tribromophenol	*29*		*15 - 135*	*04/15/20 15:55*	*04/20/20 17:02*	*1*

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	18.6		ug/L		62	29 - 120
Benzoic acid	116	61.1		ug/L		52	10 - 150
Benzyl alcohol	30.0	20.3		ug/L		68	19 - 125
Bis(2-chloroethoxy)methane	30.0	18.1		ug/L		60	45 - 120
Bis(2-chloroethyl)ether	30.0	16.0		ug/L		53	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.8		ug/L		69	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	16.6		ug/L		55	48 - 150
4-Bromophenyl phenyl ether	30.0	18.6		ug/L		62	55 - 122
Butyl benzyl phthalate	30.0	17.2		ug/L		57	46 - 145
4-Chloroaniline	30.0	17.2		ug/L		57	30 - 120
4-Chloro-3-methylphenol	30.0	21.7		ug/L		72	39 - 140

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

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	17.8		ug/L		59	52 - 120
2-Chlorophenol	30.0	18.3		ug/L		61	34 - 120
4-Chlorophenyl phenyl ether	30.0	19.6		ug/L		65	58 - 124
Dibenz[a,h]acridine	29.6	15.4		ug/L		52	46 - 149
Dibenzofuran	30.0	19.4		ug/L		65	58 - 123
3,3'-Dichlorobenzidine	40.0	34.0		ug/L		85	39 - 135
2,4-Dichlorophenol	30.0	20.7		ug/L		69	39 - 128
Diethyl phthalate	30.0	20.5		ug/L		68	44 - 146
2,4-Dimethylphenol	30.0	19.2		ug/L		64	44 - 120
Dimethyl phthalate	30.0	19.8		ug/L		66	50 - 131
Di-n-butyl phthalate	30.0	18.7		ug/L		62	55 - 131
4,6-Dinitro-ortho-cresol	60.0	44.7		ug/L		75	10 - 150
2,4-Dinitrophenol	60.0	54.3		ug/L		90	10 - 150
2,4-Dinitrotoluene	30.0	20.7		ug/L		69	58 - 140
2,6-Dinitrotoluene	30.0	20.1		ug/L		67	57 - 130
Di-n-octyl phthalate	30.0	19.2		ug/L		64	50 - 150
1,4-Dioxane	30.0	13.8		ug/L		46	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.7		ug/L		59	47 - 123
Hexachlorobenzene	30.0	18.7		ug/L		62	52 - 131
Hexachlorocyclopentadiene	30.0	12.1	J	ug/L		40	10 - 129
Hexachloroethane	30.0	15.1		ug/L		50	20 - 120
Indene	30.0	17.4		ug/L		58	47 - 120
Isophorone	30.0	19.8		ug/L		66	49 - 120
2-Methylphenol	30.0	20.0		ug/L		67	39 - 123
3 & 4 Methylphenol	30.0	19.4	J	ug/L		65	38 - 121
2-Nitroaniline	30.0	22.8		ug/L		76	47 - 150
3-Nitroaniline	30.0	20.4		ug/L		68	34 - 132
4-Nitroaniline	30.0	23.2		ug/L		77	41 - 135
Nitrobenzene	30.0	20.2		ug/L		67	47 - 120
2-Nitrophenol	30.0	18.2		ug/L		61	28 - 136
4-Nitrophenol	60.0	38.8		ug/L		65	10 - 150
N-Nitrosodimethylamine	30.0	18.4		ug/L		61	22 - 148
N-Nitrosodi-n-propylamine	30.0	19.7		ug/L		66	44 - 120
N-Nitrosodiphenylamine	29.8	18.8		ug/L		63	56 - 120
Pentachlorophenol	60.0	35.6		ug/L		59	15 - 141
Phenol	30.0	18.2		ug/L		61	33 - 120
Pyridine	60.0	28.3		ug/L		47	26 - 120
Quinoline	29.6	20.6		ug/L		69	51 - 129
2,4,5-Trichlorophenol	30.0	20.7		ug/L		69	38 - 147
2,4,6-Trichlorophenol	30.0	20.7		ug/L		69	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*34 - 120*
2-Fluorophenol	*48*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*58*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*

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

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	66		15 - 135

Lab Sample ID: LCS 400-486081/4-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	5.36	J	ug/L		18	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	51		34 - 120
2-Fluorophenol	38		10 - 120
Nitrobenzene-d5	62		27 - 120
Phenol-d5	53		10 - 120
Terphenyl-d14	57		53 - 125
2,4,6-Tribromophenol	43		15 - 135

Lab Sample ID: LCSD 400-486081/3-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	16.3		ug/L		54	29 - 120	14	30
Benzoic acid	116	56.1		ug/L		48	10 - 150	8	30
Benzyl alcohol	30.0	18.2		ug/L		61	19 - 125	11	30
Bis(2-chloroethoxy)methane	30.0	16.6		ug/L		55	45 - 120	9	30
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120	6	30
bis (2-chloroisopropyl) ether	30.0	18.9		ug/L		63	30 - 125	10	30
Bis(2-ethylhexyl) phthalate	30.0	16.2		ug/L		54	48 - 150	3	30
4-Bromophenyl phenyl ether	30.0	17.5		ug/L		58	55 - 122	6	30
Butyl benzyl phthalate	30.0	17.2		ug/L		57	46 - 145	0	30
4-Chloroaniline	30.0	15.8		ug/L		53	30 - 120	8	30
4-Chloro-3-methylphenol	30.0	19.8		ug/L		66	39 - 140	9	30
2-Chloronaphthalene	30.0	16.6		ug/L		55	52 - 120	7	30
2-Chlorophenol	30.0	16.6		ug/L		55	34 - 120	10	30
4-Chlorophenyl phenyl ether	30.0	18.1		ug/L		60	58 - 124	8	30
Dibenz[a,h]acridine	29.6	14.9		ug/L		50	46 - 149	3	30
Dibenzofuran	30.0	17.7		ug/L		59	58 - 123	9	30
3,3'-Dichlorobenzidine	40.0	31.4		ug/L		78	39 - 135	8	30
2,4-Dichlorophenol	30.0	18.9		ug/L		63	39 - 128	9	30
Diethyl phthalate	30.0	18.9		ug/L		63	44 - 146	8	30
2,4-Dimethylphenol	30.0	17.7		ug/L		59	44 - 120	8	30
Dimethyl phthalate	30.0	18.5		ug/L		62	50 - 131	7	30
Di-n-butyl phthalate	30.0	17.5		ug/L		58	55 - 131	6	30
4,6-Dinitro-ortho-cresol	60.0	39.7		ug/L		66	10 - 150	12	30
2,4-Dinitrophenol	60.0	47.8		ug/L		80	10 - 150	13	30
2,4-Dinitrotoluene	30.0	18.8		ug/L		63	58 - 140	10	30
2,6-Dinitrotoluene	30.0	18.8		ug/L		63	57 - 130	7	30

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

Lab Sample ID: LCSD 400-486081/3-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	18.9		ug/L		63	50 - 150	2	30
1,4-Dioxane	30.0	12.3		ug/L		41	25 - 120	12	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	16.8		ug/L		56	47 - 123	5	30
Hexachlorobenzene	30.0	16.8		ug/L		56	52 - 131	11	30
Hexachlorocyclopentadiene	30.0	11.5	J	ug/L		38	10 - 129	5	30
Hexachloroethane	30.0	14.0		ug/L		47	20 - 120	8	30
Indene	30.0	16.2		ug/L		54	47 - 120	7	30
Isophorone	30.0	18.5		ug/L		62	49 - 120	7	30
2-Methylphenol	30.0	17.8		ug/L		59	39 - 123	12	30
3 & 4 Methylphenol	30.0	17.7	J	ug/L		59	38 - 121	9	30
2-Nitroaniline	30.0	20.9		ug/L		70	47 - 150	9	30
3-Nitroaniline	30.0	19.1		ug/L		64	34 - 132	6	30
4-Nitroaniline	30.0	20.8		ug/L		69	41 - 135	11	30
Nitrobenzene	30.0	18.2		ug/L		61	47 - 120	10	30
2-Nitrophenol	30.0	16.9		ug/L		56	28 - 136	7	30
4-Nitrophenol	60.0	33.2		ug/L		55	10 - 150	15	30
N-Nitrosodimethylamine	30.0	16.2		ug/L		54	22 - 148	13	30
N-Nitrosodi-n-propylamine	30.0	18.1		ug/L		60	44 - 120	8	30
N-Nitrosodiphenylamine	29.8	17.7		ug/L		60	56 - 120	6	30
Pentachlorophenol	60.0	30.8		ug/L		51	15 - 141	14	30
Phenol	30.0	16.3		ug/L		54	33 - 120	11	30
Pyridine	60.0	25.9		ug/L		43	26 - 120	9	30
Quinoline	29.6	18.5		ug/L		62	51 - 129	11	30
2,4,5-Trichlorophenol	30.0	19.3		ug/L		64	38 - 147	7	30
2,4,6-Trichlorophenol	30.0	19.1		ug/L		64	36 - 139	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*50*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*52*		*10 - 120*
Terphenyl-d14	*56*		*53 - 125*
2,4,6-Tribromophenol	*59*		*15 - 135*

Lab Sample ID: LCSD 400-486081/5-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	7.59	J *1	ug/L		25	10 - 120	34	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*53*		*34 - 120*
2-Fluorophenol	*44*		*10 - 120*
Nitrobenzene-d5	*64*		*27 - 120*
Phenol-d5	*55*		*10 - 120*
Terphenyl-d14	*57*		*53 - 125*

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

Lab Sample ID: LCSD 400-486081/5-A
Matrix: Water
Analysis Batch: 486423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	38		15 - 135

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

Lab Sample ID: MB 400-486081/1-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486081

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/15/20 15:55	04/21/20 04:19	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/15/20 15:55	04/21/20 04:19	1
Anthracene	ND		0.20	0.031	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/15/20 15:55	04/21/20 04:19	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/15/20 15:55	04/21/20 04:19	1
Chrysene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 04:19	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/15/20 15:55	04/21/20 04:19	1
Fluoranthene	ND		0.20	0.068	ug/L		04/15/20 15:55	04/21/20 04:19	1
Fluorene	ND		0.20	0.11	ug/L		04/15/20 15:55	04/21/20 04:19	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/15/20 15:55	04/21/20 04:19	1
Phenanthrene	ND		0.20	0.036	ug/L		04/15/20 15:55	04/21/20 04:19	1
Pyrene	ND		0.20	0.040	ug/L		04/15/20 15:55	04/21/20 04:19	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/15/20 15:55	04/21/20 04:19	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/15/20 15:55	04/21/20 04:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	156	X	33 - 138	04/15/20 15:55	04/21/20 04:19	1
2-Fluorobiphenyl	94		15 - 122	04/15/20 15:55	04/21/20 04:19	1
Nitrobenzene-d5	83		19 - 130	04/15/20 15:55	04/21/20 04:19	1

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.0		ug/L		93	41 - 120
Acenaphthylene	30.0	28.4		ug/L		95	44 - 120
Anthracene	30.0	30.3		ug/L		101	49 - 120
Benzo[a]anthracene	30.0	28.6		ug/L		95	61 - 135
Benzo[a]pyrene	30.0	27.0		ug/L		90	52 - 120
Benzo[b]fluoranthene	30.0	28.9		ug/L		96	53 - 134
Benzo[g,h,i]perylene	30.0	24.2		ug/L		81	47 - 133
Benzo[k]fluoranthene	30.0	31.0		ug/L		103	57 - 134
Chrysene	30.0	29.1		ug/L		97	55 - 122
Dibenz(a,h)anthracene	30.0	27.6		ug/L		92	48 - 146
Fluoranthene	30.0	28.2		ug/L		94	54 - 128

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

Lab Sample ID: LCS 400-486081/2-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	30.1		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	27.0		ug/L		90	43 - 142
Phenanthrene	30.0	29.1		ug/L		97	48 - 120
Pyrene	30.0	31.7		ug/L		106	48 - 132
1-Methylnaphthalene	30.0	24.0		ug/L		80	41 - 120
2-Methylnaphthalene	30.0	24.0		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*119*		*33 - 138*
2-Fluorobiphenyl	*89*		*15 - 122*
Nitrobenzene-d5	*63*		*19 - 130*

Lab Sample ID: LCSD 400-486081/3-A
Matrix: Water
Analysis Batch: 486447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486081

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	25.5		ug/L		85	41 - 120	9	56
Acenaphthylene	30.0	26.0		ug/L		87	44 - 120	9	56
Anthracene	30.0	28.1		ug/L		94	49 - 120	8	51
Benzo[a]anthracene	30.0	26.0		ug/L		87	61 - 135	9	49
Benzo[a]pyrene	30.0	24.7		ug/L		82	52 - 120	9	50
Benzo[b]fluoranthene	30.0	26.0		ug/L		87	53 - 134	10	54
Benzo[g,h,i]perylene	30.0	23.2		ug/L		77	47 - 133	4	50
Benzo[k]fluoranthene	30.0	28.9		ug/L		96	57 - 134	7	52
Chrysene	30.0	27.2		ug/L		91	55 - 122	7	50
Dibenz(a,h)anthracene	30.0	25.4		ug/L		85	48 - 146	9	50
Fluoranthene	30.0	25.8		ug/L		86	54 - 128	9	52
Fluorene	30.0	27.8		ug/L		93	45 - 125	8	56
Indeno[1,2,3-cd]pyrene	30.0	24.3		ug/L		81	43 - 142	11	51
Phenanthrene	30.0	26.5		ug/L		88	48 - 120	9	56
Pyrene	30.0	29.3		ug/L		98	48 - 132	8	52
1-Methylnaphthalene	30.0	21.9		ug/L		73	41 - 120	9	55
2-Methylnaphthalene	30.0	21.8		ug/L		73	32 - 124	9	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*110*		*33 - 138*
2-Fluorobiphenyl	*81*		*15 - 122*
Nitrobenzene-d5	*66*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486494/1-A
Matrix: Water
Analysis Batch: 486521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/21/20 09:06	04/21/20 15:14	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-486494/1-A
Matrix: Water
Analysis Batch: 486521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486494

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		51 - 149	04/21/20 09:06	04/21/20 15:14	1

Lab Sample ID: MB 400-486494/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/21/20 09:06	04/22/20 17:25	1

Lab Sample ID: LCS 400-486494/2-A
Matrix: Water
Analysis Batch: 486521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0721		ug/L		72	60 - 140
1,2-Dibromoethane	0.101	0.113		ug/L		112	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	114		51 - 149

Lab Sample ID: LCSD 400-486494/3-A
Matrix: Water
Analysis Batch: 486521

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486494

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0729		ug/L		73	60 - 140	1	30
1,2-Dibromoethane	0.101	0.108		ug/L		107	60 - 140	4	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	108		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other ~~Lab Vendor # 1304589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☒ OTHER _ENV. SERVICES

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/10/20
Bob Billman	25278	PAGE: 1 of 1
PO #	GSAP Project ID	
60619901 - 1.03.002 / 60619901 - 1.03.0022	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 60619901 - 1.03.002 / 60619901 - 1.03.0022
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Other ID
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): B. Burkson, TJ Howell
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com
400-186589 COC

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60619901 - 1.03.002: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0022: VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-Rox-041020-8260	4/10/20	0000	Water	2					2	X				
	TB-Rox-041020-8011		0000		2					2			X		
	MW26-Rox-041020		0915		6			2		8	X	X	X	X	
	~~RUST3~~ MW-Rox-041020		1010		6			2		8	X	X	X	X	
	MW27-Rox-041020		1105		6			2		8	X	X	X	X	
	MW9-Rox-041020		1245		6			2		8	X	X	X	X	
	MW10-Rox-041020		1325		6			2		8	X	X	X	X	

4/10/20

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	Fedex: 1352 9706 1063, 1352 9706 1074, ~~1275 8866 6705~~ DB 4/10	4/10/20	1600
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
		4-11-20	0832

Version: 14Dec15

Custody Seal # 1142235, 1142234, 1142237, 1142236, ~~1142239, 1142238~~ DB 4/10

1.9°C, 2.6°C IR-8

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4/25/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186589-1

Login Number: 186589
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1.9°C 2.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-186589-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186678-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/8/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041320-8260	TB-ROX-041320-8011
MW16-ROX-041320	MW5-ROX-041320
MW6A-ROX-041320	MW6B-ROX-041320
MW6C-ROX-041320	MW6D-ROX-041320
MW6D-ROX-041320-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 benzenethiol and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for 2-fluorophenol was outside criteria in several samples. Several SVOC, SVOC, and VOC by 8011 MS/MSD recoveries and/or MS/MSD RPDs were outside evaluation criteria in sample MW6A-ROX-041320. 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 400-486237/4-A/5-A	SVOCs	Benzenethiol	**4**/19	**129**	10-120/30
LCS/LCSD 400-486672/2-A/3-A	VOC by 8011	1,2-Dibromo-3-Chloropropane	**258/247**	1	60-140/30
LCS/LCSD 400-486672/2-A/3-A	VOC by 8011	1,2-Dibromoethane	**147/144**	2	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS 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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW16-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW5-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW6A-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW6B-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW6C-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-041320	SVOCs	Benzenethiol	**UJ**
MW6D-ROX-041320-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MW16-ROX-041320	SVOCs	2-Fluorophenol	**3**	10-120
MW6A-ROX-041320	SVOCs	2-Fluorophenol	**4**	10-120
MW6C-ROX-041320	SVOCs	2-Fluorophenol	**6**	10-120

Qualifications due to surrogate recoveries were not required if only one of three acid SVOC surrogate recoveries were outside evaluation criteria in the associated samples. 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 MW6A-ROX-041320 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
MW6A-ROX-041320	VOCs	Bromomethane	130/**154**	17	10-150/50
MW6A-ROX-041320	VOCs	2-Chloroethyl vinyl ether	**0/0**	**NC**	10-150/50
MW6A-ROX-041320	SVOCs	3,3'-Dichlorobenzidine	**0/0**	**NC**	10-172/58
MW6A-ROX-041320	VOC by 8011	1,2-Dibromo-3-Chloropropane	**247/224**	10	65-135/20
MW6A-ROX-041320	VOC by 8011	1,2-Dibromoethane	**140**/130	7	65-135/20

Analytical data that required qualification based on MS/MSD data are included in the table below. Analytical data reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

Sample ID	Parameter	Analyte	Qualification
MW6A-ROX-041320	VOCs	2-Chloroethyl vinyl ether	**UJ**
MW6A-ROX-041320	SVOCs	3,3'-Dichlorobenzidine	**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
MW6D-ROX-041320	MW6D-ROX-041320-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186678-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/28/2020 9:11:50 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

LINKS

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Reviewed 5/8/2020 LK

The test results in this report meet all 2003 NELAC and 2009 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: 400-186678-1

Job ID: 400-186678-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186678-1

Comments
No additional comments.

Receipt
The samples were received on 4/14/2020 8:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 0.1° C, 0.5° C and 4.5° C.

GC/MS VOA
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-041320-8260 (400-186678-1), MW16-ROX-041320 (400-186678-3), MW5-ROX-041320 (400-186678-4), MW6A-ROX-041320 (400-186678-5), MW6B-ROX-041320 (400-186678-6), MW6C-ROX-041320 (400-186678-7), MW6D-ROX-041320 (400-186678-8) and MW6D-ROX-041320-DUP (400-186678-9). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-477133 was outside method criteria for the following analyte(s): Bromomethane and Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-486758 were outside control limits for 2-Chloroethyl vinyl ether due to the acidic nature of the parent sample.

Method 8260B: The matrix spike duplicate (MSD) recoveries for analytical batch 400-486758 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8260B: The RPD for the MS/MSD for 2-chloroethyl vinyl ether was not calculable for analytical batch 400-486758 because the recoveries were below the reporting limit due to the acidic nature of the parent sample.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-486237 and analytical batch 400-486534 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 400-486237 and analytical batch 400-486534 recovered outside control limits for the following analytes: Benzenethiol.

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: MW16-ROX-041320 (400-186678-3), MW6A-ROX-041320 (400-186678-5) and MW6C-ROX-041320 (400-186678-7). These results have been reported and qualified.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-486237 and analytical batch 400-486534 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.

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 400-486697 recovered above the upper control limit for

Job ID: 400-186678-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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 continuing calibration verification (CCV) associated with batch 400-486697 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-486672 and analytical batch 400-486697 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-486672 and analytical batch 400-486697 were outside control limits. Sample matrix interference is suspected.

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

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: 400-186678-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186678-1	TB-ROX-041320-8260	Water	04/13/20 00:00	04/14/20 08:51	
400-186678-2	TB-ROX-041320-8011	Water	04/13/20 00:00	04/14/20 08:51	
400-186678-3	MW16-ROX-041320	Water	04/13/20 10:10	04/14/20 08:51	
400-186678-4	MW5-ROX-041320	Water	04/13/20 10:35	04/14/20 08:51	
400-186678-5	MW6A-ROX-041320	Water	04/13/20 12:15	04/14/20 08:51	
400-186678-6	MW6B-ROX-041320	Water	04/13/20 12:55	04/14/20 08:51	
400-186678-7	MW6C-ROX-041320	Water	04/13/20 13:30	04/14/20 08:51	
400-186678-8	MW6D-ROX-041320	Water	04/13/20 14:05	04/14/20 08:51	
400-186678-9	MW6D-ROX-041320-DUP	Water	04/13/20 14:05	04/14/20 08:51	

Detection Summary

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

Job ID: 400-186678-1

Client Sample ID: TB-ROX-041320-8260 — Lab Sample ID: 400-186678-1

No Detections.

Client Sample ID: TB-ROX-041320-8011 — Lab Sample ID: 400-186678-2

No Detections.

Client Sample ID: MW16-ROX-041320 — Lab Sample ID: 400-186678-3

No Detections.

Client Sample ID: MW5-ROX-041320 — Lab Sample ID: 400-186678-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
tert-Butylbenzene	2.4		1.0	0.63	ug/L	1		8260B	Total/NA

Client Sample ID: MW6A-ROX-041320 — Lab Sample ID: 400-186678-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.43	J	1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW6B-ROX-041320 — Lab Sample ID: 400-186678-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.2		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW6C-ROX-041320 — Lab Sample ID: 400-186678-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.8		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW6D-ROX-041320 — Lab Sample ID: 400-186678-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	58		1.0	0.38	ug/L	1		8260B	Total/NA

Client Sample ID: MW6D-ROX-041320-DUP — Lab Sample ID: 400-186678-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	52		1.0	0.38	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: 400-186678-1

Client Sample ID: TB-ROX-041320-8260
Date Collected: 04/13/20 00:00
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-1
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			04/23/20 12:46	1
Acrolein	ND		20	10	ug/L			04/23/20 12:46	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 12:46	1
Benzene	ND		1.0	0.38	ug/L			04/23/20 12:46	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 12:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 12:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 12:46	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 12:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 12:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 12:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 12:46	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 12:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 12:46	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 12:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 12:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 12:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 12:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 12:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 12:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 12:46	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 12:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 12:46	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 12:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 12:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 12:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 12:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 12:46	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 12:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 12:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 12:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 12:46	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 12:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 12:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 12:46	1

Client Sample ID: TB-ROX-041320-8260
Date Collected: 04/13/20 00:00
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-1
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			04/23/20 12:46	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 12:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 12:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 12:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 12:46	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 12:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 12:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 12:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 12:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 12:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 12:46	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 12:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 12:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 12:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 12:46	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 12:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 12:46	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*78 - 118*		*04/23/20 12:46*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*04/23/20 12:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/23/20 12:46*	*1*

Client Sample Results

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

Job ID: 400-186678-1

Client Sample ID: TB-ROX-041320-8011
Date Collected: 04/13/20 00:00
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-2
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	*	0.029	0.0054	ug/L		04/22/20 11:23	04/23/20 23:24	1
1,2-Dibromoethane	ND	*	0.020	0.0049	ug/L		04/22/20 11:23	04/23/20 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*120*		*51 - 149*	*04/22/20 11:23*	*04/23/20 23:24*	*1*

Client Sample Results

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

Job ID: 400-186678-1

Client Sample ID: MW16-ROX-041320
Date Collected: 04/13/20 10:10
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-3
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			04/23/20 15:14	1
Acrolein	ND		20	10	ug/L			04/23/20 15:14	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 15:14	1
Benzene	ND		1.0	0.38	ug/L			04/23/20 15:14	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 15:14	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 15:14	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 15:14	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 15:14	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 15:14	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 15:14	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 15:14	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 15:14	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 15:14	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 15:14	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 15:14	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 15:14	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 15:14	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 15:14	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 15:14	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 15:14	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 15:14	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 15:14	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 15:14	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 15:14	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 15:14	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 15:14	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 15:14	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 15:14	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 15:14	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 15:14	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 15:14	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 15:14	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 15:14	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 15:14	1

Client Sample ID: MW16-ROX-041320
Date Collected: 04/13/20 10:10
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-3
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			04/23/20 15:14	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 15:14	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 15:14	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 15:14	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 15:14	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 15:14	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 15:14	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 15:14	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 15:14	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:14	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 15:14	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 15:14	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 15:14	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 15:14	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 15:14	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 15:14	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 15:14	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*78 - 118*		*04/23/20 15:14*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*04/23/20 15:14*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*04/23/20 15:14*	*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	0.032	ug/L		04/17/20 09:18	04/21/20 21:51	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 09:18	04/21/20 21:51	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 09:18	04/21/20 21:51	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 09:18	04/21/20 21:51	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 09:18	04/21/20 21:51	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/17/20 09:18	04/21/20 21:51	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 09:18	04/21/20 21:51	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/17/20 09:18	04/21/20 21:51	1
Chrysene	ND		0.20	0.073	ug/L		04/17/20 09:18	04/21/20 21:51	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 09:18	04/21/20 21:51	1
Fluoranthene	ND		0.20	0.067	ug/L		04/17/20 09:18	04/21/20 21:51	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 09:18	04/21/20 21:51	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 09:18	04/21/20 21:51	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 09:18	04/21/20 21:51	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 09:18	04/21/20 21:51	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/17/20 09:18	04/21/20 21:51	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/17/20 09:18	04/21/20 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*33 - 138*	*04/17/20 09:18*	*04/21/20 21:51*	*1*
2-Fluorobiphenyl	*79*		*15 - 122*	*04/17/20 09:18*	*04/21/20 21:51*	*1*

Client Sample ID: MW16-ROX-041320
Date Collected: 04/13/20 10:10
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	64		19 - 130	04/17/20 09:18	04/21/20 21:51	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		04/17/20 09:18	04/21/20 21:35	1
Benzenethiol	ND	**1 UJ	9.9	1.7	ug/L		04/17/20 09:18	04/21/20 21:35	1
Benzoic acid	ND		30	7.2	ug/L		04/17/20 09:18	04/21/20 21:35	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/17/20 09:18	04/21/20 21:35	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/17/20 09:18	04/21/20 21:35	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/17/20 09:18	04/21/20 21:35	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/17/20 09:18	04/21/20 21:35	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/17/20 09:18	04/21/20 21:35	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/17/20 09:18	04/21/20 21:35	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/17/20 09:18	04/21/20 21:35	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/17/20 09:18	04/21/20 21:35	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/17/20 09:18	04/21/20 21:35	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/17/20 09:18	04/21/20 21:35	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 09:18	04/21/20 21:35	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/17/20 09:18	04/21/20 21:35	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/17/20 09:18	04/21/20 21:35	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/17/20 09:18	04/21/20 21:35	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/17/20 09:18	04/21/20 21:35	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 09:18	04/21/20 21:35	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/17/20 09:18	04/21/20 21:35	1
Indene	ND		9.9	0.99	ug/L		04/17/20 09:18	04/21/20 21:35	1
Isophorone	ND		9.9	0.57	ug/L		04/17/20 09:18	04/21/20 21:35	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/17/20 09:18	04/21/20 21:35	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/17/20 09:18	04/21/20 21:35	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/17/20 09:18	04/21/20 21:35	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/17/20 09:18	04/21/20 21:35	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/17/20 09:18	04/21/20 21:35	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/17/20 09:18	04/21/20 21:35	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/17/20 09:18	04/21/20 21:35	1

Client Sample ID: MW16-ROX-041320
Date Collected: 04/13/20 10:10
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-3
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		04/17/20 09:18	04/21/20 21:35	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/17/20 09:18	04/21/20 21:35	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 09:18	04/21/20 21:35	1
Phenol	ND		9.9	2.6	ug/L		04/17/20 09:18	04/21/20 21:35	1
Pyridine	ND		9.9	3.2	ug/L		04/17/20 09:18	04/21/20 21:35	1
Quinoline	ND		9.9	6.0	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/17/20 09:18	04/21/20 21:35	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/17/20 09:18	04/21/20 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*66*		*34 - 120*	*04/17/20 09:18*	*04/21/20 21:35*	*1*
2-Fluorophenol	*3*	*X*	*10 - 120*	*04/17/20 09:18*	*04/21/20 21:35*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*04/17/20 09:18*	*04/21/20 21:35*	*1*
Phenol-d5	*13*		*10 - 120*	*04/17/20 09:18*	*04/21/20 21:35*	*1*
Terphenyl-d14	*97*		*53 - 125*	*04/17/20 09:18*	*04/21/20 21:35*	*1*
2,4,6-Tribromophenol	*39*		*15 - 135*	*04/17/20 09:18*	*04/21/20 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	*	0.031	0.0056	ug/L		04/22/20 11:23	04/23/20 00:43	1
1,2-Dibromoethane	ND	*	0.021	0.0051	ug/L		04/22/20 11:23	04/23/20 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*102*		*51 - 149*	*04/22/20 11:23*	*04/23/20 00:43*	*1*

Client Sample ID: MW5-ROX-041320
Date Collected: 04/13/20 10:35
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-4
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			04/23/20 15:38	1
Acrolein	ND		20	10	ug/L			04/23/20 15:38	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 15:38	1
Benzene	ND		1.0	0.38	ug/L			04/23/20 15:38	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 15:38	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 15:38	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 15:38	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 15:38	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 15:38	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 15:38	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 15:38	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 15:38	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 15:38	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 15:38	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 15:38	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 15:38	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 15:38	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 15:38	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 15:38	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 15:38	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 15:38	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 15:38	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 15:38	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 15:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 15:38	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 15:38	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 15:38	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 15:38	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 15:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 15:38	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 15:38	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 15:38	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 15:38	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 15:38	1

Client Sample ID: MW5-ROX-041320
Date Collected: 04/13/20 10:35
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-4
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			04/23/20 15:38	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 15:38	1
tert-Butylbenzene	**2.4**		1.0	0.63	ug/L			04/23/20 15:38	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 15:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 15:38	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 15:38	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 15:38	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 15:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 15:38	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 15:38	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 15:38	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 15:38	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 15:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 15:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 15:38	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 15:38	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 15:38	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*78 - 118*		*04/23/20 15:38*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/23/20 15:38*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/23/20 15:38*	*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	0.033	ug/L		04/17/20 09:18	04/21/20 22:07	1
Acenaphthylene	ND		0.20	0.046	ug/L		04/17/20 09:18	04/21/20 22:07	1
Anthracene	ND		0.20	0.032	ug/L		04/17/20 09:18	04/21/20 22:07	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		04/17/20 09:18	04/21/20 22:07	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		04/17/20 09:18	04/21/20 22:07	1
Benzo[b]fluoranthene	ND		0.20	0.069	ug/L		04/17/20 09:18	04/21/20 22:07	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 09:18	04/21/20 22:07	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/17/20 09:18	04/21/20 22:07	1
Chrysene	ND		0.20	0.075	ug/L		04/17/20 09:18	04/21/20 22:07	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		04/17/20 09:18	04/21/20 22:07	1
Fluoranthene	ND		0.20	0.069	ug/L		04/17/20 09:18	04/21/20 22:07	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 09:18	04/21/20 22:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 09:18	04/21/20 22:07	1
Phenanthrene	ND		0.20	0.037	ug/L		04/17/20 09:18	04/21/20 22:07	1
Pyrene	ND		0.20	0.041	ug/L		04/17/20 09:18	04/21/20 22:07	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		04/17/20 09:18	04/21/20 22:07	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		04/17/20 09:18	04/21/20 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*92*		*33 - 138*	*04/17/20 09:18*	*04/21/20 22:07*	*1*
2-Fluorobiphenyl	*81*		*15 - 122*	*04/17/20 09:18*	*04/21/20 22:07*	*1*

Client Sample ID: MW5-ROX-041320
Date Collected: 04/13/20 10:35
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		19 - 130	04/17/20 09:18	04/21/20 22:07	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		04/17/20 09:18	04/21/20 21:55	1
Benzenethiol	ND	**1	10	1.7	ug/L		04/17/20 09:18	04/21/20 21:55	1
Benzoic acid	ND		31	7.4	ug/L		04/17/20 09:18	04/21/20 21:55	1
Benzyl alcohol	ND		10	2.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		04/17/20 09:18	04/21/20 21:55	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		04/17/20 09:18	04/21/20 21:55	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		04/17/20 09:18	04/21/20 21:55	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		04/17/20 09:18	04/21/20 21:55	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Chloroaniline	ND		10	3.5	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		04/17/20 09:18	04/21/20 21:55	1
2-Chloronaphthalene	ND		10	0.53	ug/L		04/17/20 09:18	04/21/20 21:55	1
2-Chlorophenol	ND		10	2.2	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
Dibenz[a,h]acridine	ND		10	3.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
Dibenzofuran	ND		10	0.53	ug/L		04/17/20 09:18	04/21/20 21:55	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
Diethyl phthalate	ND		10	0.71	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		04/17/20 09:18	04/21/20 21:55	1
Dimethyl phthalate	ND		10	0.61	ug/L		04/17/20 09:18	04/21/20 21:55	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/17/20 09:18	04/21/20 21:55	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 09:18	04/21/20 21:55	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		04/17/20 09:18	04/21/20 21:55	1
1,4-Dioxane	ND		10	1.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/17/20 09:18	04/21/20 21:55	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 09:18	04/21/20 21:55	1
Hexachloroethane	ND		10	4.3	ug/L		04/17/20 09:18	04/21/20 21:55	1
Indene	ND		10	1.0	ug/L		04/17/20 09:18	04/21/20 21:55	1
Isophorone	ND		10	0.58	ug/L		04/17/20 09:18	04/21/20 21:55	1
2-Methylphenol	ND		10	1.8	ug/L		04/17/20 09:18	04/21/20 21:55	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
2-Nitroaniline	ND		10	2.2	ug/L		04/17/20 09:18	04/21/20 21:55	1
3-Nitroaniline	ND		10	1.8	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Nitroaniline	ND		10	2.5	ug/L		04/17/20 09:18	04/21/20 21:55	1
Nitrobenzene	ND		10	0.56	ug/L		04/17/20 09:18	04/21/20 21:55	1
2-Nitrophenol	ND		10	0.66	ug/L		04/17/20 09:18	04/21/20 21:55	1
4-Nitrophenol	ND		10	2.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		04/17/20 09:18	04/21/20 21:55	1

Client Sample ID: MW5-ROX-041320

Date Collected: 04/13/20 10:35
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-4

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	3.4	ug/L		04/17/20 09:18	04/21/20 21:55	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		04/17/20 09:18	04/21/20 21:55	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 09:18	04/21/20 21:55	1
Phenol	ND		10	2.6	ug/L		04/17/20 09:18	04/21/20 21:55	1
Pyridine	ND		10	3.3	ug/L		04/17/20 09:18	04/21/20 21:55	1
Quinoline	ND		10	6.1	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		04/17/20 09:18	04/21/20 21:55	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		04/17/20 09:18	04/21/20 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*69*		*34 - 120*	*04/17/20 09:18*	*04/21/20 21:55*	*1*
2-Fluorophenol	*32*		*10 - 120*	*04/17/20 09:18*	*04/21/20 21:55*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*04/17/20 09:18*	*04/21/20 21:55*	*1*
Phenol-d5	*60*		*10 - 120*	*04/17/20 09:18*	*04/21/20 21:55*	*1*
Terphenyl-d14	*90*		*53 - 125*	*04/17/20 09:18*	*04/21/20 21:55*	*1*
2,4,6-Tribromophenol	*97*		*15 - 135*	*04/17/20 09:18*	*04/21/20 21:55*	*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	0.0057	ug/L		04/22/20 11:23	04/23/20 01:03	1
1,2-Dibromoethane	ND	*	0.021	0.0051	ug/L		04/22/20 11:23	04/23/20 01:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*04/22/20 11:23*	*04/23/20 01:03*	*1*

Client Sample Results

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

Job ID: 400-186678-1

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5
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			04/23/20 10:21	1
Acrolein	ND		20	10	ug/L			04/23/20 10:21	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 10:21	1
Benzene	**0.43**	**J**	1.0	0.38	ug/L			04/23/20 10:21	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 10:21	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 10:21	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 10:21	1
Bromomethane	ND	F1	1.0	0.98	ug/L			04/23/20 10:21	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 10:21	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 10:21	1
2-Chloroethyl vinyl ether	ND	F1 UJ	5.0	2.0	ug/L			04/23/20 10:21	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 10:21	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 10:21	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 10:21	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 10:21	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 10:21	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 10:21	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 10:21	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 10:21	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 10:21	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 10:21	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 10:21	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 10:21	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 10:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 10:21	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 10:21	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 10:21	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 10:21	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 10:21	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 10:21	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 10:21	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 10:21	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 10:21	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 10:21	1

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5

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			04/23/20 10:21	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 10:21	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 10:21	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 10:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 10:21	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 10:21	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 10:21	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 10:21	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 10:21	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 10:21	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 10:21	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 10:21	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 10:21	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 10:21	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 10:21	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 10:21	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 10:21	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 10:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*84*		*78 - 118*		*04/23/20 10:21*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/23/20 10:21*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/23/20 10:21*	*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	0.033	ug/L		04/17/20 13:22	04/21/20 22:22	1
Acenaphthylene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 22:22	1
Anthracene	ND		0.20	0.032	ug/L		04/17/20 13:22	04/21/20 22:22	1
Benzo[a]anthracene	ND		0.20	0.047	ug/L		04/17/20 13:22	04/21/20 22:22	1
Benzo[a]pyrene	ND		0.20	0.043	ug/L		04/17/20 13:22	04/21/20 22:22	1
Benzo[b]fluoranthene	ND		0.20	0.069	ug/L		04/17/20 13:22	04/21/20 22:22	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 13:22	04/21/20 22:22	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/17/20 13:22	04/21/20 22:22	1
Chrysene	ND		0.20	0.075	ug/L		04/17/20 13:22	04/21/20 22:22	1
Dibenz(a,h)anthracene	ND		0.20	0.047	ug/L		04/17/20 13:22	04/21/20 22:22	1
Fluoranthene	ND		0.20	0.069	ug/L		04/17/20 13:22	04/21/20 22:22	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 13:22	04/21/20 22:22	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 13:22	04/21/20 22:22	1
Phenanthrene	ND		0.20	0.037	ug/L		04/17/20 13:22	04/21/20 22:22	1
Pyrene	ND		0.20	0.041	ug/L		04/17/20 13:22	04/21/20 22:22	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		04/17/20 13:22	04/21/20 22:22	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		04/17/20 13:22	04/21/20 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*33 - 138*	*04/17/20 13:22*	*04/21/20 22:22*	*1*
2-Fluorobiphenyl	*87*		*15 - 122*	*04/17/20 13:22*	*04/21/20 22:22*	*1*

Client Sample ID: MW6A-ROX-041320
Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	47		19 - 130	04/17/20 13:22	04/21/20 22:22	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		04/17/20 13:22	04/21/20 22:16	1
Benzenethiol	ND	**1 UJ	10	1.7	ug/L		04/17/20 13:22	04/21/20 22:16	1
Benzoic acid	ND		31	7.4	ug/L		04/17/20 13:22	04/21/20 22:16	1
Benzyl alcohol	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		04/17/20 13:22	04/21/20 22:16	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		04/17/20 13:22	04/21/20 22:16	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		04/17/20 13:22	04/21/20 22:16	1
Bis(2-ethylhexyl) phthalate	ND		10	5.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Bromophenyl phenyl ether	ND		10	0.33	ug/L		04/17/20 13:22	04/21/20 22:16	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Chloroaniline	ND		10	3.5	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Chloro-3-methylphenol	ND		10	3.9	ug/L		04/17/20 13:22	04/21/20 22:16	1
2-Chloronaphthalene	ND		10	0.53	ug/L		04/17/20 13:22	04/21/20 22:16	1
2-Chlorophenol	ND		10	2.2	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
Dibenz[a,h]acridine	ND		10	3.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
Dibenzofuran	ND		10	0.53	ug/L		04/17/20 13:22	04/21/20 22:16	1
3,3'-Dichlorobenzidine	ND	F1 UJ	10	2.6	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4-Dichlorophenol	ND		10	3.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
Diethyl phthalate	ND		10	0.71	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4-Dimethylphenol	ND		10	3.6	ug/L		04/17/20 13:22	04/21/20 22:16	1
Dimethyl phthalate	ND		10	0.61	ug/L		04/17/20 13:22	04/21/20 22:16	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/17/20 13:22	04/21/20 22:16	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4-Dinitrophenol	ND		31	3.5	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/21/20 22:16	1
Di-n-octyl phthalate	ND		10	0.45	ug/L		04/17/20 13:22	04/21/20 22:16	1
1,4-Dioxane	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/17/20 13:22	04/21/20 22:16	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 13:22	04/21/20 22:16	1
Hexachloroethane	ND		10	4.3	ug/L		04/17/20 13:22	04/21/20 22:16	1
Indene	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 22:16	1
Isophorone	ND		10	0.58	ug/L		04/17/20 13:22	04/21/20 22:16	1
2-Methylphenol	ND		10	1.8	ug/L		04/17/20 13:22	04/21/20 22:16	1
3 & 4 Methylphenol	ND		20	1.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
2-Nitroaniline	ND		10	2.2	ug/L		04/17/20 13:22	04/21/20 22:16	1
3-Nitroaniline	ND		10	1.8	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Nitroaniline	ND		10	2.5	ug/L		04/17/20 13:22	04/21/20 22:16	1
Nitrobenzene	ND		10	0.56	ug/L		04/17/20 13:22	04/21/20 22:16	1
2-Nitrophenol	ND		10	0.66	ug/L		04/17/20 13:22	04/21/20 22:16	1
4-Nitrophenol	ND		10	2.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
N-Nitrosodimethylamine	ND		10	3.6	ug/L		04/17/20 13:22	04/21/20 22:16	1

Client Sample ID: MW6A-ROX-041320
Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5
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		10	3.4	ug/L		04/17/20 13:22	04/21/20 22:16	1
N-Nitrosodiphenylamine	ND		10	0.48	ug/L		04/17/20 13:22	04/21/20 22:16	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 13:22	04/21/20 22:16	1
Phenol	ND		10	2.6	ug/L		04/17/20 13:22	04/21/20 22:16	1
Pyridine	ND		10	3.3	ug/L		04/17/20 13:22	04/21/20 22:16	1
Quinoline	ND		10	6.1	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4,5-Trichlorophenol	ND		10	3.8	ug/L		04/17/20 13:22	04/21/20 22:16	1
2,4,6-Trichlorophenol	ND		10	3.6	ug/L		04/17/20 13:22	04/21/20 22:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*71*		*34 - 120*	*04/17/20 13:22*	*04/21/20 22:16*	*1*
2-Fluorophenol	*4*	*X*	*10 - 120*	*04/17/20 13:22*	*04/21/20 22:16*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*04/17/20 13:22*	*04/21/20 22:16*	*1*
Phenol-d5	*23*		*10 - 120*	*04/17/20 13:22*	*04/21/20 22:16*	*1*
Terphenyl-d14	*100*		*53 - 125*	*04/17/20 13:22*	*04/21/20 22:16*	*1*
2,4,6-Tribromophenol	*97*		*15 - 135*	*04/17/20 13:22*	*04/21/20 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	F1 *	0.029	0.0053	ug/L		04/22/20 11:23	04/23/20 01:23	1
1,2-Dibromoethane	ND	F1 *	0.019	0.0048	ug/L		04/22/20 11:23	04/23/20 01:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*04/22/20 11:23*	*04/23/20 01:23*	*1*

Client Sample ID: MW6B-ROX-041320

Date Collected: 04/13/20 12:55
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-6

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			04/23/20 16:02	1
Acrolein	ND		20	10	ug/L			04/23/20 16:02	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 16:02	1
Benzene	**1.2**		1.0	0.38	ug/L			04/23/20 16:02	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 16:02	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 16:02	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 16:02	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 16:02	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 16:02	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 16:02	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 16:02	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 16:02	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 16:02	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 16:02	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:02	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 16:02	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 16:02	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 16:02	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 16:02	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 16:02	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 16:02	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 16:02	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 16:02	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 16:02	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 16:02	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 16:02	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 16:02	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 16:02	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 16:02	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 16:02	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 16:02	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 16:02	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 16:02	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 16:02	1

Client Sample ID: MW6B-ROX-041320

Date Collected: 04/13/20 12:55
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-6
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			04/23/20 16:02	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 16:02	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 16:02	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 16:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 16:02	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 16:02	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:02	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 16:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 16:02	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:02	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 16:02	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 16:02	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 16:02	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 16:02	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 16:02	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 16:02	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 16:02	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*78 - 118*		*04/23/20 16:02*	*1*
Dibromofluoromethane	*101*		*81 - 121*		*04/23/20 16:02*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/23/20 16:02*	*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		04/17/20 13:22	04/21/20 23:09	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 13:22	04/21/20 23:09	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 13:22	04/21/20 23:09	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:09	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 13:22	04/21/20 23:09	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:09	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 13:22	04/21/20 23:09	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/17/20 13:22	04/21/20 23:09	1
Chrysene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:09	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:09	1
Fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:09	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 13:22	04/21/20 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 13:22	04/21/20 23:09	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 13:22	04/21/20 23:09	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 13:22	04/21/20 23:09	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:09	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/17/20 13:22	04/21/20 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*112*		*33 - 138*	*04/17/20 13:22*	*04/21/20 23:09*	*1*
2-Fluorobiphenyl	*89*		*15 - 122*	*04/17/20 13:22*	*04/21/20 23:09*	*1*

Client Sample ID: MW6B-ROX-041320
Date Collected: 04/13/20 12:55
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	48		19 - 130	04/17/20 13:22	04/21/20 23:09	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		04/17/20 13:22	04/21/20 23:18	1
Benzenethiol	ND	**1 UJ	9.9	1.7	ug/L		04/17/20 13:22	04/21/20 23:18	1
Benzoic acid	ND		30	7.3	ug/L		04/17/20 13:22	04/21/20 23:18	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/17/20 13:22	04/21/20 23:18	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/17/20 13:22	04/21/20 23:18	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/17/20 13:22	04/21/20 23:18	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/17/20 13:22	04/21/20 23:18	1
Butyl benzyl phthalate	ND		9.9	0.69	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/17/20 13:22	04/21/20 23:18	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/17/20 13:22	04/21/20 23:18	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/17/20 13:22	04/21/20 23:18	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:18	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/17/20 13:22	04/21/20 23:18	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/17/20 13:22	04/21/20 23:18	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 13:22	04/21/20 23:18	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/17/20 13:22	04/21/20 23:18	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:18	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/17/20 13:22	04/21/20 23:18	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 13:22	04/21/20 23:18	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/17/20 13:22	04/21/20 23:18	1
Indene	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:18	1
Isophorone	ND		9.9	0.57	ug/L		04/17/20 13:22	04/21/20 23:18	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/17/20 13:22	04/21/20 23:18	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/17/20 13:22	04/21/20 23:18	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/17/20 13:22	04/21/20 23:18	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/17/20 13:22	04/21/20 23:18	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/17/20 13:22	04/21/20 23:18	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/17/20 13:22	04/21/20 23:18	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:18	1

Client Sample ID: MW6B-ROX-041320
Date Collected: 04/13/20 12:55
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-6
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		9.9	3.3	ug/L		04/17/20 13:22	04/21/20 23:18	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/17/20 13:22	04/21/20 23:18	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 13:22	04/21/20 23:18	1
Phenol	ND		9.9	2.6	ug/L		04/17/20 13:22	04/21/20 23:18	1
Pyridine	ND		9.9	3.2	ug/L		04/17/20 13:22	04/21/20 23:18	1
Quinoline	ND		9.9	6.0	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/17/20 13:22	04/21/20 23:18	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*04/17/20 13:22*	*04/21/20 23:18*	*1*
2-Fluorophenol	*13*		*10 - 120*	*04/17/20 13:22*	*04/21/20 23:18*	*1*
Nitrobenzene-d5	*80*		*27 - 120*	*04/17/20 13:22*	*04/21/20 23:18*	*1*
Phenol-d5	*54*		*10 - 120*	*04/17/20 13:22*	*04/21/20 23:18*	*1*
Terphenyl-d14	*113*		*53 - 125*	*04/17/20 13:22*	*04/21/20 23:18*	*1*
2,4,6-Tribromophenol	*115*		*15 - 135*	*04/17/20 13:22*	*04/21/20 23:18*	*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	0.0056	ug/L		04/22/20 11:23	04/23/20 02:43	1
1,2-Dibromoethane	ND	*	0.020	0.0051	ug/L		04/22/20 11:23	04/23/20 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/22/20 11:23*	*04/23/20 02:43*	*1*

Client Sample ID: MW6C-ROX-041320
Date Collected: 04/13/20 13:30
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-7
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			04/23/20 16:26	1
Acrolein	ND		20	10	ug/L			04/23/20 16:26	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 16:26	1
Benzene	**4.8**		1.0	0.38	ug/L			04/23/20 16:26	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 16:26	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 16:26	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 16:26	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 16:26	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 16:26	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 16:26	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 16:26	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 16:26	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 16:26	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 16:26	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:26	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 16:26	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 16:26	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 16:26	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 16:26	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 16:26	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 16:26	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 16:26	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 16:26	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 16:26	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 16:26	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 16:26	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 16:26	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 16:26	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 16:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 16:26	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 16:26	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 16:26	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 16:26	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 16:26	1

Client Sample ID: MW6C-ROX-041320
Date Collected: 04/13/20 13:30
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-7
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			04/23/20 16:26	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 16:26	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 16:26	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 16:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 16:26	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 16:26	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:26	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 16:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 16:26	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:26	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 16:26	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 16:26	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 16:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 16:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 16:26	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 16:26	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 16:26	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*81*		*78 - 118*		*04/23/20 16:26*	*1*
Dibromofluoromethane	*99*		*81 - 121*		*04/23/20 16:26*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/23/20 16:26*	*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		04/17/20 13:22	04/21/20 23:25	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 13:22	04/21/20 23:25	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 13:22	04/21/20 23:25	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:25	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 13:22	04/21/20 23:25	1
Benzo[b]fluoranthene	ND		0.20	0.069	ug/L		04/17/20 13:22	04/21/20 23:25	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 13:22	04/21/20 23:25	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/17/20 13:22	04/21/20 23:25	1
Chrysene	ND		0.20	0.075	ug/L		04/17/20 13:22	04/21/20 23:25	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:25	1
Fluoranthene	ND		0.20	0.069	ug/L		04/17/20 13:22	04/21/20 23:25	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 13:22	04/21/20 23:25	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 13:22	04/21/20 23:25	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 13:22	04/21/20 23:25	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 13:22	04/21/20 23:25	1
1-Methylnaphthalene	ND		0.20	0.075	ug/L		04/17/20 13:22	04/21/20 23:25	1
2-Methylnaphthalene	ND		0.20	0.061	ug/L		04/17/20 13:22	04/21/20 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*33 - 138*	*04/17/20 13:22*	*04/21/20 23:25*	*1*
2-Fluorobiphenyl	*78*		*15 - 122*	*04/17/20 13:22*	*04/21/20 23:25*	*1*

Client Sample ID: MW6C-ROX-041320
Date Collected: 04/13/20 13:30
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-7
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	61		19 - 130	04/17/20 13:22	04/21/20 23:25	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		04/17/20 13:22	04/21/20 23:39	1
Benzenethiol	ND	**1	10	1.7	ug/L		04/17/20 13:22	04/21/20 23:39	1
Benzoic acid	ND		30	7.4	ug/L		04/17/20 13:22	04/21/20 23:39	1
Benzyl alcohol	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		04/17/20 13:22	04/21/20 23:39	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		04/17/20 13:22	04/21/20 23:39	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		04/17/20 13:22	04/21/20 23:39	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/17/20 13:22	04/21/20 23:39	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Chloroaniline	ND		10	3.4	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/17/20 13:22	04/21/20 23:39	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/17/20 13:22	04/21/20 23:39	1
2-Chlorophenol	ND		10	2.2	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Dibenzofuran	ND		10	0.52	ug/L		04/17/20 13:22	04/21/20 23:39	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Diethyl phthalate	ND		10	0.71	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/17/20 13:22	04/21/20 23:39	1
Dimethyl phthalate	ND		10	0.61	ug/L		04/17/20 13:22	04/21/20 23:39	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/17/20 13:22	04/21/20 23:39	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/21/20 23:39	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/17/20 13:22	04/21/20 23:39	1
1,4-Dioxane	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/17/20 13:22	04/21/20 23:39	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 13:22	04/21/20 23:39	1
Hexachloroethane	ND		10	4.2	ug/L		04/17/20 13:22	04/21/20 23:39	1
Indene	ND		10	1.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
Isophorone	ND		10	0.58	ug/L		04/17/20 13:22	04/21/20 23:39	1
2-Methylphenol	ND		10	1.8	ug/L		04/17/20 13:22	04/21/20 23:39	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 13:22	04/21/20 23:39	1
2-Nitroaniline	ND		10	2.2	ug/L		04/17/20 13:22	04/21/20 23:39	1
3-Nitroaniline	ND		10	1.8	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Nitroaniline	ND		10	2.5	ug/L		04/17/20 13:22	04/21/20 23:39	1
Nitrobenzene	ND		10	0.56	ug/L		04/17/20 13:22	04/21/20 23:39	1
2-Nitrophenol	ND		10	0.66	ug/L		04/17/20 13:22	04/21/20 23:39	1
4-Nitrophenol	ND		10	2.1	ug/L		04/17/20 13:22	04/21/20 23:39	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/17/20 13:22	04/21/20 23:39	1

Client Sample ID: MW6C-ROX-041320
Date Collected: 04/13/20 13:30
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-7
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		04/17/20 13:22	04/21/20 23:39	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/17/20 13:22	04/21/20 23:39	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 13:22	04/21/20 23:39	1
Phenol	ND		10	2.6	ug/L		04/17/20 13:22	04/21/20 23:39	1
Pyridine	ND		10	3.2	ug/L		04/17/20 13:22	04/21/20 23:39	1
Quinoline	ND		10	6.1	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/17/20 13:22	04/21/20 23:39	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/17/20 13:22	04/21/20 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*34 - 120*	*04/17/20 13:22*	*04/21/20 23:39*	*1*
2-Fluorophenol	*6*	*X*	*10 - 120*	*04/17/20 13:22*	*04/21/20 23:39*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*04/17/20 13:22*	*04/21/20 23:39*	*1*
Phenol-d5	*35*		*10 - 120*	*04/17/20 13:22*	*04/21/20 23:39*	*1*
Terphenyl-d14	*96*		*53 - 125*	*04/17/20 13:22*	*04/21/20 23:39*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*04/17/20 13:22*	*04/21/20 23:39*	*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	*	0.032	0.0059	ug/L		04/22/20 11:23	04/23/20 03:03	1
1,2-Dibromoethane	ND	*	0.021	0.0054	ug/L		04/22/20 11:23	04/23/20 03:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*118*		*51 - 149*	*04/22/20 11:23*	*04/23/20 03:03*	*1*

Client Sample ID: MW6D-ROX-041320

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-8

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			04/23/20 16:51	1
Acrolein	ND		20	10	ug/L			04/23/20 16:51	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 16:51	1
Benzene	58		1.0	0.38	ug/L			04/23/20 16:51	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 16:51	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 16:51	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 16:51	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 16:51	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 16:51	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 16:51	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 16:51	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 16:51	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 16:51	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 16:51	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:51	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 16:51	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 16:51	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 16:51	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 16:51	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 16:51	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 16:51	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 16:51	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 16:51	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 16:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 16:51	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 16:51	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 16:51	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 16:51	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 16:51	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 16:51	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 16:51	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 16:51	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 16:51	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 16:51	1

Client Sample ID: MW6D-ROX-041320
Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-8
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			04/23/20 16:51	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 16:51	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 16:51	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 16:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 16:51	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 16:51	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 16:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 16:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 16:51	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 16:51	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 16:51	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 16:51	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 16:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 16:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 16:51	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 16:51	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 16:51	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*83*		*78 - 118*		*04/23/20 16:51*	*1*
Dibromofluoromethane	*100*		*81 - 121*		*04/23/20 16:51*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*04/23/20 16:51*	*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		04/17/20 13:22	04/21/20 23:40	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 13:22	04/21/20 23:40	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 13:22	04/21/20 23:40	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:40	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 13:22	04/21/20 23:40	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:40	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 13:22	04/21/20 23:40	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/17/20 13:22	04/21/20 23:40	1
Chrysene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:40	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:40	1
Fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:40	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 13:22	04/21/20 23:40	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 13:22	04/21/20 23:40	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 13:22	04/21/20 23:40	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 13:22	04/21/20 23:40	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:40	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/17/20 13:22	04/21/20 23:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*121*		*33 - 138*	*04/17/20 13:22*	*04/21/20 23:40*	*1*
2-Fluorobiphenyl	*91*		*15 - 122*	*04/17/20 13:22*	*04/21/20 23:40*	*1*

Client Sample ID: MW6D-ROX-041320
Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-8
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	69		19 - 130	04/17/20 13:22	04/21/20 23:40	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		04/17/20 13:22	04/21/20 23:59	1
Benzenethiol	ND	*1	9.9	1.7	ug/L		04/17/20 13:22	04/21/20 23:59	1
Benzoic acid	ND		30	7.3	ug/L		04/17/20 13:22	04/21/20 23:59	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/17/20 13:22	04/21/20 23:59	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/17/20 13:22	04/21/20 23:59	1
bis (2-chloroisopropyl) ether	ND		9.9	0.81	ug/L		04/17/20 13:22	04/21/20 23:59	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/17/20 13:22	04/21/20 23:59	1
Butyl benzyl phthalate	ND		9.9	0.69	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/17/20 13:22	04/21/20 23:59	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/17/20 13:22	04/21/20 23:59	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/17/20 13:22	04/21/20 23:59	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:59	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/17/20 13:22	04/21/20 23:59	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/17/20 13:22	04/21/20 23:59	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/17/20 13:22	04/21/20 23:59	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/17/20 13:22	04/21/20 23:59	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:59	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:59	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/17/20 13:22	04/21/20 23:59	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 13:22	04/21/20 23:59	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/17/20 13:22	04/21/20 23:59	1
Indene	ND		9.9	0.99	ug/L		04/17/20 13:22	04/21/20 23:59	1
Isophorone	ND		9.9	0.57	ug/L		04/17/20 13:22	04/21/20 23:59	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/17/20 13:22	04/21/20 23:59	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/17/20 13:22	04/21/20 23:59	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/17/20 13:22	04/21/20 23:59	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/17/20 13:22	04/21/20 23:59	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/17/20 13:22	04/21/20 23:59	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/17/20 13:22	04/21/20 23:59	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:59	1

Client Sample ID: MW6D-ROX-041320

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-8

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		9.9	3.3	ug/L		04/17/20 13:22	04/21/20 23:59	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/17/20 13:22	04/21/20 23:59	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 13:22	04/21/20 23:59	1
Phenol	ND		9.9	2.6	ug/L		04/17/20 13:22	04/21/20 23:59	1
Pyridine	ND		9.9	3.2	ug/L		04/17/20 13:22	04/21/20 23:59	1
Quinoline	ND		9.9	6.0	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/17/20 13:22	04/21/20 23:59	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/17/20 13:22	04/21/20 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*34 - 120*	*04/17/20 13:22*	*04/21/20 23:59*	*1*
2-Fluorophenol	*11*		*10 - 120*	*04/17/20 13:22*	*04/21/20 23:59*	*1*
Nitrobenzene-d5	*81*		*27 - 120*	*04/17/20 13:22*	*04/21/20 23:59*	*1*
Phenol-d5	*45*		*10 - 120*	*04/17/20 13:22*	*04/21/20 23:59*	*1*
Terphenyl-d14	*115*		*53 - 125*	*04/17/20 13:22*	*04/21/20 23:59*	*1*
2,4,6-Tribromophenol	*97*		*15 - 135*	*04/17/20 13:22*	*04/21/20 23:59*	*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	*	0.028	0.0052	ug/L		04/22/20 11:23	04/23/20 03:23	1
1,2-Dibromoethane	ND	*	0.019	0.0047	ug/L		04/22/20 11:23	04/23/20 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*04/22/20 11:23*	*04/23/20 03:23*	*1*

Client Sample ID: MW6D-ROX-041320-DUP

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-9

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			04/23/20 17:17	1
Acrolein	ND		20	10	ug/L			04/23/20 17:17	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 17:17	1
Benzene	**52**		1.0	0.38	ug/L			04/23/20 17:17	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 17:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 17:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 17:17	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 17:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 17:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 17:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 17:17	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 17:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 17:17	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 17:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 17:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 17:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 17:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 17:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 17:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 17:17	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 17:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 17:17	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 17:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 17:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 17:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 17:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 17:17	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 17:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 17:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 17:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 17:17	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 17:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 17:17	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/23/20 17:17	1

Client Sample ID: MW6D-ROX-041320-DUP

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-9
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			04/23/20 17:17	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 17:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 17:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 17:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 17:17	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 17:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 17:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 17:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 17:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 17:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 17:17	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 17:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 17:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 17:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 17:17	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 17:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 17:17	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*78 - 118*		*04/23/20 17:17*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/23/20 17:17*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*04/23/20 17:17*	*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		04/17/20 13:22	04/21/20 23:56	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 13:22	04/21/20 23:56	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 13:22	04/21/20 23:56	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:56	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 13:22	04/21/20 23:56	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:56	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 13:22	04/21/20 23:56	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/17/20 13:22	04/21/20 23:56	1
Chrysene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:56	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 13:22	04/21/20 23:56	1
Fluoranthene	ND		0.20	0.068	ug/L		04/17/20 13:22	04/21/20 23:56	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 13:22	04/21/20 23:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 13:22	04/21/20 23:56	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 13:22	04/21/20 23:56	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 13:22	04/21/20 23:56	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/17/20 13:22	04/21/20 23:56	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/17/20 13:22	04/21/20 23:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*113*		*33 - 138*	*04/17/20 13:22*	*04/21/20 23:56*	*1*
2-Fluorobiphenyl	*87*		*15 - 122*	*04/17/20 13:22*	*04/21/20 23:56*	*1*

Client Sample ID: MW6D-ROX-041320-DUP
Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-9
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	67		19 - 130	04/17/20 13:22	04/21/20 23:56	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		04/17/20 13:22	04/22/20 00:20	1
Benzenethiol	ND	**1	10	1.7	ug/L		04/17/20 13:22	04/22/20 00:20	1
Benzoic acid	ND		30	7.3	ug/L		04/17/20 13:22	04/22/20 00:20	1
Benzyl alcohol	ND		10	2.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/17/20 13:22	04/22/20 00:20	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/17/20 13:22	04/22/20 00:20	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/17/20 13:22	04/22/20 00:20	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/17/20 13:22	04/22/20 00:20	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Chloroaniline	ND		10	3.4	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/17/20 13:22	04/22/20 00:20	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/17/20 13:22	04/22/20 00:20	1
2-Chlorophenol	ND		10	2.2	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Dibenzofuran	ND		10	0.52	ug/L		04/17/20 13:22	04/22/20 00:20	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Diethyl phthalate	ND		10	0.70	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/17/20 13:22	04/22/20 00:20	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/17/20 13:22	04/22/20 00:20	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/17/20 13:22	04/22/20 00:20	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 13:22	04/22/20 00:20	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/17/20 13:22	04/22/20 00:20	1
1,4-Dioxane	ND		10	1.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/17/20 13:22	04/22/20 00:20	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 13:22	04/22/20 00:20	1
Hexachloroethane	ND		10	4.2	ug/L		04/17/20 13:22	04/22/20 00:20	1
Indene	ND		10	1.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
Isophorone	ND		10	0.57	ug/L		04/17/20 13:22	04/22/20 00:20	1
2-Methylphenol	ND		10	1.8	ug/L		04/17/20 13:22	04/22/20 00:20	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
2-Nitroaniline	ND		10	2.2	ug/L		04/17/20 13:22	04/22/20 00:20	1
3-Nitroaniline	ND		10	1.8	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Nitroaniline	ND		10	2.5	ug/L		04/17/20 13:22	04/22/20 00:20	1
Nitrobenzene	ND		10	0.55	ug/L		04/17/20 13:22	04/22/20 00:20	1
2-Nitrophenol	ND		10	0.65	ug/L		04/17/20 13:22	04/22/20 00:20	1
4-Nitrophenol	ND		10	2.1	ug/L		04/17/20 13:22	04/22/20 00:20	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/17/20 13:22	04/22/20 00:20	1

Client Sample ID: MW6D-ROX-041320-DUP

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-9
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	3.3	ug/L		04/17/20 13:22	04/22/20 00:20	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/17/20 13:22	04/22/20 00:20	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 13:22	04/22/20 00:20	1
Phenol	ND		10	2.6	ug/L		04/17/20 13:22	04/22/20 00:20	1
Pyridine	ND		10	3.2	ug/L		04/17/20 13:22	04/22/20 00:20	1
Quinoline	ND		10	6.0	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/17/20 13:22	04/22/20 00:20	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/17/20 13:22	04/22/20 00:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*34 - 120*	*04/17/20 13:22*	*04/22/20 00:20*	*1*
2-Fluorophenol	*38*		*10 - 120*	*04/17/20 13:22*	*04/22/20 00:20*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*04/17/20 13:22*	*04/22/20 00:20*	*1*
Phenol-d5	*62*		*10 - 120*	*04/17/20 13:22*	*04/22/20 00:20*	*1*
Terphenyl-d14	*100*		*53 - 125*	*04/17/20 13:22*	*04/22/20 00:20*	*1*
2,4,6-Tribromophenol	*103*		*15 - 135*	*04/17/20 13:22*	*04/22/20 00:20*	*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	*	0.028	0.0052	ug/L		04/22/20 11:23	04/23/20 03:43	1
1,2-Dibromoethane	ND	*	0.019	0.0047	ug/L		04/22/20 11:23	04/23/20 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*04/22/20 11:23*	*04/23/20 03:43*	*1*

Definitions/Glossary

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

Job ID: 400-186678-1

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 or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186678-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BFB (78-118)	DBFM (81-121)	TOL (80-120)
400-186678-1	TB-ROX-041320-8260	79	91	98
400-186678-3	MW16-ROX-041320	81	98	87
400-186678-4	MW5-ROX-041320	83	96	98
400-186678-5	MW6A-ROX-041320	84	95	96
400-186678-5 MS	MW6A-ROX-041320	82	88	97
400-186678-5 MSD	MW6A-ROX-041320	85	92	97
400-186678-6	MW6B-ROX-041320	79	101	97
400-186678-7	MW6C-ROX-041320	81	99	96
400-186678-8	MW6D-ROX-041320	83	100	94
400-186678-9	MW6D-ROX-041320-DUP	82	96	96
LCS 400-486758/1002	Lab Control Sample	82	95	96
MB 400-486758/4	Method Blank	79	96	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)					
Lab Sample ID	Client Sample ID	FBP (34-120)	2FP (10-120)	NBZ (27-120)	PHL (10-120)	TPHL (53-125)	TBP (15-135)
400-186678-3	MW16-ROX-041320	66	3 X	73	13	97	39
400-186678-4	MW5-ROX-041320	69	32	73	60	90	97
400-186678-5	MW6A-ROX-041320	71	4 X	81	23	100	97
400-186678-5 MS	MW6A-ROX-041320	65	25	75	57	81	114
400-186678-5 MSD	MW6A-ROX-041320	73	17	83	57	106	124
400-186678-6	MW6B-ROX-041320	73	13	80	54	113	115
400-186678-7	MW6C-ROX-041320	62	6 X	71	35	96	84
400-186678-8	MW6D-ROX-041320	73	11	81	45	115	97
400-186678-9	MW6D-ROX-041320-DUP	67	38	72	62	100	103
LCS 400-486237/2-A	Lab Control Sample	58	23	73	54	73	79
LCS 400-486237/4-A	Lab Control Sample	62	23	74	55	80	51
LCSD 400-486237/3-A	Lab Control Sample Dup	61	14	72	46	82	81
LCSD 400-486237/5-A	Lab Control Sample Dup	65	32	70	61	86	62
MB 400-486237/1-A	Method Blank	55	26	67	53	81	46

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: 400-186678-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186678-3	MW16-ROX-041320	100	79	64
400-186678-4	MW5-ROX-041320	92	81	66
400-186678-5	MW6A-ROX-041320	98	87	47
400-186678-5 MS	MW6A-ROX-041320	99	84	59
400-186678-5 MSD	MW6A-ROX-041320	104	85	63
400-186678-6	MW6B-ROX-041320	112	89	48
400-186678-7	MW6C-ROX-041320	98	78	61
400-186678-8	MW6D-ROX-041320	121	91	69
400-186678-9	MW6D-ROX-041320-DUP	113	87	67
LCS 400-486237/2-A	Lab Control Sample	99	84	55
LCSD 400-486237/3-A	Lab Control Sample Dup	105	85	61
MB 400-486237/1-A	Method Blank	117	82	69

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	Client Sample ID	(51-149)
400-186678-2	TB-ROX-041320-8011	120
400-186678-3	MW16-ROX-041320	102
400-186678-4	MW5-ROX-041320	125
400-186678-5	MW6A-ROX-041320	125
400-186678-5 MS	MW6A-ROX-041320	129
400-186678-5 MSD	MW6A-ROX-041320	119
400-186678-6	MW6B-ROX-041320	108
400-186678-7	MW6C-ROX-041320	118
400-186678-8	MW6D-ROX-041320	106
400-186678-9	MW6D-ROX-041320-DUP	92
LCS 400-486672/2-A	Lab Control Sample	122
LCSD 400-486672/3-A	Lab Control Sample Dup	120
MB 400-486672/1-A	Method Blank	133

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186678-1

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 TestAmerica, 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: 400-186678-1

Client Sample ID: TB-ROX-041320-8260

Date Collected: 04/13/20 00:00
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-1
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	486758	04/23/20 12:46	WPD	TAL PEN

Client Sample ID: TB-ROX-041320-8011

Date Collected: 04/13/20 00:00
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-2
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			35.7 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 23:24	DS	TAL PEN

Client Sample ID: MW16-ROX-041320

Date Collected: 04/13/20 10:10
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-3
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	486758	04/23/20 15:14	WPD	TAL PEN
Total/NA	Prep	3520C			1008.4 mL	1 mL	486237	04/17/20 09:18	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 21:35	VC1	TAL PEN
Total/NA	Prep	3520C			1008.4 mL	1 mL	486237	04/17/20 09:18	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 21:51	PP1	TAL PEN
Total/NA	Prep	8011			34.1 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 00:43	DS	TAL PEN

Client Sample ID: MW5-ROX-041320

Date Collected: 04/13/20 10:35
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-4
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	486758	04/23/20 15:38	WPD	TAL PEN
Total/NA	Prep	3520C			983.2 mL	1 mL	486237	04/17/20 09:18	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 21:55	VC1	TAL PEN
Total/NA	Prep	3520C			983.2 mL	1 mL	486237	04/17/20 09:18	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 22:07	PP1	TAL PEN
Total/NA	Prep	8011			34 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 01:03	DS	TAL PEN

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5
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	486758	04/23/20 10:21	WPD	TAL PEN
Total/NA	Prep	3520C			982.4 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 22:16	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186678-1

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5
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			982.4 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 22:22	PP1	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 01:23	DS	TAL PEN

Client Sample ID: MW6B-ROX-041320

Date Collected: 04/13/20 12:55
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-6
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	486758	04/23/20 16:02	WPD	TAL PEN
Total/NA	Prep	3520C			1006.8 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	486534	04/21/20 23:18	VC1	TAL PEN
Total/NA	Prep	3520C			1006.8 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 23:09	PP1	TAL PEN
Total/NA	Prep	8011			34.3 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 02:43	DS	TAL PEN

Client Sample ID: MW6C-ROX-041320

Date Collected: 04/13/20 13:30
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-7
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	486758	04/23/20 16:26	WPD	TAL PEN
Total/NA	Prep	3520C			990.6 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 23:39	VC1	TAL PEN
Total/NA	Prep	3520C			990.6 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 23:25	PP1	TAL PEN
Total/NA	Prep	8011			32.7 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 03:03	DS	TAL PEN

Client Sample ID: MW6D-ROX-041320

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-8
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		1	5 mL	5 mL	486758	04/23/20 16:51	WPD	TAL PEN
Total/NA	Prep	3520C			1005.2 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 23:59	VC1	TAL PEN
Total/NA	Prep	3520C			1005.2 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 23:40	PP1	TAL PEN
Total/NA	Prep	8011			37.1 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 03:23	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186678-1

Client Sample ID: MW6D-ROX-041320-DUP

Lab Sample ID: 400-186678-9

Date Collected: 04/13/20 14:05
Date Received: 04/14/20 08:51

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	486758	04/23/20 17:17	WPD	TAL PEN
Total/NA	Prep	3520C			997.2 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/22/20 00:20	VC1	TAL PEN
Total/NA	Prep	3520C			997.2 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 23:56	PP1	TAL PEN
Total/NA	Prep	8011			37.1 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 03:43	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486237/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 17:06	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486581	04/21/20 18:13	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486672/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:04	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486758/4

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	486758	04/23/20 09:08	WPD	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-486237/2-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			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	486534	04/21/20 17:27	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486581	04/21/20 18:29	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-186678-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486237/4-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			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 18:08	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486672/2-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	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:24	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486758/1002
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	486758	04/23/20 08:19	WPD	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486237/3-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			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 17:47	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486581	04/21/20 18:44	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486237/5-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486237	04/17/20 09:17	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 18:29	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486672/3-A
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:44	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186678-1

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5 MS

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486758	04/23/20 11:33	WPD	TAL PEN
Total/NA	Prep	3520C			973.8 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 22:36	VC1	TAL PEN
Total/NA	Prep	3520C			973.8 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486581	04/21/20 22:38	PP1	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 01:43	DS	TAL PEN

Client Sample ID: MW6A-ROX-041320

Date Collected: 04/13/20 12:15
Date Received: 04/14/20 08:51

Lab Sample ID: 400-186678-5 MSD

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	486758	04/23/20 11:58	WPD	TAL PEN
Total/NA	Prep	3520C			996.4 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486534	04/21/20 22:57	VC1	TAL PEN
Total/NA	Prep	3520C			996.4 mL	1 mL	486237	04/17/20 13:22	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486581	04/21/20 22:54	PP1	TAL PEN
Total/NA	Prep	8011			35.9 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 02:23	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186678-1

GC/MS VOA

Analysis Batch: 486758

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-1	TB-ROX-041320-8260	Total/NA	Water	8260B	
400-186678-3	MW16-ROX-041320	Total/NA	Water	8260B	
400-186678-4	MW5-ROX-041320	Total/NA	Water	8260B	
400-186678-5	MW6A-ROX-041320	Total/NA	Water	8260B	
400-186678-6	MW6B-ROX-041320	Total/NA	Water	8260B	
400-186678-7	MW6C-ROX-041320	Total/NA	Water	8260B	
400-186678-8	MW6D-ROX-041320	Total/NA	Water	8260B	
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	8260B	
MB 400-486758/4	Method Blank	Total/NA	Water	8260B	
LCS 400-486758/1002	Lab Control Sample	Total/NA	Water	8260B	
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	8260B	
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-3	MW16-ROX-041320	Total/NA	Water	3520C	
400-186678-4	MW5-ROX-041320	Total/NA	Water	3520C	
400-186678-5	MW6A-ROX-041320	Total/NA	Water	3520C	
400-186678-6	MW6B-ROX-041320	Total/NA	Water	3520C	
400-186678-7	MW6C-ROX-041320	Total/NA	Water	3520C	
400-186678-8	MW6D-ROX-041320	Total/NA	Water	3520C	
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	3520C	
MB 400-486237/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486237/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486237/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486237/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486237/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	3520C	
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	3520C	

Analysis Batch: 486534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-3	MW16-ROX-041320	Total/NA	Water	8270D	486237
400-186678-4	MW5-ROX-041320	Total/NA	Water	8270D	486237
400-186678-5	MW6A-ROX-041320	Total/NA	Water	8270D	486237
400-186678-6	MW6B-ROX-041320	Total/NA	Water	8270D	486237
400-186678-7	MW6C-ROX-041320	Total/NA	Water	8270D	486237
400-186678-8	MW6D-ROX-041320	Total/NA	Water	8270D	486237
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	8270D	486237
MB 400-486237/1-A	Method Blank	Total/NA	Water	8270D	486237
LCS 400-486237/2-A	Lab Control Sample	Total/NA	Water	8270D	486237
LCS 400-486237/4-A	Lab Control Sample	Total/NA	Water	8270D	486237
LCSD 400-486237/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486237
LCSD 400-486237/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486237
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	8270D	486237
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	8270D	486237

QC Association Summary

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

Job ID: 400-186678-1

GC/MS Semi VOA

Analysis Batch: 486581

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-3	MW16-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-4	MW5-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-5	MW6A-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-6	MW6B-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-7	MW6C-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-8	MW6D-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	8270D LL	486237
MB 400-486237/1-A	Method Blank	Total/NA	Water	8270D LL	486237
LCS 400-486237/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486237
LCSD 400-486237/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486237
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	8270D LL	486237
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	8270D LL	486237

GC Semi VOA

Prep Batch: 486672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-2	TB-ROX-041320-8011	Total/NA	Water	8011	
400-186678-3	MW16-ROX-041320	Total/NA	Water	8011	
400-186678-4	MW5-ROX-041320	Total/NA	Water	8011	
400-186678-5	MW6A-ROX-041320	Total/NA	Water	8011	
400-186678-6	MW6B-ROX-041320	Total/NA	Water	8011	
400-186678-7	MW6C-ROX-041320	Total/NA	Water	8011	
400-186678-8	MW6D-ROX-041320	Total/NA	Water	8011	
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	8011	
MB 400-486672/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486672/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486672/3-A	Lab Control Sample Dup	Total/NA	Water	8011	
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	8011	
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	8011	

Analysis Batch: 486697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186678-2	TB-ROX-041320-8011	Total/NA	Water	8011	486672
400-186678-3	MW16-ROX-041320	Total/NA	Water	8011	486672
400-186678-4	MW5-ROX-041320	Total/NA	Water	8011	486672
400-186678-5	MW6A-ROX-041320	Total/NA	Water	8011	486672
400-186678-6	MW6B-ROX-041320	Total/NA	Water	8011	486672
400-186678-7	MW6C-ROX-041320	Total/NA	Water	8011	486672
400-186678-8	MW6D-ROX-041320	Total/NA	Water	8011	486672
400-186678-9	MW6D-ROX-041320-DUP	Total/NA	Water	8011	486672
MB 400-486672/1-A	Method Blank	Total/NA	Water	8011	486672
LCS 400-486672/2-A	Lab Control Sample	Total/NA	Water	8011	486672
LCSD 400-486672/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486672
400-186678-5 MS	MW6A-ROX-041320	Total/NA	Water	8011	486672
400-186678-5 MSD	MW6A-ROX-041320	Total/NA	Water	8011	486672

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

Lab Sample ID: MB 400-486758/4
Matrix: Water
Analysis Batch: 486758

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			04/23/20 09:08	1
Acrolein	ND		20	10	ug/L			04/23/20 09:08	1
Acrylonitrile	ND		10	2.8	ug/L			04/23/20 09:08	1
Benzene	ND		1.0	0.38	ug/L			04/23/20 09:08	1
Bromobenzene	ND		1.0	0.54	ug/L			04/23/20 09:08	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/23/20 09:08	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Bromoform	ND		5.0	0.71	ug/L			04/23/20 09:08	1
Bromomethane	ND		1.0	0.98	ug/L			04/23/20 09:08	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/23/20 09:08	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Chloroethane	ND		1.0	0.76	ug/L			04/23/20 09:08	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/23/20 09:08	1
Chloroform	ND		1.0	0.60	ug/L			04/23/20 09:08	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/23/20 09:08	1
Chloromethane	ND		1.0	0.83	ug/L			04/23/20 09:08	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 09:08	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/23/20 09:08	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/23/20 09:08	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/23/20 09:08	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/23/20 09:08	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/23/20 09:08	1
2-Hexanone	ND		25	3.1	ug/L			04/23/20 09:08	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/23/20 09:08	1
Methylene bromide	ND		5.0	0.59	ug/L			04/23/20 09:08	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/23/20 09:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/23/20 09:08	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/23/20 09:08	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/23/20 09:08	1
Naphthalene	ND		1.0	1.0	ug/L			04/23/20 09:08	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/23/20 09:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/23/20 09:08	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/23/20 09:08	1
o-Xylene	ND		5.0	0.60	ug/L			04/23/20 09:08	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/23/20 09:08	1

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

Lab Sample ID: MB 400-486758/4
Matrix: Water
Analysis Batch: 486758

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			04/23/20 09:08	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/23/20 09:08	1
Styrene	ND		1.0	1.0	ug/L			04/23/20 09:08	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/23/20 09:08	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/23/20 09:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/23/20 09:08	1
Toluene	ND		1.0	0.41	ug/L			04/23/20 09:08	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/23/20 09:08	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/23/20 09:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/23/20 09:08	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/23/20 09:08	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/23/20 09:08	1
Trichloroethene	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/23/20 09:08	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/23/20 09:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/23/20 09:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/23/20 09:08	1
Vinyl acetate	ND		25	2.0	ug/L			04/23/20 09:08	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/23/20 09:08	1
Xylenes, Total	ND		10	1.6	ug/L			04/23/20 09:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*79*		*78 - 118*		*04/23/20 09:08*	*1*
Dibromofluoromethane	*96*		*81 - 121*		*04/23/20 09:08*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/23/20 09:08*	*1*

Lab Sample ID: LCS 400-486758/1002
Matrix: Water
Analysis Batch: 486758

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	163		ug/L		81	43 - 160
Acrolein	250	184		ug/L		74	38 - 160
Acrylonitrile	500	439		ug/L		88	64 - 142
Benzene	50.0	49.3		ug/L		99	70 - 130
Bromobenzene	50.0	55.1		ug/L		110	70 - 132
Bromochloromethane	50.0	56.3		ug/L		113	70 - 130
Bromodichloromethane	50.0	40.2		ug/L		80	67 - 133
Bromoform	50.0	43.2		ug/L		86	57 - 140
Bromomethane	25.0	35.4		ug/L		141	10 - 160
2-Butanone (MEK)	200	170		ug/L		85	61 - 145
Carbon disulfide	50.0	50.0		ug/L		100	61 - 137
Carbon tetrachloride	50.0	42.5		ug/L		85	61 - 137
Chlorobenzene	50.0	47.9		ug/L		96	70 - 130
Dibromochloromethane	50.0	49.7		ug/L		99	67 - 135
Chloroethane	25.0	28.8		ug/L		115	55 - 141

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

Lab Sample ID: LCS 400-486758/1002
Matrix: Water
Analysis Batch: 486758

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	16.0		ug/L		64	10 - 160
Chloroform	50.0	44.4		ug/L		89	69 - 130
1-Chlorohexane	50.0	45.6		ug/L		91	69 - 130
Chloromethane	25.0	24.8		ug/L		99	58 - 137
cis-1,2-Dichloroethene	50.0	45.0		ug/L		90	68 - 130
cis-1,3-Dichloropropene	50.0	45.5		ug/L		91	69 - 132
1,2-Dichlorobenzene	50.0	52.6		ug/L		105	67 - 130
1,3-Dichlorobenzene	50.0	55.5		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	55.6		ug/L		111	70 - 130
Dichlorodifluoromethane	25.0	18.3		ug/L		73	41 - 146
1,1-Dichloroethane	50.0	47.1		ug/L		94	70 - 130
1,2-Dichloroethane	50.0	41.4		ug/L		83	69 - 130
1,1-Dichloroethene	50.0	59.2		ug/L		118	63 - 134
1,2-Dichloropropane	50.0	44.6		ug/L		89	70 - 130
1,3-Dichloropropane	50.0	47.9		ug/L		96	70 - 130
2,2-Dichloropropane	50.0	39.6		ug/L		79	52 - 135
1,1-Dichloropropene	50.0	47.5		ug/L		95	70 - 130
Ethylbenzene	50.0	49.7		ug/L		99	70 - 130
Ethyl methacrylate	50.0	42.4		ug/L		85	68 - 130
Hexachlorobutadiene	50.0	49.1		ug/L		98	53 - 140
2-Hexanone	200	168		ug/L		84	65 - 137
Isopropylbenzene	50.0	50.2		ug/L		100	70 - 130
Methylene bromide	50.0	44.3		ug/L		89	70 - 130
Methylene Chloride	50.0	52.2		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	167		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	45.1		ug/L		90	66 - 130
m-Xylene & p-Xylene	50.0	47.4		ug/L		95	70 - 130
Naphthalene	50.0	45.4		ug/L		91	47 - 149
n-Butylbenzene	50.0	52.4		ug/L		105	67 - 130
N-Propylbenzene	50.0	50.6		ug/L		101	70 - 130
o-Chlorotoluene	50.0	47.5		ug/L		95	70 - 130
o-Xylene	50.0	47.7		ug/L		95	70 - 130
p-Chlorotoluene	50.0	49.0		ug/L		98	70 - 130
p-Isopropyltoluene	50.0	56.8		ug/L		114	65 - 130
sec-Butylbenzene	50.0	51.5		ug/L		103	66 - 130
Styrene	50.0	52.3		ug/L		105	70 - 130
tert-Butylbenzene	50.0	46.6		ug/L		93	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.6		ug/L		97	67 - 131
1,1,2,2-Tetrachloroethane	50.0	43.8		ug/L		88	70 - 131
Tetrachloroethene	50.0	50.2		ug/L		100	65 - 130
Toluene	50.0	48.9		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	51.9		ug/L		104	70 - 130
trans-1,3-Dichloropropene	50.0	42.3		ug/L		85	63 - 130
1,2,3-Trichlorobenzene	50.0	50.0		ug/L		100	60 - 138
1,2,4-Trichlorobenzene	50.0	48.2		ug/L		96	60 - 140
1,1,1-Trichloroethane	50.0	42.5		ug/L		85	68 - 130
1,1,2-Trichloroethane	50.0	47.1		ug/L		94	70 - 130
Trichloroethene	50.0	52.4		ug/L		105	70 - 130
Trichlorofluoromethane	25.0	22.1		ug/L		88	65 - 138

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

Lab Sample ID: LCS 400-486758/1002
Matrix: Water
Analysis Batch: 486758

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.2		ug/L		86	70 - 130
1,2,4-Trimethylbenzene	50.0	48.4		ug/L		97	70 - 130
1,3,5-Trimethylbenzene	50.0	52.2		ug/L		104	69 - 130
Vinyl acetate	50.0	43.2		ug/L		86	26 - 160
Vinyl chloride	25.0	23.7		ug/L		95	59 - 136
Xylenes, Total	100	95.1		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*78 - 118*
Dibromofluoromethane	*95*		*81 - 121*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486758

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		200	184		ug/L		92	43 - 150
Acrolein	ND		250	189		ug/L		76	38 - 150
Acrylonitrile	ND		500	454		ug/L		91	62 - 149
Benzene	0.43	J	50.0	51.6		ug/L		102	56 - 142
Bromobenzene	ND		50.0	55.7		ug/L		111	59 - 136
Bromochloromethane	ND		50.0	56.3		ug/L		113	64 - 140
Bromodichloromethane	ND		50.0	42.9		ug/L		86	59 - 143
Bromoform	ND		50.0	45.0		ug/L		90	50 - 140
Bromomethane	ND	F1	25.0	32.5		ug/L		130	10 - 150
2-Butanone (MEK)	ND		200	194		ug/L		97	55 - 150
Carbon disulfide	ND		50.0	53.2		ug/L		106	48 - 150
Carbon tetrachloride	ND		50.0	46.3		ug/L		93	55 - 145
Chlorobenzene	ND		50.0	53.7		ug/L		107	64 - 130
Dibromochloromethane	ND		50.0	49.2		ug/L		98	56 - 143
Chloroethane	ND		25.0	28.6		ug/L		115	50 - 150
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150
Chloroform	ND		50.0	47.6		ug/L		95	60 - 141
1-Chlorohexane	ND		50.0	47.1		ug/L		94	56 - 136
Chloromethane	ND		25.0	23.8		ug/L		95	49 - 148
cis-1,2-Dichloroethene	ND		50.0	47.9		ug/L		96	59 - 143
cis-1,3-Dichloropropene	ND		50.0	47.6		ug/L		95	57 - 140
1,2-Dichlorobenzene	ND		50.0	53.0		ug/L		106	52 - 137
1,3-Dichlorobenzene	ND		50.0	54.6		ug/L		109	54 - 135
1,4-Dichlorobenzene	ND		50.0	53.5		ug/L		107	53 - 135
Dichlorodifluoromethane	ND		25.0	17.6		ug/L		71	16 - 150
1,1-Dichloroethane	ND		50.0	49.3		ug/L		99	61 - 144
1,2-Dichloroethane	ND		50.0	43.7		ug/L		87	60 - 141
1,1-Dichloroethene	ND		50.0	61.1		ug/L		122	54 - 147
1,2-Dichloropropane	ND		50.0	46.9		ug/L		94	66 - 137
1,3-Dichloropropane	ND		50.0	49.3		ug/L		99	66 - 133
2,2-Dichloropropane	ND		50.0	44.4		ug/L		89	42 - 144

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

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486758

Client Sample ID: MW6A-ROX-041320
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	50.2		ug/L		100	65 - 136
Ethylbenzene	ND		50.0	49.1		ug/L		98	58 - 131
Ethyl methacrylate	ND		50.0	47.1		ug/L		94	64 - 130
Hexachlorobutadiene	ND		50.0	44.8		ug/L		90	31 - 149
2-Hexanone	ND		200	171		ug/L		85	65 - 140
Isopropylbenzene	ND		50.0	50.6		ug/L		101	56 - 133
Methylene bromide	ND		50.0	47.5		ug/L		95	63 - 138
Methylene Chloride	ND		50.0	55.2		ug/L		110	60 - 146
4-Methyl-2-pentanone (MIBK)	ND		200	175		ug/L		87	63 - 146
Methyl tert-butyl ether	ND		50.0	46.9		ug/L		94	59 - 137
m-Xylene & p-Xylene	ND		50.0	49.4		ug/L		99	57 - 130
Naphthalene	ND		50.0	50.0		ug/L		100	25 - 150
n-Butylbenzene	ND		50.0	49.1		ug/L		98	41 - 142
N-Propylbenzene	ND		50.0	48.5		ug/L		97	51 - 138
o-Chlorotoluene	ND		50.0	47.6		ug/L		95	53 - 134
o-Xylene	ND		50.0	50.3		ug/L		101	61 - 130
p-Chlorotoluene	ND		50.0	46.8		ug/L		94	54 - 133
p-Isopropyltoluene	ND		50.0	54.5		ug/L		109	48 - 139
sec-Butylbenzene	ND		50.0	52.1		ug/L		104	50 - 138
Styrene	ND		50.0	53.3		ug/L		107	58 - 131
tert-Butylbenzene	ND		50.0	46.2		ug/L		92	54 - 146
1,1,1,2-Tetrachloroethane	ND		50.0	48.7		ug/L		97	59 - 137
1,1,2,2-Tetrachloroethane	ND		50.0	46.1		ug/L		92	66 - 135
Tetrachloroethene	ND		50.0	52.8		ug/L		106	52 - 133
Toluene	ND		50.0	52.4		ug/L		105	65 - 130
trans-1,2-Dichloroethene	ND		50.0	53.0		ug/L		106	61 - 143
trans-1,3-Dichloropropene	ND		50.0	45.7		ug/L		91	53 - 133
1,2,3-Trichlorobenzene	ND		50.0	49.8		ug/L		100	43 - 145
1,2,4-Trichlorobenzene	ND		50.0	49.0		ug/L		98	39 - 148
1,1,1-Trichloroethane	ND		50.0	46.3		ug/L		93	57 - 142
1,1,2-Trichloroethane	ND		50.0	49.5		ug/L		99	66 - 131
Trichloroethene	ND		50.0	54.0		ug/L		108	64 - 136
Trichlorofluoromethane	ND		25.0	20.9		ug/L		84	54 - 150
1,2,3-Trichloropropane	ND		50.0	43.6		ug/L		87	65 - 133
1,2,4-Trimethylbenzene	ND		50.0	48.2		ug/L		96	50 - 139
1,3,5-Trimethylbenzene	ND		50.0	49.4		ug/L		99	52 - 135
Vinyl acetate	ND		50.0	44.7		ug/L		89	26 - 150
Vinyl chloride	ND		25.0	23.6		ug/L		95	46 - 150
Xylenes, Total	ND		100	99.7		ug/L		100	59 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*82*		*78 - 118*
Dibromofluoromethane	*88*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486758

Client Sample ID: MW6A-ROX-041320
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	187		ug/L		93	43 - 150	1	30
Acrolein	ND		250	249		ug/L		100	38 - 150	27	31
Acrylonitrile	ND		500	451		ug/L		90	62 - 149	1	30
Benzene	0.43	J	50.0	49.0		ug/L		97	56 - 142	5	30
Bromobenzene	ND		50.0	52.7		ug/L		105	59 - 136	5	30
Bromochloromethane	ND		50.0	55.8		ug/L		112	64 - 140	1	30
Bromodichloromethane	ND		50.0	41.1		ug/L		82	59 - 143	4	30
Bromoform	ND		50.0	42.4		ug/L		85	50 - 140	6	30
Bromomethane	ND	F1	25.0	38.6	F1	ug/L		154	10 - 150	17	50
2-Butanone (MEK)	ND		200	203		ug/L		102	55 - 150	4	30
Carbon disulfide	ND		50.0	49.7		ug/L		99	48 - 150	7	30
Carbon tetrachloride	ND		50.0	44.2		ug/L		88	55 - 145	4	30
Chlorobenzene	ND		50.0	49.9		ug/L		100	64 - 130	7	30
Dibromochloromethane	ND		50.0	46.7		ug/L		93	56 - 143	5	30
Chloroethane	ND		25.0	35.4		ug/L		142	50 - 150	21	30
2-Chloroethyl vinyl ether	ND	F1	25.0	ND	F1	ug/L		0	10 - 150	NC	50
Chloroform	ND		50.0	45.0		ug/L		90	60 - 141	6	30
1-Chlorohexane	ND		50.0	42.4		ug/L		85	56 - 136	10	30
Chloromethane	ND		25.0	28.3		ug/L		113	49 - 148	17	31
cis-1,2-Dichloroethene	ND		50.0	45.2		ug/L		90	59 - 143	6	30
cis-1,3-Dichloropropene	ND		50.0	45.5		ug/L		91	57 - 140	4	30
1,2-Dichlorobenzene	ND		50.0	50.5		ug/L		101	52 - 137	5	30
1,3-Dichlorobenzene	ND		50.0	50.5		ug/L		101	54 - 135	8	30
1,4-Dichlorobenzene	ND		50.0	47.4		ug/L		95	53 - 135	12	30
Dichlorodifluoromethane	ND		25.0	21.8		ug/L		87	16 - 150	21	31
1,1-Dichloroethane	ND		50.0	44.6		ug/L		89	61 - 144	10	30
1,2-Dichloroethane	ND		50.0	40.4		ug/L		81	60 - 141	8	30
1,1-Dichloroethene	ND		50.0	58.1		ug/L		116	54 - 147	5	30
1,2-Dichloropropane	ND		50.0	44.6		ug/L		89	66 - 137	5	30
1,3-Dichloropropane	ND		50.0	47.0		ug/L		94	66 - 133	5	30
2,2-Dichloropropane	ND		50.0	40.5		ug/L		81	42 - 144	9	31
1,1-Dichloropropene	ND		50.0	48.3		ug/L		97	65 - 136	4	30
Ethylbenzene	ND		50.0	47.5		ug/L		95	58 - 131	3	30
Ethyl methacrylate	ND		50.0	43.6		ug/L		87	64 - 130	8	30
Hexachlorobutadiene	ND		50.0	40.3		ug/L		81	31 - 149	11	36
2-Hexanone	ND		200	170		ug/L		85	65 - 140	1	30
Isopropylbenzene	ND		50.0	47.5		ug/L		95	56 - 133	6	30
Methylene bromide	ND		50.0	44.6		ug/L		89	63 - 138	6	30
Methylene Chloride	ND		50.0	51.3		ug/L		103	60 - 146	7	32
4-Methyl-2-pentanone (MIBK)	ND		200	181		ug/L		91	63 - 146	4	30
Methyl tert-butyl ether	ND		50.0	46.3		ug/L		93	59 - 137	1	30
m-Xylene & p-Xylene	ND		50.0	45.5		ug/L		91	57 - 130	8	30
Naphthalene	ND		50.0	48.7		ug/L		97	25 - 150	3	30
n-Butylbenzene	ND		50.0	45.5		ug/L		91	41 - 142	7	31
N-Propylbenzene	ND		50.0	46.3		ug/L		93	51 - 138	5	30
o-Chlorotoluene	ND		50.0	43.8		ug/L		88	53 - 134	8	30
o-Xylene	ND		50.0	45.2		ug/L		90	61 - 130	11	30
p-Chlorotoluene	ND		50.0	43.5		ug/L		87	54 - 133	7	30

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

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486758

Client Sample ID: MW6A-ROX-041320
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	50.9		ug/L		102	48 - 139	7	30
sec-Butylbenzene	ND		50.0	48.4		ug/L		97	50 - 138	7	30
Styrene	ND		50.0	47.8		ug/L		96	58 - 131	11	30
tert-Butylbenzene	ND		50.0	44.5		ug/L		89	54 - 146	4	30
1,1,1,2-Tetrachloroethane	ND		50.0	45.0		ug/L		90	59 - 137	8	30
1,1,2,2-Tetrachloroethane	ND		50.0	46.0		ug/L		92	66 - 135	0	30
Tetrachloroethene	ND		50.0	47.1		ug/L		94	52 - 133	11	30
Toluene	ND		50.0	48.2		ug/L		96	65 - 130	8	30
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	61 - 143	8	30
trans-1,3-Dichloropropene	ND		50.0	40.7		ug/L		81	53 - 133	12	30
1,2,3-Trichlorobenzene	ND		50.0	47.0		ug/L		94	43 - 145	6	30
1,2,4-Trichlorobenzene	ND		50.0	46.0		ug/L		92	39 - 148	6	30
1,1,1-Trichloroethane	ND		50.0	42.9		ug/L		86	57 - 142	8	30
1,1,2-Trichloroethane	ND		50.0	45.7		ug/L		91	66 - 131	8	30
Trichloroethene	ND		50.0	51.9		ug/L		104	64 - 136	4	30
Trichlorofluoromethane	ND		25.0	25.9		ug/L		104	54 - 150	21	30
1,2,3-Trichloropropane	ND		50.0	43.7		ug/L		87	65 - 133	0	30
1,2,4-Trimethylbenzene	ND		50.0	45.0		ug/L		90	50 - 139	7	30
1,3,5-Trimethylbenzene	ND		50.0	46.5		ug/L		93	52 - 135	6	30
Vinyl acetate	ND		50.0	58.4		ug/L		117	26 - 150	27	33
Vinyl chloride	ND		25.0	29.1		ug/L		117	46 - 150	21	30
Xylenes, Total	ND		100	90.7		ug/L		91	59 - 130	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene	*85*		*78 - 118*
Dibromofluoromethane	*92*		*81 - 121*
Toluene-d8 (Surr)	*97*		*80 - 120*

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

Lab Sample ID: MB 400-486237/1-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/17/20 09:17	04/21/20 17:06	1
Benzenethiol	ND		10	1.7	ug/L		04/17/20 09:17	04/21/20 17:06	1
Benzoic acid	ND		30	7.3	ug/L		04/17/20 09:17	04/21/20 17:06	1
Benzyl alcohol	ND		10	2.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/17/20 09:17	04/21/20 17:06	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/17/20 09:17	04/21/20 17:06	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/17/20 09:17	04/21/20 17:06	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/17/20 09:17	04/21/20 17:06	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/17/20 09:17	04/21/20 17:06	1
4-Chloroaniline	ND		10	3.4	ug/L		04/17/20 09:17	04/21/20 17:06	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/17/20 09:17	04/21/20 17:06	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/17/20 09:17	04/21/20 17:06	1
2-Chlorophenol	ND		10	2.2	ug/L		04/17/20 09:17	04/21/20 17:06	1

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

Lab Sample ID: MB 400-486237/1-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Dibenzofuran	ND		10	0.52	ug/L		04/17/20 09:17	04/21/20 17:06	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Diethyl phthalate	ND		10	0.70	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/17/20 09:17	04/21/20 17:06	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/17/20 09:17	04/21/20 17:06	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/17/20 09:17	04/21/20 17:06	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/17/20 09:17	04/21/20 17:06	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/17/20 09:17	04/21/20 17:06	1
1,4-Dioxane	ND		10	1.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/17/20 09:17	04/21/20 17:06	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/17/20 09:17	04/21/20 17:06	1
Hexachloroethane	ND		10	4.2	ug/L		04/17/20 09:17	04/21/20 17:06	1
Indene	ND		10	1.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
Isophorone	ND		10	0.57	ug/L		04/17/20 09:17	04/21/20 17:06	1
2-Methylphenol	ND		10	1.8	ug/L		04/17/20 09:17	04/21/20 17:06	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
2-Nitroaniline	ND		10	2.2	ug/L		04/17/20 09:17	04/21/20 17:06	1
3-Nitroaniline	ND		10	1.8	ug/L		04/17/20 09:17	04/21/20 17:06	1
4-Nitroaniline	ND		10	2.5	ug/L		04/17/20 09:17	04/21/20 17:06	1
Nitrobenzene	ND		10	0.55	ug/L		04/17/20 09:17	04/21/20 17:06	1
2-Nitrophenol	ND		10	0.65	ug/L		04/17/20 09:17	04/21/20 17:06	1
4-Nitrophenol	ND		10	2.1	ug/L		04/17/20 09:17	04/21/20 17:06	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/17/20 09:17	04/21/20 17:06	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/17/20 09:17	04/21/20 17:06	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/17/20 09:17	04/21/20 17:06	1
Pentachlorophenol	ND		20	1.8	ug/L		04/17/20 09:17	04/21/20 17:06	1
Phenol	ND		10	2.6	ug/L		04/17/20 09:17	04/21/20 17:06	1
Pyridine	ND		10	3.2	ug/L		04/17/20 09:17	04/21/20 17:06	1
Quinoline	ND		10	6.0	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/17/20 09:17	04/21/20 17:06	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/17/20 09:17	04/21/20 17:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*04/17/20 09:17*	*04/21/20 17:06*	*1*
2-Fluorophenol	*26*		*10 - 120*	*04/17/20 09:17*	*04/21/20 17:06*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*04/17/20 09:17*	*04/21/20 17:06*	*1*
Phenol-d5	*53*		*10 - 120*	*04/17/20 09:17*	*04/21/20 17:06*	*1*
Terphenyl-d14	*81*		*53 - 125*	*04/17/20 09:17*	*04/21/20 17:06*	*1*
2,4,6-Tribromophenol	*46*		*15 - 135*	*04/17/20 09:17*	*04/21/20 17:06*	*1*

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

Lab Sample ID: LCS 400-486237/2-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	19.0		ug/L		63	29 - 120
Benzoic acid	116	80.7		ug/L		69	10 - 150
Benzyl alcohol	30.0	22.0		ug/L		73	19 - 125
Bis(2-chloroethoxy)methane	30.0	19.8		ug/L		66	45 - 120
Bis(2-chloroethyl)ether	30.0	17.0		ug/L		57	48 - 120
bis (2-chloroisopropyl) ether	30.0	18.8		ug/L		63	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.7		ug/L		62	48 - 150
4-Bromophenyl phenyl ether	30.0	21.7		ug/L		72	55 - 122
Butyl benzyl phthalate	30.0	20.3		ug/L		68	46 - 145
4-Chloroaniline	30.0	14.7		ug/L		49	30 - 120
4-Chloro-3-methylphenol	30.0	21.6		ug/L		72	39 - 140
2-Chloronaphthalene	30.0	18.1		ug/L		60	52 - 120
2-Chlorophenol	30.0	15.8		ug/L		53	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.0		ug/L		70	58 - 124
Dibenz[a,h]acridine	29.6	18.1		ug/L		61	46 - 149
Dibenzofuran	30.0	19.2		ug/L		64	58 - 123
3,3'-Dichlorobenzidine	40.0	29.7		ug/L		74	39 - 135
2,4-Dichlorophenol	30.0	22.2		ug/L		74	39 - 128
Diethyl phthalate	30.0	19.5		ug/L		65	44 - 146
2,4-Dimethylphenol	30.0	21.0		ug/L		70	44 - 120
Dimethyl phthalate	30.0	20.3		ug/L		68	50 - 131
Di-n-butyl phthalate	30.0	19.4		ug/L		65	55 - 131
4,6-Dinitro-ortho-cresol	60.0	43.7		ug/L		73	10 - 150
2,4-Dinitrophenol	60.0	48.6		ug/L		81	10 - 150
2,4-Dinitrotoluene	30.0	21.8		ug/L		73	58 - 140
2,6-Dinitrotoluene	30.0	20.4		ug/L		68	57 - 130
Di-n-octyl phthalate	30.0	21.4		ug/L		71	50 - 150
1,4-Dioxane	30.0	15.3		ug/L		51	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	18.9		ug/L		63	47 - 123
Hexachlorobenzene	30.0	21.5		ug/L		72	52 - 131
Hexachlorocyclopentadiene	30.0	9.08	J	ug/L		30	10 - 129
Hexachloroethane	30.0	15.3		ug/L		51	20 - 120
Indene	30.0	19.0		ug/L		63	47 - 120
Isophorone	30.0	22.3		ug/L		74	49 - 120
2-Methylphenol	30.0	19.1		ug/L		64	39 - 123
3 & 4 Methylphenol	30.0	19.1	J	ug/L		64	38 - 121
2-Nitroaniline	30.0	19.8		ug/L		66	47 - 150
3-Nitroaniline	30.0	16.3		ug/L		54	34 - 132
4-Nitroaniline	30.0	20.4		ug/L		68	41 - 135
Nitrobenzene	30.0	20.4		ug/L		68	47 - 120
2-Nitrophenol	30.0	18.4		ug/L		61	28 - 136
4-Nitrophenol	60.0	33.7		ug/L		56	10 - 150
N-Nitrosodimethylamine	30.0	19.7		ug/L		66	22 - 148
N-Nitrosodi-n-propylamine	30.0	20.5		ug/L		68	44 - 120
N-Nitrosodiphenylamine	29.8	20.7		ug/L		70	56 - 120
Pentachlorophenol	60.0	40.2		ug/L		67	15 - 141
Phenol	30.0	16.4		ug/L		55	33 - 120
Pyridine	60.0	28.6		ug/L		48	26 - 120

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

Lab Sample ID: LCS 400-486237/2-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	25.0		ug/L		84	51 - 129
2,4,5-Trichlorophenol	30.0	21.3		ug/L		71	38 - 147
2,4,6-Trichlorophenol	30.0	21.0		ug/L		70	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*23*		*10 - 120*
Nitrobenzene-d5	*73*		*27 - 120*
Phenol-d5	*54*		*10 - 120*
Terphenyl-d14	*73*		*53 - 125*
2,4,6-Tribromophenol	*79*		*15 - 135*

Lab Sample ID: LCS 400-486237/4-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*62*		*34 - 120*
2-Fluorophenol	*23*		*10 - 120*
Nitrobenzene-d5	*74*		*27 - 120*
Phenol-d5	*55*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: LCSD 400-486237/3-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	19.6		ug/L		65	29 - 120	3	30
Benzoic acid	116	62.7		ug/L		54	10 - 150	25	30
Benzyl alcohol	30.0	21.9		ug/L		73	19 - 125	0	30
Bis(2-chloroethoxy)methane	30.0	19.3		ug/L		64	45 - 120	2	30
Bis(2-chloroethyl)ether	30.0	19.4		ug/L		65	48 - 120	13	30
bis (2-chloroisopropyl) ether	30.0	20.7		ug/L		69	30 - 125	10	30
Bis(2-ethylhexyl) phthalate	30.0	20.9		ug/L		70	48 - 150	11	30
4-Bromophenyl phenyl ether	30.0	23.3		ug/L		78	55 - 122	7	30
Butyl benzyl phthalate	30.0	22.4		ug/L		75	46 - 145	10	30
4-Chloroaniline	30.0	16.3		ug/L		54	30 - 120	10	30
4-Chloro-3-methylphenol	30.0	23.0		ug/L		77	39 - 140	6	30
2-Chloronaphthalene	30.0	20.4		ug/L		68	52 - 120	12	30
2-Chlorophenol	30.0	13.0		ug/L		43	34 - 120	19	30
4-Chlorophenyl phenyl ether	30.0	22.7		ug/L		76	58 - 124	8	30
Dibenz[a,h]acridine	29.6	20.2		ug/L		68	46 - 149	11	30
Dibenzofuran	30.0	21.6		ug/L		72	58 - 123	12	30

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

Lab Sample ID: LCSD 400-486237/3-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	31.4		ug/L		79	39 - 135	6	30
2,4-Dichlorophenol	30.0	20.5		ug/L		68	39 - 128	8	30
Diethyl phthalate	30.0	21.3		ug/L		71	44 - 146	9	30
2,4-Dimethylphenol	30.0	21.0		ug/L		70	44 - 120	0	30
Dimethyl phthalate	30.0	22.5		ug/L		75	50 - 131	10	30
Di-n-butyl phthalate	30.0	20.7		ug/L		69	55 - 131	6	30
4,6-Dinitro-ortho-cresol	60.0	45.6		ug/L		76	10 - 150	4	30
2,4-Dinitrophenol	60.0	44.9		ug/L		75	10 - 150	8	30
2,4-Dinitrotoluene	30.0	23.3		ug/L		78	58 - 140	7	30
2,6-Dinitrotoluene	30.0	21.8		ug/L		73	57 - 130	7	30
Di-n-octyl phthalate	30.0	24.4		ug/L		81	50 - 150	13	30
1,4-Dioxane	30.0	16.0		ug/L		53	25 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	19.2		ug/L		64	47 - 123	2	30
Hexachlorobenzene	30.0	23.1		ug/L		77	52 - 131	7	30
Hexachlorocyclopentadiene	30.0	8.89	J	ug/L		30	10 - 129	2	30
Hexachloroethane	30.0	16.4		ug/L		55	20 - 120	7	30
Indene	30.0	20.1		ug/L		67	47 - 120	6	30
Isophorone	30.0	21.8		ug/L		73	49 - 120	2	30
2-Methylphenol	30.0	20.3		ug/L		68	39 - 123	6	30
3 & 4 Methylphenol	30.0	18.7	J	ug/L		62	38 - 121	2	30
2-Nitroaniline	30.0	22.1		ug/L		74	47 - 150	11	30
3-Nitroaniline	30.0	18.7		ug/L		62	34 - 132	14	30
4-Nitroaniline	30.0	20.9		ug/L		70	41 - 135	2	30
Nitrobenzene	30.0	20.3		ug/L		68	47 - 120	1	30
2-Nitrophenol	30.0	17.3		ug/L		58	28 - 136	7	30
4-Nitrophenol	60.0	34.3		ug/L		57	10 - 150	2	30
N-Nitrosodimethylamine	30.0	22.2		ug/L		74	22 - 148	12	30
N-Nitrosodi-n-propylamine	30.0	21.1		ug/L		70	44 - 120	3	30
N-Nitrosodiphenylamine	29.8	22.5		ug/L		75	56 - 120	8	30
Pentachlorophenol	60.0	44.6		ug/L		74	15 - 141	10	30
Phenol	30.0	14.1		ug/L		47	33 - 120	15	30
Pyridine	60.0	32.1		ug/L		53	26 - 120	12	30
Quinoline	29.6	23.7		ug/L		80	51 - 129	5	30
2,4,5-Trichlorophenol	30.0	22.2		ug/L		74	38 - 147	4	30
2,4,6-Trichlorophenol	30.0	21.2		ug/L		71	36 - 139	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*14*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*82*		*53 - 125*
2,4,6-Tribromophenol	*81*		*15 - 135*

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

Lab Sample ID: LCSD 400-486237/5-A
Matrix: Water
Analysis Batch: 486534

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	5.78	J *1	ug/L		19	10 - 120	129	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*34 - 120*
2-Fluorophenol	*32*		*10 - 120*
Nitrobenzene-d5	*70*		*27 - 120*
Phenol-d5	*61*		*10 - 120*
Terphenyl-d14	*86*		*53 - 125*
2,4,6-Tribromophenol	*62*		*15 - 135*

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486534

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	ND		30.8	14.6		ug/L		47	10 - 143
Benzoic acid	ND		120	120		ug/L		100	10 - 134
Benzyl alcohol	ND		30.8	25.0		ug/L		81	10 - 154
Bis(2-chloroethoxy)methane	ND		30.8	19.8		ug/L		64	14 - 147
Bis(2-chloroethyl)ether	ND		30.8	20.4		ug/L		66	28 - 130
bis (2-chloroisopropyl) ether	ND		30.8	20.0		ug/L		65	10 - 141
Bis(2-ethylhexyl) phthalate	ND		30.8	21.4		ug/L		69	43 - 160
4-Bromophenyl phenyl ether	ND		30.8	26.0		ug/L		84	26 - 159
Butyl benzyl phthalate	ND		30.8	25.9		ug/L		84	43 - 151
4-Chloroaniline	ND		30.8	10.8		ug/L		35	10 - 152
4-Chloro-3-methylphenol	ND		30.8	28.1		ug/L		91	17 - 156
2-Chloronaphthalene	ND		30.8	22.0		ug/L		71	10 - 155
2-Chlorophenol	ND		30.8	17.1		ug/L		56	19 - 130
4-Chlorophenyl phenyl ether	ND		30.8	25.5		ug/L		83	25 - 161
Dibenz[a,h]acridine	ND		30.4	19.3		ug/L		64	42 - 147
Dibenzofuran	ND		30.8	25.3		ug/L		82	18 - 157
3,3'-Dichlorobenzidine	ND	F1	41.1	ND	F1	ug/L		0	10 - 172
2,4-Dichlorophenol	ND		30.8	23.4		ug/L		76	16 - 147
Diethyl phthalate	ND		30.8	26.1		ug/L		85	23 - 160
2,4-Dimethylphenol	ND		30.8	23.3		ug/L		76	25 - 146
Dimethyl phthalate	ND		30.8	24.7		ug/L		80	11 - 158
Di-n-butyl phthalate	ND		30.8	24.0		ug/L		78	28 - 162
4,6-Dinitro-ortho-cresol	ND		61.6	63.1		ug/L		102	10 - 168
2,4-Dinitrophenol	ND		61.6	84.8		ug/L		138	10 - 166
2,4-Dinitrotoluene	ND		30.8	27.3		ug/L		89	26 - 158
2,6-Dinitrotoluene	ND		30.8	24.9		ug/L		81	19 - 157
Di-n-octyl phthalate	ND		30.8	26.6		ug/L		86	42 - 150
1,4-Dioxane	ND		30.8	16.4		ug/L		53	10 - 130
1,2-Diphenylhydrazine (as Azobenzene)	ND		30.8	20.5		ug/L		66	19 - 162
Hexachlorobenzene	ND		30.8	26.7		ug/L		87	45 - 145
Hexachlorocyclopentadiene	ND		30.8	16.3	J	ug/L		53	10 - 151
Hexachloroethane	ND		30.8	21.0		ug/L		68	29 - 130

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

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486534

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indene	ND		30.8	22.1		ug/L		72	22 - 130
Isophorone	ND		30.8	22.0		ug/L		71	24 - 144
2-Methylphenol	ND		30.8	22.1		ug/L		72	22 - 130
3 & 4 Methylphenol	ND		30.8	21.6		ug/L		70	31 - 130
2-Nitroaniline	ND		30.8	23.1		ug/L		75	10 - 162
3-Nitroaniline	ND		30.8	13.2		ug/L		43	10 - 163
4-Nitroaniline	ND		30.8	25.9		ug/L		84	10 - 162
Nitrobenzene	ND		30.8	21.2		ug/L		69	34 - 135
2-Nitrophenol	ND		30.8	19.6		ug/L		64	27 - 134
4-Nitrophenol	ND		61.6	50.4		ug/L		82	10 - 175
N-Nitrosodimethylamine	ND		30.8	22.4		ug/L		73	10 - 139
N-Nitrosodi-n-propylamine	ND		30.8	22.8		ug/L		74	13 - 147
N-Nitrosodiphenylamine	ND		30.6	22.5		ug/L		73	31 - 150
Pentachlorophenol	ND		61.6	70.8		ug/L		115	10 - 180
Phenol	ND		30.8	17.6		ug/L		57	23 - 130
Pyridine	ND		61.6	36.0		ug/L		58	10 - 130
Quinoline	ND		30.4	27.2		ug/L		89	10 - 180
2,4,5-Trichlorophenol	ND		30.8	27.0		ug/L		88	43 - 137
2,4,6-Trichlorophenol	ND		30.8	25.7		ug/L		83	42 - 135

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*65*		*34 - 120*
2-Fluorophenol	*25*		*10 - 120*
Nitrobenzene-d5	*75*		*27 - 120*
Phenol-d5	*57*		*10 - 120*
Terphenyl-d14	*81*		*53 - 125*
2,4,6-Tribromophenol	*114*		*15 - 135*

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486534

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	ND		30.1	16.2		ug/L		54	10 - 143	10	63
Benzoic acid	ND		117	124		ug/L		106	10 - 134	3	49
Benzyl alcohol	ND		30.1	26.9		ug/L		89	10 - 154	7	37
Bis(2-chloroethoxy)methane	ND		30.1	21.0		ug/L		70	14 - 147	6	70
Bis(2-chloroethyl)ether	ND		30.1	20.7		ug/L		69	28 - 130	1	42
bis (2-chloroisopropyl) ether	ND		30.1	21.8		ug/L		72	10 - 141	8	41
Bis(2-ethylhexyl) phthalate	ND		30.1	26.6		ug/L		88	43 - 160	22	35
4-Bromophenyl phenyl ether	ND		30.1	29.4		ug/L		98	26 - 159	12	30
Butyl benzyl phthalate	ND		30.1	30.5		ug/L		101	43 - 151	16	32
4-Chloroaniline	ND		30.1	11.0		ug/L		37	10 - 152	2	94
4-Chloro-3-methylphenol	ND		30.1	29.4		ug/L		98	17 - 156	4	40
2-Chloronaphthalene	ND		30.1	24.6		ug/L		82	10 - 155	11	29
2-Chlorophenol	ND		30.1	16.1		ug/L		54	19 - 130	6	42
4-Chlorophenyl phenyl ether	ND		30.1	27.3		ug/L		91	25 - 161	7	27
Dibenz[a,h]acridine	ND		29.7	22.8		ug/L		77	42 - 147	16	40

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

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486534

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Dibenzofuran	ND		30.1	27.0		ug/L		90	18 - 157	6	29
3,3'-Dichlorobenzidine	ND	F1	40.1	ND	F1	ug/L		0	10 - 172	NC	58
2,4-Dichlorophenol	ND		30.1	24.0		ug/L		80	16 - 147	2	43
Diethyl phthalate	ND		30.1	27.9		ug/L		93	23 - 160	7	40
2,4-Dimethylphenol	ND		30.1	25.1		ug/L		84	25 - 146	8	47
Dimethyl phthalate	ND		30.1	27.2		ug/L		90	11 - 158	10	36
Di-n-butyl phthalate	ND		30.1	26.4		ug/L		88	28 - 162	10	32
4,6-Dinitro-ortho-cresol	ND		60.2	70.0		ug/L		116	10 - 168	10	42
2,4-Dinitrophenol	ND		60.2	89.9		ug/L		149	10 - 166	6	36
2,4-Dinitrotoluene	ND		30.1	29.1		ug/L		97	26 - 158	6	28
2,6-Dinitrotoluene	ND		30.1	27.0		ug/L		90	19 - 157	8	28
Di-n-octyl phthalate	ND		30.1	32.1		ug/L		107	42 - 150	19	35
1,4-Dioxane	ND		30.1	12.2		ug/L		40	10 - 130	30	40
1,2-Diphenylhydrazine (as Azobenzene)	ND		30.1	23.1		ug/L		77	19 - 162	12	40
Hexachlorobenzene	ND		30.1	30.4		ug/L		101	45 - 145	13	33
Hexachlorocyclopentadiene	ND		30.1	18.9	J	ug/L		63	10 - 151	15	50
Hexachloroethane	ND		30.1	22.7		ug/L		76	29 - 130	8	41
Indene	ND		30.1	23.4		ug/L		78	22 - 130	6	40
Isophorone	ND		30.1	23.4		ug/L		78	24 - 144	6	33
2-Methylphenol	ND		30.1	23.5		ug/L		78	22 - 130	6	47
3 & 4 Methylphenol	ND		30.1	22.7		ug/L		75	31 - 130	5	47
2-Nitroaniline	ND		30.1	25.4		ug/L		84	10 - 162	9	33
3-Nitroaniline	ND		30.1	14.1		ug/L		47	10 - 163	7	39
4-Nitroaniline	ND		30.1	21.7		ug/L		72	10 - 162	18	50
Nitrobenzene	ND		30.1	22.5		ug/L		75	34 - 135	6	35
2-Nitrophenol	ND		30.1	20.5		ug/L		68	27 - 134	4	43
4-Nitrophenol	ND		60.2	52.6		ug/L		87	10 - 175	4	82
N-Nitrosodimethylamine	ND		30.1	24.1		ug/L		80	10 - 139	7	62
N-Nitrosodi-n-propylamine	ND		30.1	24.2		ug/L		80	13 - 147	6	36
N-Nitrosodiphenylamine	ND		29.9	25.6		ug/L		86	31 - 150	13	34
Pentachlorophenol	ND		60.2	78.5		ug/L		130	10 - 180	10	42
Phenol	ND		30.1	17.2		ug/L		57	23 - 130	2	52
Pyridine	ND		60.2	38.5		ug/L		64	10 - 130	7	55
Quinoline	ND		29.7	29.6		ug/L		99	10 - 180	8	40
2,4,5-Trichlorophenol	ND		30.1	29.1		ug/L		97	43 - 137	7	42
2,4,6-Trichlorophenol	ND		30.1	27.7		ug/L		92	42 - 135	8	44

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 120*
2-Fluorophenol	*17*		*10 - 120*
Nitrobenzene-d5	*83*		*27 - 120*
Phenol-d5	*57*		*10 - 120*
Terphenyl-d14	*106*		*53 - 125*
2,4,6-Tribromophenol	*124*		*15 - 135*

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

Lab Sample ID: MB 400-486237/1-A
Matrix: Water
Analysis Batch: 486581

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486237

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/17/20 09:17	04/21/20 18:13	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/17/20 09:17	04/21/20 18:13	1
Anthracene	ND		0.20	0.031	ug/L		04/17/20 09:17	04/21/20 18:13	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/17/20 09:17	04/21/20 18:13	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/17/20 09:17	04/21/20 18:13	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/17/20 09:17	04/21/20 18:13	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/17/20 09:17	04/21/20 18:13	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/17/20 09:17	04/21/20 18:13	1
Chrysene	ND		0.20	0.074	ug/L		04/17/20 09:17	04/21/20 18:13	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/17/20 09:17	04/21/20 18:13	1
Fluoranthene	ND		0.20	0.068	ug/L		04/17/20 09:17	04/21/20 18:13	1
Fluorene	ND		0.20	0.11	ug/L		04/17/20 09:17	04/21/20 18:13	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/17/20 09:17	04/21/20 18:13	1
Phenanthrene	ND		0.20	0.036	ug/L		04/17/20 09:17	04/21/20 18:13	1
Pyrene	ND		0.20	0.040	ug/L		04/17/20 09:17	04/21/20 18:13	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/17/20 09:17	04/21/20 18:13	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/17/20 09:17	04/21/20 18:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*117*		*33 - 138*	*04/17/20 09:17*	*04/21/20 18:13*	*1*
2-Fluorobiphenyl	*82*		*15 - 122*	*04/17/20 09:17*	*04/21/20 18:13*	*1*
Nitrobenzene-d5	*69*		*19 - 130*	*04/17/20 09:17*	*04/21/20 18:13*	*1*

Lab Sample ID: LCS 400-486237/2-A
Matrix: Water
Analysis Batch: 486581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	25.3		ug/L		84	41 - 120
Acenaphthylene	30.0	26.4		ug/L		88	44 - 120
Anthracene	30.0	26.4		ug/L		88	49 - 120
Benzo[a]anthracene	30.0	25.3		ug/L		84	61 - 135
Benzo[a]pyrene	30.0	24.2		ug/L		81	52 - 120
Benzo[b]fluoranthene	30.0	25.2		ug/L		84	53 - 134
Benzo[g,h,i]perylene	30.0	29.3		ug/L		98	47 - 133
Benzo[k]fluoranthene	30.0	24.3		ug/L		81	57 - 134
Chrysene	30.0	25.5		ug/L		85	55 - 122
Dibenz(a,h)anthracene	30.0	30.8		ug/L		103	48 - 146
Fluoranthene	30.0	25.4		ug/L		85	54 - 128
Fluorene	30.0	27.1		ug/L		90	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	29.6		ug/L		99	43 - 142
Phenanthrene	30.0	26.0		ug/L		87	48 - 120
Pyrene	30.0	25.2		ug/L		84	48 - 132
1-Methylnaphthalene	30.0	21.0		ug/L		70	41 - 120
2-Methylnaphthalene	30.0	21.3		ug/L		71	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*

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

Lab Sample ID: LCS 400-486237/2-A
Matrix: Water
Analysis Batch: 486581

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486237

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	84		15 - 122
Nitrobenzene-d5	55		19 - 130

Lab Sample ID: LCSD 400-486237/3-A
Matrix: Water
Analysis Batch: 486581

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	25.9		ug/L		86	41 - 120	2	56
Acenaphthylene	30.0	25.9		ug/L		86	44 - 120	2	56
Anthracene	30.0	26.2		ug/L		87	49 - 120	1	51
Benzo[a]anthracene	30.0	26.2		ug/L		87	61 - 135	4	49
Benzo[a]pyrene	30.0	23.8		ug/L		79	52 - 120	2	50
Benzo[b]fluoranthene	30.0	26.5		ug/L		88	53 - 134	5	54
Benzo[g,h,i]perylene	30.0	28.4		ug/L		95	47 - 133	3	50
Benzo[k]fluoranthene	30.0	24.3		ug/L		81	57 - 134	0	52
Chrysene	30.0	26.5		ug/L		88	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	29.9		ug/L		100	48 - 146	3	50
Fluoranthene	30.0	26.2		ug/L		87	54 - 128	3	52
Fluorene	30.0	28.0		ug/L		93	45 - 125	3	56
Indeno[1,2,3-cd]pyrene	30.0	28.9		ug/L		96	43 - 142	2	51
Phenanthrene	30.0	26.4		ug/L		88	48 - 120	2	56
Pyrene	30.0	27.0		ug/L		90	48 - 132	7	52
1-Methylnaphthalene	30.0	22.1		ug/L		74	41 - 120	5	55
2-Methylnaphthalene	30.0	22.2		ug/L		74	32 - 124	4	57

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Terphenyl-d14	105		33 - 138
2-Fluorobiphenyl	85		15 - 122
Nitrobenzene-d5	61		19 - 130

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486581

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		30.8	26.5		ug/L		86	35 - 113
Acenaphthylene	ND		30.8	27.3		ug/L		89	41 - 118
Anthracene	ND		30.8	30.5		ug/L		99	45 - 122
Benzo[a]anthracene	ND		30.8	25.6		ug/L		83	55 - 133
Benzo[a]pyrene	ND		30.8	24.6		ug/L		80	50 - 108
Benzo[b]fluoranthene	ND		30.8	25.6		ug/L		83	50 - 128
Benzo[g,h,i]perylene	ND		30.8	27.1		ug/L		88	46 - 133
Benzo[k]fluoranthene	ND		30.8	25.6		ug/L		83	52 - 128
Chrysene	ND		30.8	27.3		ug/L		89	52 - 116
Dibenz(a,h)anthracene	ND		30.8	29.0		ug/L		94	52 - 143
Fluoranthene	ND		30.8	27.3		ug/L		89	32 - 150
Fluorene	ND		30.8	27.6		ug/L		90	15 - 150

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

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486581

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indeno[1,2,3-cd]pyrene	ND		30.8	27.8		ug/L		90	41 - 141
Phenanthrene	ND		30.8	27.8		ug/L		90	36 - 125
Pyrene	ND		30.8	28.2		ug/L		92	41 - 127
1-Methylnaphthalene	ND		30.8	23.3		ug/L		76	10 - 150
2-Methylnaphthalene	ND		30.8	23.2		ug/L		75	10 - 150

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Terphenyl-d14	*99*		*33 - 138*
2-Fluorobiphenyl	*84*		*15 - 122*
Nitrobenzene-d5	*59*		*19 - 130*

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486581

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486237

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		30.1	26.0		ug/L		86	35 - 113	2	49
Acenaphthylene	ND		30.1	26.7		ug/L		89	41 - 118	2	48
Anthracene	ND		30.1	29.2		ug/L		97	45 - 122	4	56
Benzo[a]anthracene	ND		30.1	25.8		ug/L		86	55 - 133	1	57
Benzo[a]pyrene	ND		30.1	25.0		ug/L		83	50 - 108	2	59
Benzo[b]fluoranthene	ND		30.1	24.9		ug/L		83	50 - 128	3	62
Benzo[g,h,i]perylene	ND		30.1	27.6		ug/L		92	46 - 133	2	58
Benzo[k]fluoranthene	ND		30.1	27.1		ug/L		90	52 - 128	6	58
Chrysene	ND		30.1	27.4		ug/L		91	52 - 116	0	59
Dibenz(a,h)anthracene	ND		30.1	29.6		ug/L		98	52 - 143	2	60
Fluoranthene	ND		30.1	27.4		ug/L		91	32 - 150	1	59
Fluorene	ND		30.1	27.3		ug/L		91	15 - 150	1	49
Indeno[1,2,3-cd]pyrene	ND		30.1	28.7		ug/L		95	41 - 141	3	58
Phenanthrene	ND		30.1	27.4		ug/L		91	36 - 125	1	69
Pyrene	ND		30.1	27.4		ug/L		91	41 - 127	3	58
1-Methylnaphthalene	ND		30.1	22.0		ug/L		73	10 - 150	6	66
2-Methylnaphthalene	ND		30.1	22.6		ug/L		75	10 - 150	3	66

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Terphenyl-d14	*104*		*33 - 138*
2-Fluorobiphenyl	*85*		*15 - 122*
Nitrobenzene-d5	*63*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486672/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/22/20 11:23	04/22/20 20:04	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/22/20 11:23	04/22/20 20:04	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-486672/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486672

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	133		51 - 149	04/22/20 11:23	04/22/20 20:04	1

Lab Sample ID: LCS 400-486672/2-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.259	*	ug/L		258	60 - 140
1,2-Dibromoethane	0.101	0.148	*	ug/L		147	60 - 140

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	122		51 - 149

Lab Sample ID: LCSD 400-486672/3-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486672

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.248	*	ug/L		247	60 - 140	1	30
1,2-Dibromoethane	0.101	0.145	*	ug/L		144	60 - 140	2	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	120		51 - 149

Lab Sample ID: 400-186678-5 MS
Matrix: Water
Analysis Batch: 486697

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486672

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND	F1 *	0.0977	0.219	F1	ug/L		224	65 - 135
1,2-Dibromoethane	ND	F1 *	0.0980	0.137	F1	ug/L		140	65 - 135

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene	129		51 - 149

Lab Sample ID: 400-186678-5 MSD
Matrix: Water
Analysis Batch: 486697

Client Sample ID: MW6A-ROX-041320
Prep Type: Total/NA
Prep Batch: 486672

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	F1 *	0.0980	0.198	F1	ug/L		202	65 - 135	10	20
1,2-Dibromoethane	ND	* F1	0.0982	0.128		ug/L		130	65 - 135	7	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene	119		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1364589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	**GSAP Project ID**
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/13/20

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 60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

COF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): TJ Burkeson, D. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 / UNIT COST 60619901 - 1.03.0022

400-186678 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-Rox-041320-8260	4/13/20	0000	Water	2					2	X			
	TB-Rox-041320-8011		0000		2					2			X	
	MW16-Rox-041320		1010		6			2		8	X	X	X	X
	MW5-Rox-041320		1055		6			2		8	X	X	X	X
	MW6A-Rox-041320		1215		6			2		8	X	X	X	X
	MW6A-Rox-041320-MS		1215		6			2		8	X	X	X	X
	MW6A-Rox-041320-MSD		1215		6			2		8	X	X	X	X
	MW6B-Rox-041320		1255		6			2		8	X	X	X	X
	MW6C-Rox-041320		1330		6			2		8	X	X	X	X
	MW6D-Rox-041320		1405		6			2		8	X	X	X	X

Relinquished by (Signature)	Received by (Signature)	Date	Time
	Fedex: 135294706 1052, 135294706 1041, 125 8885 6705	4/13/20	1600
Relinquished by (Signature)	Received by (Signature)	Date	Time
Relinquished by (Signature)	Received by (Signature)	Date	Time
		4-14-20	8:51

Version 14Dec15

Custody Seal # 1142221, 1142219, 1142217, 1142220, 1142218, 1142216 4.5c, 0.1c, 0.5c IR9

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4/28/2020

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1584589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID	☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/13/20
Bob Billman	25278	PAGE 2 of 2
PO #	**GSAP Project ID**	
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02	

SAMPLING COMPANY	LOG CODE	SITE ADDRESS: Street and City	State	AECOM Project / Task Number: Roxana Quarterly GW
AECOM		900 South Central Ave, ROXANA	IL	60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS	EDF DELIVERABLE TO (Name, Company, Office Location)	PHONE NO.	E-MAIL	AECOM Other ID
100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA	Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman	314-802-1172; 314-449-2913; 314-802-1122	melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com	

PROJECT CONTACT (Hardcopy or PDF Report to)	TELEPHONE	FAX	Bill To Contact E-MAIL	SAMPLER NAME(S) (Print)
Elizabeth Kunkel, Bob Billman, Melissa Remiger	314-429-0100	314-429-0462	bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com	B Burleson B. Howell

TURNAROUND TIME (CALENDAR DAYS)
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

- ☑ SHELL CONTRACT RATE APPLIES
- ☐ STATE REIMBURSEMENT RATE APPLIES
- ☐ EDD NOT NEEDED
- ☑ RECEIPT VERIFICATION REQUESTED
- ☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60619901 - 1.03.002: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0022: VOC 8011	PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	MW10-RWX-041320-REP	4/13/20	1405	Water	6			2		8	X	X	X	X	

Relinquished by (Signature) | Received by (Signature) | Date | Time
- Relinquished by: [signature] | Received by: Fedex: 135297061052, 135297061041, 1275 6885 6705 | 4/13/20 | 1600
- Relinquished by: | Received by: | Date: | Time:
- Relinquished by: | Received by: [signature] | Date: 4-14-20 | Time: 8:51

Version 14Dec15

Custody Seal #: 1142221, 1142219, 1142217
1142220, 1142218, 1142216

4.5 c, 0.1 c, 0.5 c IR9

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4/28/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186678-1

Login Number: 186678
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1142217,1142219,1142221
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5 °C, 0.1 °C, 0.5 °C IR 9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186678-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186690-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/18/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041420-8260	TB-ROX-041420-8011
MW14-ROX-041420-EB	MW14-ROX-041420
P66-ROX-041420	

1.0 Data Package Completeness

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

Yes

2.0 Laboratory Case Narrative \ Cooler Receipt Form

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

Yes, although not indicated in the laboratory case narrative, analytes were detected in equipment blank MW14-ROX-041420-EB. The laboratory case narrative indicated benzenethiol and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for nitrobenzene-d_5 was outside criteria in the laboratory control sample. The PAH internal standard recovery for acenaphthene-d_{10} was outside criteria in sample P66-ROX-041420. Several PAHs in sample P66-ROX-041420 were diluted due to the nature of the sample matrix. The continuing calibration verification for hexachlorocyclopentadiene 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
MW14-ROX-041420-EB	VOCs	Toluene	0.46 µg/L

Blank ID	Parameter	Analyte	Concentration/ Amount
MW14-ROX-041420-EB	SVOCs	1,2-Diphenylhydrazine (as Azobenzene)	1.2 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 400-486588/4-A/5-A	SVOCs	Benzenethiol	**2**/10	**129**	10-120/30
LCS/LCSD 400-486672/2-A/3-A	VOC by 8011	1,2-Dibromo-3-Chloropropane	**258/247**	1	60-140/30
LCS/LCSD 400-486672/2-A/3-A	VOC by 8011	1,2-Dibromoethane	**147/144**	2	60-140/30
LCS/LCSD 400-487102/2-A/3-A	VOC by 8011	1,2-Dibromo-3-Chloropropane	**166/161**	3	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS 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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-041420	SVOCs	Benzenethiol	**UJ**
P66-ROX-041420	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-486588/4-A	SVOCs	Nitrobenzene-d_5	**18**	27-120

Laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
P66-ROX-041420	PAHs	Acenaphthene-d_{10}	**2000926**	395471	197736-790942

Analytical data reported as non-detect and associated with internal standard recoveries outside evaluation criteria did not require qualification. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low, and is qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW14-ROX-041420	PAHs	Hexachlorocyclopentadiene	**UJ**
P66-ROX-041420	PAHs	Hexachlorocyclopentadiene	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186690-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/30/2020 5:30:23 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

..... LINKS .....

Review your project results through TotalAccess

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Reviewed 5/18/

The test results in this report meet all 2003 NELAC and 2009 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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Certification Summary 44

Job ID: 400-186690-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186690-1

Comments
No additional comments.

Receipt
The samples were received on 4/15/2020 9:07 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.

GC/MS VOA
Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-480262 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte 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-041420-8260 (400-186690-1), MW14-ROX-041420-EB (400-186690-3), MW14-ROX-041420 (400-186690-4) and P66-ROX-041420 (400-186690-5). 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 laboratory control sample (LCS) for preparation batch 400-486588 and analytical batch 400-486937 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 400-486588 and analytical batch 400-486937 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered above the upper control limit for Hexachlorobenzene, 2,4-Dichlorophenol and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: 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: (LCS 400-486588/4-A). These results have been reported and qualified.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (CCVIS 400-486937/3). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486926 recovered above the upper control limit for Benzo[k]fluoranthene, Fluoranthene, Fluorene and 1-Methylnaphthalene. The samples associated with this CCV were non-detects and/or recovered below the reporting limit (RL) for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: P66-ROX-041420 (400-186690-5). These results have been reported and qualified.

Job ID: 400-186690-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: P66-ROX-041420 (400-186690-5). Elevated reporting limits (RLs) are provided.

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: (CCVIS 400-486926/3). 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 400-486697 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-486672 and analytical batch 400-486697 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-487173 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-487102 and analytical batch 400-487173 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The continuing calibration verification (CCV) associated with batch 400-487173 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: 400-186690-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186690-1	TB-ROX-041420-8260	Water	04/14/20 00:00	04/15/20 09:07	
400-186690-2	TB-ROX-041420-8011	Water	04/14/20 00:00	04/15/20 09:07	
400-186690-3	MW14-ROX-041420-EB	Water	04/14/20 08:00	04/15/20 09:07	
400-186690-4	MW14-ROX-041420	Water	04/14/20 10:05	04/15/20 09:07	
400-186690-5	P66-ROX-041420	Water	04/14/20 10:35	04/15/20 09:07	

Detection Summary

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

Job ID: 400-186690-1

Client Sample ID: TB-ROX-041420-8260 — Lab Sample ID: 400-186690-1

No Detections.

Client Sample ID: TB-ROX-041420-8011 — Lab Sample ID: 400-186690-2

No Detections.

Client Sample ID: MW14-ROX-041420-EB — Lab Sample ID: 400-186690-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.46	J	1.0	0.41	ug/L	1		8260B	Total/NA
1,2-Diphenylhydrazine (as Azobenzene)	1.2	J	9.9	0.99	ug/L	1		8270D	Total/NA

Client Sample ID: MW14-ROX-041420 — Lab Sample ID: 400-186690-4

No Detections.

Client Sample ID: P66-ROX-041420 — Lab Sample ID: 400-186690-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	130		1.0	0.38	ug/L	1		8260B	Total/NA
Isopropylbenzene	40		1.0	0.53	ug/L	1		8260B	Total/NA
Naphthalene	10		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	2.4		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	47		1.0	0.69	ug/L	1		8260B	Total/NA
sec-Butylbenzene	5.0		1.0	0.70	ug/L	1		8260B	Total/NA
tert-Butylbenzene	2.2		1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	0.98	J	1.0	0.41	ug/L	1		8260B	Total/NA
Acenaphthene - DL	0.45	J	0.98	0.16	ug/L	5		8270D LL	Total/NA
Indene	20		9.8	0.98	ug/L	1		8270D	Total/NA
Phenol	14		9.8	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: 400-186690-1

Client Sample ID: TB-ROX-041420-8260
Date Collected: 04/14/20 00:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-1
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			04/25/20 15:59	1
Acrolein	ND		20	10	ug/L			04/25/20 15:59	1
Acrylonitrile	ND		10	2.8	ug/L			04/25/20 15:59	1
Benzene	ND		1.0	0.38	ug/L			04/25/20 15:59	1
Bromobenzene	ND		1.0	0.54	ug/L			04/25/20 15:59	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/25/20 15:59	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Bromoform	ND		5.0	0.71	ug/L			04/25/20 15:59	1
Bromomethane	ND		1.0	0.98	ug/L			04/25/20 15:59	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/25/20 15:59	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Chloroethane	ND		1.0	0.76	ug/L			04/25/20 15:59	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/25/20 15:59	1
Chloroform	ND		1.0	0.60	ug/L			04/25/20 15:59	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/25/20 15:59	1
Chloromethane	ND		1.0	0.83	ug/L			04/25/20 15:59	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 15:59	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/25/20 15:59	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/25/20 15:59	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/25/20 15:59	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/25/20 15:59	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/25/20 15:59	1
2-Hexanone	ND		25	3.1	ug/L			04/25/20 15:59	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/25/20 15:59	1
Methylene bromide	ND		5.0	0.59	ug/L			04/25/20 15:59	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/25/20 15:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/25/20 15:59	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/25/20 15:59	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/25/20 15:59	1
Naphthalene	ND		1.0	1.0	ug/L			04/25/20 15:59	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/25/20 15:59	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/25/20 15:59	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/25/20 15:59	1
o-Xylene	ND		5.0	0.60	ug/L			04/25/20 15:59	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/25/20 15:59	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/25/20 15:59	1

Client Sample ID: TB-ROX-041420-8260
Date Collected: 04/14/20 00:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-1
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			04/25/20 15:59	1
Styrene	ND		1.0	1.0	ug/L			04/25/20 15:59	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/25/20 15:59	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/25/20 15:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/25/20 15:59	1
Toluene	ND		1.0	0.41	ug/L			04/25/20 15:59	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 15:59	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/25/20 15:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/25/20 15:59	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/25/20 15:59	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/25/20 15:59	1
Trichloroethene	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/25/20 15:59	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/25/20 15:59	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/25/20 15:59	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/25/20 15:59	1
Vinyl acetate	ND		25	2.0	ug/L			04/25/20 15:59	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/25/20 15:59	1
Xylenes, Total	ND		10	1.6	ug/L			04/25/20 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*04/25/20 15:59*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/25/20 15:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/25/20 15:59*	*1*

Client Sample Results

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

Job ID: 400-186690-1

Client Sample ID: TB-ROX-041420-8011
Date Collected: 04/14/20 00:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-2
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	*	0.029	0.0053	ug/L		04/22/20 11:23	04/23/20 04:42	1
1,2-Dibromoethane	ND	*	0.019	0.0048	ug/L		04/22/20 11:23	04/23/20 04:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*124*		*51 - 149*	*04/22/20 11:23*	*04/23/20 04:42*	*1*

Client Sample Results

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

Job ID: 400-186690-1

Client Sample ID: MW14-ROX-041420-EB

Date Collected: 04/14/20 08:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-3

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			04/25/20 21:20	1
Acrolein	ND		20	10	ug/L			04/25/20 21:20	1
Acrylonitrile	ND		10	2.8	ug/L			04/25/20 21:20	1
Benzene	ND		1.0	0.38	ug/L			04/25/20 21:20	1
Bromobenzene	ND		1.0	0.54	ug/L			04/25/20 21:20	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/25/20 21:20	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Bromoform	ND		5.0	0.71	ug/L			04/25/20 21:20	1
Bromomethane	ND		1.0	0.98	ug/L			04/25/20 21:20	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/25/20 21:20	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Chloroethane	ND		1.0	0.76	ug/L			04/25/20 21:20	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/25/20 21:20	1
Chloroform	ND		1.0	0.60	ug/L			04/25/20 21:20	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/25/20 21:20	1
Chloromethane	ND		1.0	0.83	ug/L			04/25/20 21:20	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 21:20	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/25/20 21:20	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/25/20 21:20	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/25/20 21:20	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/25/20 21:20	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/25/20 21:20	1
2-Hexanone	ND		25	3.1	ug/L			04/25/20 21:20	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/25/20 21:20	1
Methylene bromide	ND		5.0	0.59	ug/L			04/25/20 21:20	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/25/20 21:20	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/25/20 21:20	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/25/20 21:20	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/25/20 21:20	1
Naphthalene	ND		1.0	1.0	ug/L			04/25/20 21:20	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/25/20 21:20	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/25/20 21:20	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/25/20 21:20	1
o-Xylene	ND		5.0	0.60	ug/L			04/25/20 21:20	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/25/20 21:20	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/25/20 21:20	1

Client Sample ID: MW14-ROX-041420-EB

Date Collected: 04/14/20 08:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-3

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			04/25/20 21:20	1
Styrene	ND		1.0	1.0	ug/L			04/25/20 21:20	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/25/20 21:20	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/25/20 21:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/25/20 21:20	1
Toluene	0.46	J	1.0	0.41	ug/L			04/25/20 21:20	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 21:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/25/20 21:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/25/20 21:20	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:20	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/25/20 21:20	1
Trichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/25/20 21:20	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/25/20 21:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/25/20 21:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/25/20 21:20	1
Vinyl acetate	ND		25	2.0	ug/L			04/25/20 21:20	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/25/20 21:20	1
Xylenes, Total	ND		10	1.6	ug/L			04/25/20 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/25/20 21:20*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/25/20 21:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/25/20 21:20*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/21/20 16:04	04/24/20 14:49	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 14:49	1
Anthracene	ND		0.20	0.031	ug/L		04/21/20 16:04	04/24/20 14:49	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 14:49	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/21/20 16:04	04/24/20 14:49	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 14:49	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 14:49	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/21/20 16:04	04/24/20 14:49	1
Chrysene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 14:49	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 14:49	1
Fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 14:49	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 14:49	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 14:49	1
Phenanthrene	ND		0.20	0.036	ug/L		04/21/20 16:04	04/24/20 14:49	1
Pyrene	ND		0.20	0.040	ug/L		04/21/20 16:04	04/24/20 14:49	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 14:49	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/21/20 16:04	04/24/20 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*33 - 138*	*04/21/20 16:04*	*04/24/20 14:49*	*1*
2-Fluorobiphenyl	*71*		*15 - 122*	*04/21/20 16:04*	*04/24/20 14:49*	*1*

Client Sample ID: MW14-ROX-041420-EB
Date Collected: 04/14/20 08:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	04/21/20 16:04	04/24/20 14:49	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		04/21/20 16:04	04/24/20 17:46	1
Benzenethiol	ND	**1	9.9	1.7	ug/L		04/21/20 16:04	04/24/20 17:46	1
Benzoic acid	ND		30	7.3	ug/L		04/21/20 16:04	04/24/20 17:46	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/21/20 16:04	04/24/20 17:46	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/21/20 16:04	04/24/20 17:46	1
bis (2-chloroisopropyl) ether	ND		9.9	0.81	ug/L		04/21/20 16:04	04/24/20 17:46	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/21/20 16:04	04/24/20 17:46	1
Butyl benzyl phthalate	ND		9.9	0.69	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/21/20 16:04	04/24/20 17:46	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/21/20 16:04	04/24/20 17:46	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/21/20 16:04	04/24/20 17:46	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/21/20 16:04	04/24/20 17:46	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/21/20 16:04	04/24/20 17:46	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/21/20 16:04	04/24/20 17:46	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/21/20 16:04	04/24/20 17:46	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/21/20 16:04	04/24/20 17:46	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/21/20 16:04	04/24/20 17:46	1
1,2-Diphenylhydrazine (as Azobenzene)	1.2	J	9.9	0.99	ug/L		04/21/20 16:04	04/24/20 17:46	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/21/20 16:04	04/24/20 17:46	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/21/20 16:04	04/24/20 17:46	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/21/20 16:04	04/24/20 17:46	1
Indene	ND		9.9	0.99	ug/L		04/21/20 16:04	04/24/20 17:46	1
Isophorone	ND		9.9	0.57	ug/L		04/21/20 16:04	04/24/20 17:46	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/21/20 16:04	04/24/20 17:46	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/21/20 16:04	04/24/20 17:46	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/21/20 16:04	04/24/20 17:46	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/21/20 16:04	04/24/20 17:46	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/21/20 16:04	04/24/20 17:46	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/21/20 16:04	04/24/20 17:46	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/21/20 16:04	04/24/20 17:46	1

Client Sample ID: MW14-ROX-041420-EB
Date Collected: 04/14/20 08:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-3
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		04/21/20 16:04	04/24/20 17:46	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/21/20 16:04	04/24/20 17:46	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 17:46	1
Phenol	ND		9.9	2.6	ug/L		04/21/20 16:04	04/24/20 17:46	1
Pyridine	ND		9.9	3.2	ug/L		04/21/20 16:04	04/24/20 17:46	1
Quinoline	ND		9.9	6.0	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/21/20 16:04	04/24/20 17:46	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/21/20 16:04	04/24/20 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*68*		*34 - 120*	*04/21/20 16:04*	*04/24/20 17:46*	*1*
2-Fluorophenol	*49*		*10 - 120*	*04/21/20 16:04*	*04/24/20 17:46*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/21/20 16:04*	*04/24/20 17:46*	*1*
Phenol-d5	*56*		*10 - 120*	*04/21/20 16:04*	*04/24/20 17:46*	*1*
Terphenyl-d14	*87*		*53 - 125*	*04/21/20 16:04*	*04/24/20 17:46*	*1*
2,4,6-Tribromophenol	*80*		*15 - 135*	*04/21/20 16:04*	*04/24/20 17:46*	*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	0.0053	ug/L		04/22/20 11:23	04/23/20 05:02	1
1,2-Dibromoethane	ND	*	0.019	0.0048	ug/L		04/22/20 11:23	04/23/20 05:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*04/22/20 11:23*	*04/23/20 05:02*	*1*

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

Job ID: 400-186690-1

Client Sample ID: MW14-ROX-041420
Date Collected: 04/14/20 10:05
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-4
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			04/25/20 21:45	1
Acrolein	ND		20	10	ug/L			04/25/20 21:45	1
Acrylonitrile	ND		10	2.8	ug/L			04/25/20 21:45	1
Benzene	ND		1.0	0.38	ug/L			04/25/20 21:45	1
Bromobenzene	ND		1.0	0.54	ug/L			04/25/20 21:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/25/20 21:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Bromoform	ND		5.0	0.71	ug/L			04/25/20 21:45	1
Bromomethane	ND		1.0	0.98	ug/L			04/25/20 21:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/25/20 21:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Chloroethane	ND		1.0	0.76	ug/L			04/25/20 21:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/25/20 21:45	1
Chloroform	ND		1.0	0.60	ug/L			04/25/20 21:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/25/20 21:45	1
Chloromethane	ND		1.0	0.83	ug/L			04/25/20 21:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 21:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/25/20 21:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/25/20 21:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/25/20 21:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/25/20 21:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/25/20 21:45	1
2-Hexanone	ND		25	3.1	ug/L			04/25/20 21:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/25/20 21:45	1
Methylene bromide	ND		5.0	0.59	ug/L			04/25/20 21:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/25/20 21:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/25/20 21:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/25/20 21:45	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/25/20 21:45	1
Naphthalene	ND		1.0	1.0	ug/L			04/25/20 21:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/25/20 21:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/25/20 21:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/25/20 21:45	1
o-Xylene	ND		5.0	0.60	ug/L			04/25/20 21:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/25/20 21:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/25/20 21:45	1

Client Sample ID: MW14-ROX-041420
Date Collected: 04/14/20 10:05
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-4
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			04/25/20 21:45	1
Styrene	ND		1.0	1.0	ug/L			04/25/20 21:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/25/20 21:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/25/20 21:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/25/20 21:45	1
Toluene	ND		1.0	0.41	ug/L			04/25/20 21:45	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 21:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/25/20 21:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/25/20 21:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/25/20 21:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/25/20 21:45	1
Trichloroethene	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/25/20 21:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/25/20 21:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/25/20 21:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/25/20 21:45	1
Vinyl acetate	ND		25	2.0	ug/L			04/25/20 21:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/25/20 21:45	1
Xylenes, Total	ND		10	1.6	ug/L			04/25/20 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/25/20 21:45*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/25/20 21:45*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/25/20 21:45*	*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		04/21/20 16:04	04/24/20 15:07	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/21/20 16:04	04/24/20 15:07	1
Anthracene	ND		0.20	0.030	ug/L		04/21/20 16:04	04/24/20 15:07	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 15:07	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/21/20 16:04	04/24/20 15:07	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/21/20 16:04	04/24/20 15:07	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 15:07	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/21/20 16:04	04/24/20 15:07	1
Chrysene	ND		0.20	0.073	ug/L		04/21/20 16:04	04/24/20 15:07	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 15:07	1
Fluoranthene	ND		0.20	0.067	ug/L		04/21/20 16:04	04/24/20 15:07	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 15:07	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 15:07	1
Phenanthrene	ND		0.20	0.035	ug/L		04/21/20 16:04	04/24/20 15:07	1
Pyrene	ND		0.20	0.039	ug/L		04/21/20 16:04	04/24/20 15:07	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/21/20 16:04	04/24/20 15:07	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/21/20 16:04	04/24/20 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*83*		*33 - 138*	*04/21/20 16:04*	*04/24/20 15:07*	*1*
2-Fluorobiphenyl	*66*		*15 - 122*	*04/21/20 16:04*	*04/24/20 15:07*	*1*

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

Job ID: 400-186690-1

Client Sample ID: MW14-ROX-041420
Date Collected: 04/14/20 10:05
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*71*		*19 - 130*	*04/21/20 16:04*	*04/24/20 15:07*	*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		04/21/20 16:04	04/24/20 18:07	1
Benzenethiol	ND	**1 UJ	9.8	1.7	ug/L		04/21/20 16:04	04/24/20 18:07	1
Benzoic acid	ND		29	7.2	ug/L		04/21/20 16:04	04/24/20 18:07	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/21/20 16:04	04/24/20 18:07	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/21/20 16:04	04/24/20 18:07	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		04/21/20 16:04	04/24/20 18:07	1
bis (2-chloroisopropyl) ether	ND		9.8	0.80	ug/L		04/21/20 16:04	04/24/20 18:07	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/21/20 16:04	04/24/20 18:07	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/21/20 16:04	04/24/20 18:07	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/21/20 16:04	04/24/20 18:07	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/21/20 16:04	04/24/20 18:07	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/21/20 16:04	04/24/20 18:07	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/21/20 16:04	04/24/20 18:07	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/21/20 16:04	04/24/20 18:07	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		04/21/20 16:04	04/24/20 18:07	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/21/20 16:04	04/24/20 18:07	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/21/20 16:04	04/24/20 18:07	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/21/20 16:04	04/24/20 18:07	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		04/21/20 16:04	04/24/20 18:07	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		04/21/20 16:04	04/24/20 18:07	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/21/20 16:04	04/24/20 18:07	1
Indene	ND		9.8	0.98	ug/L		04/21/20 16:04	04/24/20 18:07	1
Isophorone	ND		9.8	0.56	ug/L		04/21/20 16:04	04/24/20 18:07	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/21/20 16:04	04/24/20 18:07	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 18:07	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/21/20 16:04	04/24/20 18:07	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/21/20 16:04	04/24/20 18:07	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/21/20 16:04	04/24/20 18:07	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/21/20 16:04	04/24/20 18:07	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/21/20 16:04	04/24/20 18:07	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/21/20 16:04	04/24/20 18:07	1

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

Job ID: 400-186690-1

Client Sample ID: MW14-ROX-041420
Date Collected: 04/14/20 10:05
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-4
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		04/21/20 16:04	04/24/20 18:07	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/21/20 16:04	04/24/20 18:07	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 18:07	1
Phenol	ND		9.8	2.6	ug/L		04/21/20 16:04	04/24/20 18:07	1
Pyridine	ND		9.8	3.1	ug/L		04/21/20 16:04	04/24/20 18:07	1
Quinoline	ND		9.8	5.9	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/21/20 16:04	04/24/20 18:07	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/21/20 16:04	04/24/20 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 120*	*04/21/20 16:04*	*04/24/20 18:07*	*1*
2-Fluorophenol	*61*		*10 - 120*	*04/21/20 16:04*	*04/24/20 18:07*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*04/21/20 16:04*	*04/24/20 18:07*	*1*
Phenol-d5	*66*		*10 - 120*	*04/21/20 16:04*	*04/24/20 18:07*	*1*
Terphenyl-d14	*92*		*53 - 125*	*04/21/20 16:04*	*04/24/20 18:07*	*1*
2,4,6-Tribromophenol	*104*		*15 - 135*	*04/21/20 16:04*	*04/24/20 18:07*	*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	0.0054	ug/L		04/22/20 11:23	04/23/20 05:22	1
1,2-Dibromoethane	ND	*	0.020	0.0049	ug/L		04/22/20 11:23	04/23/20 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*125*		*51 - 149*	*04/22/20 11:23*	*04/23/20 05:22*	*1*

Client Sample ID: P66-ROX-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5

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			04/25/20 22:10	1
Acrolein	ND		20	10	ug/L			04/25/20 22:10	1
Acrylonitrile	ND		10	2.8	ug/L			04/25/20 22:10	1
Benzene	**130**		1.0	0.38	ug/L			04/25/20 22:10	1
Bromobenzene	ND		1.0	0.54	ug/L			04/25/20 22:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/25/20 22:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Bromoform	ND		5.0	0.71	ug/L			04/25/20 22:10	1
Bromomethane	ND		1.0	0.98	ug/L			04/25/20 22:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/25/20 22:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Chloroethane	ND		1.0	0.76	ug/L			04/25/20 22:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/25/20 22:10	1
Chloroform	ND		1.0	0.60	ug/L			04/25/20 22:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/25/20 22:10	1
Chloromethane	ND		1.0	0.83	ug/L			04/25/20 22:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 22:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/25/20 22:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/25/20 22:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/25/20 22:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/25/20 22:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/25/20 22:10	1
2-Hexanone	ND		25	3.1	ug/L			04/25/20 22:10	1
Isopropylbenzene	**40**		1.0	0.53	ug/L			04/25/20 22:10	1
Methylene bromide	ND		5.0	0.59	ug/L			04/25/20 22:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/25/20 22:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/25/20 22:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/25/20 22:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/25/20 22:10	1
Naphthalene	**10**		1.0	1.0	ug/L			04/25/20 22:10	1
n-Butylbenzene	**2.4**		1.0	0.76	ug/L			04/25/20 22:10	1
N-Propylbenzene	**47**		1.0	0.69	ug/L			04/25/20 22:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/25/20 22:10	1
o-Xylene	ND		5.0	0.60	ug/L			04/25/20 22:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/25/20 22:10	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/25/20 22:10	1

Client Sample ID: P66-ROX-041420
Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**5.0**		1.0	0.70	ug/L			04/25/20 22:10	1
Styrene	ND		1.0	1.0	ug/L			04/25/20 22:10	1
tert-Butylbenzene	**2.2**		1.0	0.63	ug/L			04/25/20 22:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/25/20 22:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/25/20 22:10	1
Toluene	**0.98**	J	1.0	0.41	ug/L			04/25/20 22:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 22:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/25/20 22:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/25/20 22:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/25/20 22:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/25/20 22:10	1
Trichloroethene	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/25/20 22:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/25/20 22:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/25/20 22:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/25/20 22:10	1
Vinyl acetate	ND		25	2.0	ug/L			04/25/20 22:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/25/20 22:10	1
Xylenes, Total	ND		10	1.6	ug/L			04/25/20 22:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*04/25/20 22:10*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/25/20 22:10*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/25/20 22:10*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		0.20	0.030	ug/L		04/21/20 16:05	04/24/20 15:24	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/21/20 16:05	04/24/20 15:24	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/21/20 16:05	04/24/20 15:24	1
Benzo[b]fluoranthene	ND		0.20	0.066	ug/L		04/21/20 16:05	04/24/20 15:24	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:05	04/24/20 15:24	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/21/20 16:05	04/24/20 15:24	1
Chrysene	ND		0.20	0.072	ug/L		04/21/20 16:05	04/24/20 15:24	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/21/20 16:05	04/24/20 15:24	1
Fluoranthene	ND		0.20	0.066	ug/L		04/21/20 16:05	04/24/20 15:24	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:05	04/24/20 15:24	1
Phenanthrene	ND		0.20	0.035	ug/L		04/21/20 16:05	04/24/20 15:24	1
Pyrene	ND		0.20	0.039	ug/L		04/21/20 16:05	04/24/20 15:24	1
1-Methylnaphthalene	ND		0.20	0.072	ug/L		04/21/20 16:05	04/24/20 15:24	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/21/20 16:05	04/24/20 15:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.45**	J	0.98	0.16	ug/L		04/21/20 16:05	04/30/20 12:16	5
Acenaphthylene	ND		0.98	0.22	ug/L		04/21/20 16:05	04/30/20 12:16	5
Fluorene	ND		0.98	0.54	ug/L		04/21/20 16:05	04/30/20 12:16	5

Client Sample Results

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

Job ID: 400-186690-1

Client Sample ID: P66-ROX-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	*84*		*33 - 138*	*04/21/20 16:05*	*04/30/20 12:16*	*5*
2-Fluorobiphenyl	*64*		*15 - 122*	*04/21/20 16:05*	*04/30/20 12:16*	*5*
Nitrobenzene-d5	*64*		*19 - 130*	*04/21/20 16:05*	*04/30/20 12:16*	*5*

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		04/21/20 16:05	04/24/20 18:28	1
Benzenethiol	ND	**1 UJ	9.8	1.7	ug/L		04/21/20 16:05	04/24/20 18:28	1
Benzoic acid	ND		29	7.1	ug/L		04/21/20 16:05	04/24/20 18:28	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/21/20 16:05	04/24/20 18:28	1
Bis(2-chloroethoxy)methane	ND		9.8	0.67	ug/L		04/21/20 16:05	04/24/20 18:28	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		04/21/20 16:05	04/24/20 18:28	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		04/21/20 16:05	04/24/20 18:28	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/21/20 16:05	04/24/20 18:28	1
Butyl benzyl phthalate	ND		9.8	0.67	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/21/20 16:05	04/24/20 18:28	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/21/20 16:05	04/24/20 18:28	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/21/20 16:05	04/24/20 18:28	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/21/20 16:05	04/24/20 18:28	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
Diethyl phthalate	ND		9.8	0.68	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/21/20 16:05	04/24/20 18:28	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/21/20 16:05	04/24/20 18:28	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		04/21/20 16:05	04/24/20 18:28	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/21/20 16:05	04/24/20 18:28	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/21/20 16:05	04/24/20 18:28	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/21/20 16:05	04/24/20 18:28	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		04/21/20 16:05	04/24/20 18:28	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		04/21/20 16:05	04/24/20 18:28	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/21/20 16:05	04/24/20 18:28	1
Indene	**20**		9.8	0.98	ug/L		04/21/20 16:05	04/24/20 18:28	1
Isophorone	ND		9.8	0.56	ug/L		04/21/20 16:05	04/24/20 18:28	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/21/20 16:05	04/24/20 18:28	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:05	04/24/20 18:28	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/21/20 16:05	04/24/20 18:28	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/21/20 16:05	04/24/20 18:28	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/21/20 16:05	04/24/20 18:28	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/21/20 16:05	04/24/20 18:28	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/21/20 16:05	04/24/20 18:28	1

Client Sample ID: P66-ROX-041420
Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/21/20 16:05	04/24/20 18:28	1
N-Nitrosodi-n-propylamine	ND		9.8	3.2	ug/L		04/21/20 16:05	04/24/20 18:28	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/21/20 16:05	04/24/20 18:28	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:05	04/24/20 18:28	1
Phenol	**14**		9.8	2.5	ug/L		04/21/20 16:05	04/24/20 18:28	1
Pyridine	ND		9.8	3.1	ug/L		04/21/20 16:05	04/24/20 18:28	1
Quinoline	ND		9.8	5.9	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/21/20 16:05	04/24/20 18:28	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/21/20 16:05	04/24/20 18:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*34 - 120*	*04/21/20 16:05*	*04/24/20 18:28*	*1*
2-Fluorophenol	*55*		*10 - 120*	*04/21/20 16:05*	*04/24/20 18:28*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*04/21/20 16:05*	*04/24/20 18:28*	*1*
Phenol-d5	*62*		*10 - 120*	*04/21/20 16:05*	*04/24/20 18:28*	*1*
Terphenyl-d14	*96*		*53 - 125*	*04/21/20 16:05*	*04/24/20 18:28*	*1*
2,4,6-Tribromophenol	*123*		*15 - 135*	*04/21/20 16:05*	*04/24/20 18:28*	*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	0.0054	ug/L		04/27/20 09:51	04/27/20 15:58	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/27/20 09:51	04/27/20 15:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*85*		*51 - 149*	*04/27/20 09:51*	*04/27/20 15:58*	*1*

Definitions/Glossary

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

Job ID: 400-186690-1

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 or LCSD is outside acceptance limits.
*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.
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186690-1

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	(78-118)	(81-121)	(80-120)
400-186690-1	TB-ROX-041420-8260	101	93	98
400-186690-3	MW14-ROX-041420-EB	99	93	100
400-186690-4	MW14-ROX-041420	99	94	99
400-186690-5	P66-ROX-041420	98	93	100
LCS 400-487008/1002	Lab Control Sample	100	93	101
MB 400-487008/27	Method Blank	101	94	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186690-3	MW14-ROX-041420-EB	68	49	59	56	87	80
400-186690-4	MW14-ROX-041420	82	61	69	66	92	104
400-186690-5	P66-ROX-041420	76	55	66	62	96	123
LCS 400-486588/2-A	Lab Control Sample	67	29	60	46	80	86
LCS 400-486588/4-A	Lab Control Sample	66		18 X		81	
LCSD 400-486588/5-A	Lab Control Sample Dup	61		50		72	
MB 400-486588/1-A	Method Blank	70	23	59	42	85	64

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186690-3	MW14-ROX-041420-EB	90	71	71
400-186690-4	MW14-ROX-041420	83	66	71
400-186690-5 - DL	P66-ROX-041420	84	64	64
LCS 400-486588/2-A	Lab Control Sample	103	79	91
MB 400-486588/1-A	Method Blank	62	57	63

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-186690-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB1
Lab Sample ID	**Client Sample ID**	**(51-149)**
400-186690-2	TB-ROX-041420-8011	124
400-186690-3	MW14-ROX-041420-EB	113
400-186690-4	MW14-ROX-041420	125
LCS 400-486672/2-A	Lab Control Sample	122
LCSD 400-486672/3-A	Lab Control Sample Dup	120
MB 400-486672/1-A	Method Blank	133

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	**Client Sample ID**	**(51-149)**
400-186690-5	P66-ROX-041420	85
LCS 400-487102/2-A	Lab Control Sample	105
LCSD 400-487102/3-A	Lab Control Sample Dup	104
MB 400-487102/1-A	Method Blank	92

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186690-1

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 TestAmerica, 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: 400-186690-1

Client Sample ID: TB-ROX-041420-8260

Date Collected: 04/14/20 00:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-1

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	487008	04/25/20 15:59	RS	TAL PEN

Client Sample ID: TB-ROX-041420-8011

Date Collected: 04/14/20 00:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-2

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			36.4 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 04:42	DS	TAL PEN

Client Sample ID: MW14-ROX-041420-EB

Date Collected: 04/14/20 08:00
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-3

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	487008	04/25/20 21:20	RS	TAL PEN
Total/NA	Prep	3520C			1005.8 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 17:46	VC1	TAL PEN
Total/NA	Prep	3520C			1005.8 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 14:49	DS	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 05:02	DS	TAL PEN

Client Sample ID: MW14-ROX-041420

Date Collected: 04/14/20 10:05
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-4

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	487008	04/25/20 21:45	RS	TAL PEN
Total/NA	Prep	3520C			1017.2 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 18:07	VC1	TAL PEN
Total/NA	Prep	3520C			1017.2 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 15:07	DS	TAL PEN
Total/NA	Prep	8011			35.5 mL	35 mL	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/23/20 05:22	DS	TAL PEN

Client Sample ID: P66-ROX-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5

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	487008	04/25/20 22:10	RS	TAL PEN
Total/NA	Prep	3520C			1022.6 mL	1 mL	486588	04/21/20 16:05	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 18:28	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186690-1

Client Sample ID: P66-ROX-041420

Date Collected: 04/14/20 10:35
Date Received: 04/15/20 09:07

Lab Sample ID: 400-186690-5

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			1022.6 mL	1 mL	486588	04/21/20 16:05	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 15:24	DS	TAL PEN
Total/NA	Prep	3520C	DL		1022.6 mL	1 mL	486588	04/21/20 16:05	JRW	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			487532	04/30/20 12:16	KJA	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:58	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:34	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 12:28	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486672/1-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	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:04	DS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487008/27

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	487008	04/25/20 12:17	RS	TAL PEN

Client Sample ID: Method Blank

Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487102/1-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:00	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/2-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:56	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 12:46	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/4-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486672/2-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	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:24	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-487008/1002
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	487008	04/25/20 10:54	RS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-487102/2-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:19	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Lab Sample ID: LCSD 400-486588/5-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:38	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186690-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486672/3-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	486672	04/22/20 11:23	DHJ	TAL PEN
Total/NA	Analysis	8011		1			486697	04/22/20 20:44	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487102/3-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:39	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186690-1

GC/MS VOA

Analysis Batch: 487008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-1	TB-ROX-041420-8260	Total/NA	Water	8260B	
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	8260B	
400-186690-4	MW14-ROX-041420	Total/NA	Water	8260B	
400-186690-5	P66-ROX-041420	Total/NA	Water	8260B	
MB 400-487008/27	Method Blank	Total/NA	Water	8260B	
LCS 400-487008/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	3520C	
400-186690-4	MW14-ROX-041420	Total/NA	Water	3520C	
400-186690-5	P66-ROX-041420	Total/NA	Water	3520C	
400-186690-5 - DL	P66-ROX-041420	Total/NA	Water	3520C	
MB 400-486588/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	8270D LL	486588
400-186690-4	MW14-ROX-041420	Total/NA	Water	8270D LL	486588
400-186690-5	P66-ROX-041420	Total/NA	Water	8270D LL	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D LL	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486588

Analysis Batch: 486937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	8270D	486588
400-186690-4	MW14-ROX-041420	Total/NA	Water	8270D	486588
400-186690-5	P66-ROX-041420	Total/NA	Water	8270D	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486588

Analysis Batch: 487532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-5 - DL	P66-ROX-041420	Total/NA	Water	8270D LL	486588

GC Semi VOA

Prep Batch: 486672

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-2	TB-ROX-041420-8011	Total/NA	Water	8011	
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	8011	
400-186690-4	MW14-ROX-041420	Total/NA	Water	8011	
MB 400-486672/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-486672/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-486672/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

QC Association Summary

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

Job ID: 400-186690-1

GC Semi VOA

Analysis Batch: 486697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-2	TB-ROX-041420-8011	Total/NA	Water	8011	486672
400-186690-3	MW14-ROX-041420-EB	Total/NA	Water	8011	486672
400-186690-4	MW14-ROX-041420	Total/NA	Water	8011	486672
MB 400-486672/1-A	Method Blank	Total/NA	Water	8011	486672
LCS 400-486672/2-A	Lab Control Sample	Total/NA	Water	8011	486672
LCSD 400-486672/3-A	Lab Control Sample Dup	Total/NA	Water	8011	486672

Prep Batch: 487102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-5	P66-ROX-041420	Total/NA	Water	8011	
MB 400-487102/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487102/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487102/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186690-5	P66-ROX-041420	Total/NA	Water	8011	487102
MB 400-487102/1-A	Method Blank	Total/NA	Water	8011	487102
LCS 400-487102/2-A	Lab Control Sample	Total/NA	Water	8011	487102
LCSD 400-487102/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487102

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

Lab Sample ID: MB 400-487008/27
Matrix: Water
Analysis Batch: 487008

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			04/25/20 12:17	1
Acrolein	ND		20	10	ug/L			04/25/20 12:17	1
Acrylonitrile	ND		10	2.8	ug/L			04/25/20 12:17	1
Benzene	ND		1.0	0.38	ug/L			04/25/20 12:17	1
Bromobenzene	ND		1.0	0.54	ug/L			04/25/20 12:17	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/25/20 12:17	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Bromoform	ND		5.0	0.71	ug/L			04/25/20 12:17	1
Bromomethane	ND		1.0	0.98	ug/L			04/25/20 12:17	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/25/20 12:17	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Chloroethane	ND		1.0	0.76	ug/L			04/25/20 12:17	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/25/20 12:17	1
Chloroform	ND		1.0	0.60	ug/L			04/25/20 12:17	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/25/20 12:17	1
Chloromethane	ND		1.0	0.83	ug/L			04/25/20 12:17	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 12:17	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/25/20 12:17	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/25/20 12:17	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/25/20 12:17	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/25/20 12:17	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/25/20 12:17	1
2-Hexanone	ND		25	3.1	ug/L			04/25/20 12:17	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/25/20 12:17	1
Methylene bromide	ND		5.0	0.59	ug/L			04/25/20 12:17	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/25/20 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/25/20 12:17	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/25/20 12:17	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/25/20 12:17	1
Naphthalene	ND		1.0	1.0	ug/L			04/25/20 12:17	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/25/20 12:17	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/25/20 12:17	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/25/20 12:17	1
o-Xylene	ND		5.0	0.60	ug/L			04/25/20 12:17	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/25/20 12:17	1

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

Lab Sample ID: MB 400-487008/27
Matrix: Water
Analysis Batch: 487008

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			04/25/20 12:17	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/25/20 12:17	1
Styrene	ND		1.0	1.0	ug/L			04/25/20 12:17	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/25/20 12:17	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/25/20 12:17	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/25/20 12:17	1
Toluene	ND		1.0	0.41	ug/L			04/25/20 12:17	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/25/20 12:17	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/25/20 12:17	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/25/20 12:17	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/25/20 12:17	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/25/20 12:17	1
Trichloroethene	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/25/20 12:17	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/25/20 12:17	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/25/20 12:17	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/25/20 12:17	1
Vinyl acetate	ND		25	2.0	ug/L			04/25/20 12:17	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/25/20 12:17	1
Xylenes, Total	ND		10	1.6	ug/L			04/25/20 12:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*78 - 118*		*04/25/20 12:17*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/25/20 12:17*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/25/20 12:17*	*1*

Lab Sample ID: LCS 400-487008/1002
Matrix: Water
Analysis Batch: 487008

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	193		ug/L		96	43 - 160
Acrolein	500	508		ug/L		102	38 - 160
Acrylonitrile	500	496		ug/L		99	64 - 142
Benzene	50.0	49.8		ug/L		100	70 - 130
Bromobenzene	50.0	52.1		ug/L		104	70 - 132
Bromochloromethane	50.0	58.2		ug/L		116	70 - 130
Bromodichloromethane	50.0	49.0		ug/L		98	67 - 133
Bromoform	50.0	49.5		ug/L		99	57 - 140
Bromomethane	50.0	56.8		ug/L		114	10 - 160
2-Butanone (MEK)	200	199		ug/L		100	61 - 145
Carbon disulfide	50.0	49.4		ug/L		99	61 - 137
Carbon tetrachloride	50.0	47.9		ug/L		96	61 - 137
Chlorobenzene	50.0	51.7		ug/L		103	70 - 130
Dibromochloromethane	50.0	50.4		ug/L		101	67 - 135
Chloroethane	50.0	51.6		ug/L		103	55 - 141

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

Lab Sample ID: LCS 400-487008/1002
Matrix: Water
Analysis Batch: 487008

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	38.7		ug/L		77	10 - 160
Chloroform	50.0	51.3		ug/L		103	69 - 130
1-Chlorohexane	50.0	48.7		ug/L		97	69 - 130
Chloromethane	50.0	48.5		ug/L		97	58 - 137
cis-1,2-Dichloroethene	50.0	48.0		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	49.7		ug/L		99	69 - 132
1,2-Dichlorobenzene	50.0	54.4		ug/L		109	67 - 130
1,3-Dichlorobenzene	50.0	53.9		ug/L		108	70 - 130
1,4-Dichlorobenzene	50.0	54.1		ug/L		108	70 - 130
Dichlorodifluoromethane	50.0	58.9		ug/L		118	41 - 146
1,1-Dichloroethane	50.0	48.4		ug/L		97	70 - 130
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 130
1,1-Dichloroethene	50.0	47.8		ug/L		96	63 - 134
1,2-Dichloropropane	50.0	49.4		ug/L		99	70 - 130
1,3-Dichloropropane	50.0	49.6		ug/L		99	70 - 130
2,2-Dichloropropane	50.0	47.9		ug/L		96	52 - 135
1,1-Dichloropropene	50.0	49.4		ug/L		99	70 - 130
Ethylbenzene	50.0	48.8		ug/L		98	70 - 130
Ethyl methacrylate	50.0	49.3		ug/L		99	68 - 130
Hexachlorobutadiene	50.0	47.3		ug/L		95	53 - 140
2-Hexanone	200	200		ug/L		100	65 - 137
Isopropylbenzene	50.0	50.2		ug/L		100	70 - 130
Methylene bromide	50.0	49.2		ug/L		98	70 - 130
Methylene Chloride	50.0	54.6		ug/L		109	66 - 135
4-Methyl-2-pentanone (MIBK)	200	204		ug/L		102	69 - 138
Methyl tert-butyl ether	50.0	49.3		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	47.7		ug/L		95	70 - 130
Naphthalene	50.0	48.3		ug/L		97	47 - 149
n-Butylbenzene	50.0	52.9		ug/L		106	67 - 130
N-Propylbenzene	50.0	55.2		ug/L		110	70 - 130
o-Chlorotoluene	50.0	53.4		ug/L		107	70 - 130
o-Xylene	50.0	47.6		ug/L		95	70 - 130
p-Chlorotoluene	50.0	53.2		ug/L		106	70 - 130
p-Isopropyltoluene	50.0	53.1		ug/L		106	65 - 130
sec-Butylbenzene	50.0	53.9		ug/L		108	66 - 130
Styrene	50.0	50.0		ug/L		100	70 - 130
tert-Butylbenzene	50.0	48.8		ug/L		98	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.0		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.1		ug/L		100	70 - 131
Tetrachloroethene	50.0	49.1		ug/L		98	65 - 130
Toluene	50.0	46.7		ug/L		93	70 - 130
trans-1,2-Dichloroethene	50.0	53.9		ug/L		108	70 - 130
trans-1,3-Dichloropropene	50.0	47.8		ug/L		96	63 - 130
1,2,3-Trichlorobenzene	50.0	49.6		ug/L		99	60 - 138
1,2,4-Trichlorobenzene	50.0	50.2		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	51.2		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	49.6		ug/L		99	70 - 130
Trichloroethene	50.0	52.6		ug/L		105	70 - 130
Trichlorofluoromethane	50.0	48.6		ug/L		97	65 - 138

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

Lab Sample ID: LCS 400-487008/1002
Matrix: Water
Analysis Batch: 487008

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	51.6		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	53.0		ug/L		106	69 - 130
Vinyl acetate	100	120		ug/L		120	26 - 160
Vinyl chloride	50.0	55.3		ug/L		111	59 - 136
Xylenes, Total	100	95.3		ug/L		95	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*78 - 118*
Dibromofluoromethane	*93*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzenethiol	ND		10	1.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzoic acid	ND		30	7.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzyl alcohol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/21/20 16:04	04/24/20 14:34	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/21/20 16:04	04/24/20 14:34	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloroaniline	ND		10	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chlorophenol	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenzofuran	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Diethyl phthalate	ND		10	0.70	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/21/20 16:04	04/24/20 14:34	1
1,4-Dioxane	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachloroethane	ND		10	4.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Indene	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Isophorone	ND		10	0.57	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Methylphenol	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitroaniline	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
3-Nitroaniline	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitroaniline	ND		10	2.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Nitrobenzene	ND		10	0.55	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitrophenol	ND		10	0.65	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitrophenol	ND		10	2.1	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Phenol	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pyridine	ND		10	3.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Quinoline	ND		10	6.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Phenol-d5	*42*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Terphenyl-d14	*85*		*53 - 125*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*04/21/20 16:04*	*04/24/20 14:34*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	14.0		ug/L		47	29 - 120
Benzoic acid	116	74.2		ug/L		64	10 - 150
Benzyl alcohol	30.0	17.1		ug/L		57	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.4		ug/L		55	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	11.7		ug/L		39	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.6		ug/L		62	48 - 150
4-Bromophenyl phenyl ether	30.0	23.6		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	18.2		ug/L		61	46 - 145
4-Chloroaniline	30.0	15.2		ug/L		51	30 - 120
4-Chloro-3-methylphenol	30.0	20.7		ug/L		69	39 - 140

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	19.3		ug/L		64	52 - 120
2-Chlorophenol	30.0	15.9		ug/L		53	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.4		ug/L		71	58 - 124
Dibenz[a,h]acridine	29.6	13.9		ug/L		47	46 - 149
Dibenzofuran	30.0	19.9		ug/L		66	58 - 123
3,3'-Dichlorobenzidine	40.0	37.3		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.9		ug/L		73	39 - 128
Diethyl phthalate	30.0	20.9		ug/L		70	44 - 146
2,4-Dimethylphenol	30.0	20.3		ug/L		68	44 - 120
Dimethyl phthalate	30.0	21.4		ug/L		71	50 - 131
Di-n-butyl phthalate	30.0	17.6		ug/L		59	55 - 131
4,6-Dinitro-ortho-cresol	60.0	36.5		ug/L		61	10 - 150
2,4-Dinitrophenol	60.0	45.3		ug/L		76	10 - 150
2,4-Dinitrotoluene	30.0	21.1		ug/L		70	58 - 140
2,6-Dinitrotoluene	30.0	23.0		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	11.5		ug/L		38	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.7		ug/L		52	47 - 123
Hexachlorobenzene	30.0	23.8		ug/L		79	52 - 131
Hexachlorocyclopentadiene	30.0	7.15	J	ug/L		24	10 - 129
Hexachloroethane	30.0	11.4		ug/L		38	20 - 120
Indene	30.0	16.2		ug/L		54	47 - 120
Isophorone	30.0	17.3		ug/L		58	49 - 120
2-Methylphenol	30.0	17.0		ug/L		57	39 - 123
3 & 4 Methylphenol	30.0	16.8	J	ug/L		56	38 - 121
2-Nitroaniline	30.0	17.5		ug/L		58	47 - 150
3-Nitroaniline	30.0	15.6		ug/L		52	34 - 132
4-Nitroaniline	30.0	15.2		ug/L		51	41 - 135
Nitrobenzene	30.0	16.9		ug/L		56	47 - 120
2-Nitrophenol	30.0	17.0		ug/L		57	28 - 136
4-Nitrophenol	60.0	35.2		ug/L		59	10 - 150
N-Nitrosodimethylamine	30.0	15.4		ug/L		51	22 - 148
N-Nitrosodi-n-propylamine	30.0	15.6		ug/L		52	44 - 120
N-Nitrosodiphenylamine	29.8	20.9		ug/L		70	56 - 120
Pentachlorophenol	60.0	43.5		ug/L		73	15 - 141
Phenol	30.0	13.7		ug/L		46	33 - 120
Pyridine	60.0	23.5		ug/L		39	26 - 120
Quinoline	29.6	16.3		ug/L		55	51 - 129
2,4,5-Trichlorophenol	30.0	22.6		ug/L		75	38 - 147
2,4,6-Trichlorophenol	30.0	23.0		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*29*		*10 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	86		15 - 135

Lab Sample ID: LCS 400-486588/4-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	66		34 - 120
Nitrobenzene-d5	18	X	27 - 120
Terphenyl-d14	81		53 - 125

Lab Sample ID: LCSD 400-486588/5-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	3.05	J *1	ug/L		10	10 - 120	129	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	61		34 - 120
Nitrobenzene-d5	50		27 - 120
Terphenyl-d14	72		53 - 125

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/21/20 16:04	04/24/20 12:28	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 12:28	1
Anthracene	ND		0.20	0.031	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/21/20 16:04	04/24/20 12:28	1
Chrysene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 12:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 12:28	1
Phenanthrene	ND		0.20	0.036	ug/L		04/21/20 16:04	04/24/20 12:28	1
Pyrene	ND		0.20	0.040	ug/L		04/21/20 16:04	04/24/20 12:28	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/21/20 16:04	04/24/20 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*04/21/20 16:04*	*04/24/20 12:28*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	29.4		ug/L		98	41 - 120
Acenaphthylene	30.0	28.5		ug/L		95	44 - 120
Anthracene	30.0	29.1		ug/L		97	49 - 120
Benzo[a]anthracene	30.0	31.1		ug/L		104	61 - 135
Benzo[a]pyrene	30.0	30.1		ug/L		100	52 - 120
Benzo[b]fluoranthene	30.0	32.0		ug/L		107	53 - 134
Benzo[g,h,i]perylene	30.0	21.9		ug/L		73	47 - 133
Benzo[k]fluoranthene	30.0	32.5		ug/L		108	57 - 134
Chrysene	30.0	32.4		ug/L		108	55 - 122
Dibenz(a,h)anthracene	30.0	22.9		ug/L		76	48 - 146
Fluoranthene	30.0	31.4		ug/L		105	54 - 128
Fluorene	30.0	30.0		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.5		ug/L		75	43 - 142
Phenanthrene	30.0	27.7		ug/L		92	48 - 120
Pyrene	30.0	30.9		ug/L		103	48 - 132
1-Methylnaphthalene	30.0	25.0		ug/L		83	41 - 120
2-Methylnaphthalene	30.0	26.8		ug/L		89	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*103*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*91*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-486672/1-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486672

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/22/20 11:23	04/22/20 20:04	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/22/20 11:23	04/22/20 20:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*133*		*51 - 149*	*04/22/20 11:23*	*04/22/20 20:04*	*1*

QC Sample Results

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

Job ID: 400-186690-1

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: LCS 400-486672/2-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486672

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.259	*	ug/L		258	60 - 140
1,2-Dibromoethane	0.101	0.148	*	ug/L		147	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*122*		*51 - 149*

Lab Sample ID: LCSD 400-486672/3-A
Matrix: Water
Analysis Batch: 486697

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486672

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.248	*	ug/L		247	60 - 140	1	30
1,2-Dibromoethane	0.101	0.145	*	ug/L		144	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*120*		*51 - 149*

Lab Sample ID: MB 400-487102/1-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/27/20 09:51	04/27/20 15:00	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/27/20 09:51	04/27/20 15:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*04/27/20 09:51*	*04/27/20 15:00*	*1*

Lab Sample ID: LCS 400-487102/2-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.167	*	ug/L		166	60 - 140
1,2-Dibromoethane	0.101	0.133		ug/L		132	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487102/3-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487102

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.162	*	ug/L		161	60 - 140	3	30
1,2-Dibromoethane	0.101	0.130		ug/L		129	60 - 140	2	30

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-487102/3-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487102

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	104		51 - 149

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1564589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES	

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	**GSAP Project ID**
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/14/20

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 — 60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): J. Burleson, J. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS)

☒ STANDARD (14 DAY) 5 DAYS ☐ 3 DAYS 2 DAYS 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 | UNIT COST 60619901 - 1.03.0022

400-186690 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 7°C IR8

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-Rox-041420-8260	4/14/20	0000	Water	2					2	X			
	TB-Rox-041420-8011		0000		2					2			X	
	MW14-Rox-041420-ETS		0800		6			2		8	X	X	X	X
	MW14-Rox-041420		1005		6			2		8	X	X	X	X
	P66-Rox-041420		1035		6			2		8	X	X	X	X

	Relinquished by (Signature)	Received by (Signature)	Date	Time
		Fedex: 1680 3500 9137	4/14/20	~~1600~~ 1300
			4/15/20	9:07

custody seal #: 1142213, 1142212

14Dec15

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4/30/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186690-1

Login Number: 186690
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1142213,1142212
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7 °C IR 8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-186690-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186792-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/18/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041520-8260	TB-ROX-041520-8011
MW22-ROX-041520	ROST4PZG-ROX-041520-EB
ROST4PZG-ROX-041520	ROST4PZG-ROX-041520-Dup
ROST4PZC-ROX-041520	

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 SVOCs were re-extracted outside of the extraction time criteria in sample ROST4PZG-ROX-041520-Dup. Although not indicated in the laboratory case narrative, benzoic acid was detected in equipment blank ROST4PZG-ROX-041520-EB. The laboratory case narrative indicated benzenethiol and VOC by 8011 LCS/LCD recoveries and/or LCS/LCSD RPDs were outside evaluation criteria. Several SVOC/PAH surrogate recoveries were outside criteria in sample ROST4PZG-ROX-041520-Dup and the laboratory control sample. Several PAHs in sample ROST4PZC-ROX-041520 were diluted due to the nature of the sample matrix. The continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low; and 1-methylnaphthalene was outside acceptance criteria, biased high. 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, several SVOCs were re-extracted 6 days outside of the extraction time criteria (7 days) in investigative samples due to initial failing surrogate recoveries. Professional judgement was used to qualify as estimated (**UJ**), however, not reject the out of holding time data. Holding time exceedances were not greater than two times (2X) criteria; data requiring qualification is summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
ROST4PZG-ROX-041520-Dup – RERA	SVOCs	All non-detects	**UJ**
ROST4PZG-ROX-041520-Dup – RERA	SVOCs	Dibenzofuran	**J**

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
ROST4PZG-ROX-041520-EB	SVOCs	Benzoic acid	7.1 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 400-486588/4-A/5-A	SVOCs	Benzenethiol	**2**/10	**129**	10-120/30
LCS/LCSD 400-487115/25-A/26-A	SVOCs	Benzenethiol	**3/4**	8	10-120/30
LCS 400-487115/2-A	SVOCs	Dibenz[a,h]acridine	**40**	NA	46-149
LCS/LCSD 400-487102/2-A/3-A	VOC by 8011	1,2-Dibromo-3-Chloropropane	**166/161**	3	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS 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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-041520	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-041520	SVOCs	Benzenethiol	**UJ**
ROST4PZG-ROX-041520-Dup	SVOCs	Benzenethiol	**UJ**
ROST4PZC-ROX-041520	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
ROST4PZG-ROX-041520-Dup	PAHs	Nitrobenzene-d_5	**17**	19-130
ROST4PZG-ROX-041520-Dup	SVOCs	2-Fluorophenol	**5**	10-120
ROST4PZG-ROX-041520-Dup	SVOCs	Nitrobenzene-d_5	**18**	27-120
ROST4PZG-ROX-041520-Dup	SVOCs	Phenol-d_5	**1**	10-120
LCS 400-486588/4-A	SVOCs	Nitrobenzene-d_5	**18**	27-120

Qualifications due to surrogate recoveries were not required if only one of three base/neutral PAH surrogate recoveries were outside evaluation criteria in sample ROST4PZG-ROX-041520-Dup. SVOCs in sample ROST4PZG-ROX-041520-Dup were qualified in Section 3.0 of this data review due to holding time criteria; no further qualification of SVOCs were required. Laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

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
ROST4PZG-ROX-041520	ROST4PZG-ROX-041520-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low; and 1-methylnaphthalene was outside acceptance criteria, biased high. These are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW22-ROX-041520	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZG-ROX-041520	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZC-ROX-041520	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZG-ROX-041520-Dup	PAHs	1-Methylnaphthalene	**J**

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ANALYTICAL REPORT

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

Laboratory Job ID: 400-186792-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/6/2020 4:31:54 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/18/20 MR

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186792-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186792-1

Comments
No additional comments.

Receipt
The samples were received on 4/16/2020 8:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 0.9° C.

GC/MS VOA
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-041520-8260 (400-186792-1), MW22-ROX-041520 (400-186792-3), ROST4PZG-ROX-041520-EB (400-186792-4, ROST4PZG-ROX-041520 (400-186792-5), ROST4PZG-ROX-041520-DUP (400-186792-6) and ROST4PZC-ROX-041520 (400-186792-7). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-480262 was outside method criteria for the following analyte(s): Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 400-486588 and analytical batch 400-486937 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 400-486588 and analytical batch 400-486937 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered above the upper control limit for Hexachlorobenzene, 2,4-Dichlorophenol and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: 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: (LCS 400-486588/4-A). These results have been reported and qualified.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (CCVIS 400-486937/3). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487699 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-487115 and analytical batch 400-487699: 4-Nitrophenol. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Job ID: 400-186792-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487529 recovered above the upper control limit for N-Nitrosodi-n-propylamine and Di-n-octyl phthalate. 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 400-487529 recovered outside acceptance criteria, low biased, for Hexachloroethane, N-Nitrosodi-n-propylamine, 1,4-Dioxane and 3 & 4 Methylphenol. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: Surrogate recovery for the following sample was outside control limits: ROST4PZG-ROX-041520-DUP (400-186792-6). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486926 recovered above the upper control limit for Benzo[k]fluoranthene, Fluoranthene, Fluorene and 1-Methylnaphthalene. The samples associated with this CCV were non-detects and/or recovered below the reporting limit (RL) for the affected analytes; therefore, the 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 acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: ROST4PZG-ROX-041520-DUP (400-186792-6). 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 400-487173 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8011: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-487102 and analytical batch 400-487173 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

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: 400-186792-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186792-1	TB-ROX-041520-8260	Water	04/15/20 00:00	04/16/20 08:55	
400-186792-2	TB-ROX-041520-8011	Water	04/15/20 00:00	04/16/20 08:55	
400-186792-3	MW22-ROX-041520	Water	04/15/20 08:35	04/16/20 08:55	
400-186792-4	ROST4PZG-ROX-041520-EB	Water	04/15/20 09:00	04/16/20 08:55	
400-186792-5	ROST4PZG-ROX-041520	Water	04/15/20 09:45	04/16/20 08:55	
400-186792-6	ROST4PZG-ROX-041520-DUP	Water	04/15/20 09:45	04/16/20 08:55	
400-186792-7	ROST4PZC-ROX-041520	Water	04/15/20 11:30	04/16/20 08:55	

Detection Summary

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

Job ID: 400-186792-1

Client Sample ID: TB-ROX-041520-8260 — Lab Sample ID: 400-186792-1

No Detections.

Client Sample ID: TB-ROX-041520-8011 — Lab Sample ID: 400-186792-2

No Detections.

Client Sample ID: MW22-ROX-041520 — Lab Sample ID: 400-186792-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.92	J	1.0	0.38	ug/L	1		8260B	Total/NA
Ethylbenzene	53		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	4.4		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	62		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	12		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	7.3		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	3.7	J	5.0	0.60	ug/L	1		8260B	Total/NA
tert-Butylbenzene	0.76	J	1.0	0.63	ug/L	1		8260B	Total/NA
Toluene	1.9		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	40		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	8.5		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	66		10	1.6	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	1.4		0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	1.9		0.20	0.059	ug/L	1		8270D LL	Total/NA

Client Sample ID: ROST4PZG-ROX-041520-EB — Lab Sample ID: 400-186792-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzoic acid	7.1	J	29	7.0	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZG-ROX-041520 — Lab Sample ID: 400-186792-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	2.5		1.0	0.41	ug/L	1		8260B	Total/NA

Client Sample ID: ROST4PZG-ROX-041520-DUP — Lab Sample ID: 400-186792-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	1.8		1.0	0.41	ug/L	1		8260B	Total/NA
1-Methylnaphthalene	0.099	J	0.20	0.073	ug/L	1		8270D LL	Total/NA
Dibenzofuran - RERA	1.3	J H	9.5	0.49	ug/L	1		8270D	Total/NA

Client Sample ID: ROST4PZC-ROX-041520 — Lab Sample ID: 400-186792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4.7		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	3.0	J	25	2.6	ug/L	1		8260B	Total/NA
Ethylbenzene	47		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	6.0		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	86		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	55		1.0	1.0	ug/L	1		8260B	Total/NA
N-Propylbenzene	10		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	1.6	J	5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	0.71	J	1.0	0.71	ug/L	1		8260B	Total/NA
Toluene	8.8		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	23		1.0	0.82	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: ROST4PZC-ROX-041520 (Continued)

Lab Sample ID: 400-186792-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	4.9		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	88		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	2.0		0.20	0.031	ug/L	1		8270D LL	Total/NA
Anthracene	0.42		0.20	0.030	ug/L	1		8270D LL	Total/NA
Phenanthrene	3.7		0.20	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.059	J	0.20	0.039	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	25		0.20	0.059	ug/L	1		8270D LL	Total/NA
Fluorene - DL	1.5		0.98	0.54	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene - DL	54		0.98	0.36	ug/L	5		8270D LL	Total/NA
Dibenzofuran	1.6	J	9.8	0.51	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: 400-186792-1

Client Sample ID: TB-ROX-041520-8260
Date Collected: 04/15/20 00:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-1
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			04/26/20 15:39	1
Acrolein	ND		20	10	ug/L			04/26/20 15:39	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 15:39	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 15:39	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 15:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 15:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 15:39	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 15:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 15:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 15:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 15:39	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 15:39	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 15:39	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 15:39	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 15:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 15:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 15:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 15:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 15:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 15:39	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 15:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 15:39	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 15:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 15:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 15:39	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 15:39	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 15:39	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 15:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 15:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 15:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 15:39	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 15:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 15:39	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 15:39	1

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

Job ID: 400-186792-1

Client Sample ID: TB-ROX-041520-8260
Date Collected: 04/15/20 00:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-1
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			04/26/20 15:39	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 15:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 15:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 15:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 15:39	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 15:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 15:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 15:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 15:39	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 15:39	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 15:39	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 15:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 15:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 15:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 15:39	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 15:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 15:39	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*78 - 118*		*04/26/20 15:39*	*1*
Dibromofluoromethane	*90*		*81 - 121*		*04/26/20 15:39*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/26/20 15:39*	*1*

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

Job ID: 400-186792-1

Client Sample ID: TB-ROX-041520-8011
Date Collected: 04/15/20 00:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-2
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	*	0.029	0.0052	ug/L		04/27/20 09:51	04/27/20 17:17	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/27/20 09:51	04/27/20 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*04/27/20 09:51*	*04/27/20 17:17*	*1*

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

Job ID: 400-186792-1

Client Sample ID: MW22-ROX-041520
Date Collected: 04/15/20 08:35
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-3
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			04/26/20 16:53	1
Acrolein	ND		20	10	ug/L			04/26/20 16:53	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 16:53	1
Benzene	**0.92**	**J**	1.0	0.38	ug/L			04/26/20 16:53	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 16:53	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 16:53	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 16:53	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 16:53	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 16:53	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 16:53	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 16:53	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 16:53	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 16:53	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 16:53	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 16:53	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 16:53	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 16:53	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 16:53	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Ethylbenzene	**53**		1.0	0.50	ug/L			04/26/20 16:53	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 16:53	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 16:53	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 16:53	1
Isopropylbenzene	**4.4**		1.0	0.53	ug/L			04/26/20 16:53	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 16:53	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 16:53	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 16:53	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 16:53	1
m-Xylene & p-Xylene	**62**		5.0	1.6	ug/L			04/26/20 16:53	1
Naphthalene	**12**		1.0	1.0	ug/L			04/26/20 16:53	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 16:53	1
N-Propylbenzene	**7.3**		1.0	0.69	ug/L			04/26/20 16:53	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 16:53	1
o-Xylene	**3.7**	**J**	5.0	0.60	ug/L			04/26/20 16:53	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 16:53	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 16:53	1

Client Sample ID: MW22-ROX-041520

Date Collected: 04/15/20 08:35
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-3

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			04/26/20 16:53	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 16:53	1
tert-Butylbenzene	**0.76**	**J**	1.0	0.63	ug/L			04/26/20 16:53	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 16:53	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 16:53	1
Toluene	**1.9**		1.0	0.41	ug/L			04/26/20 16:53	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 16:53	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 16:53	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 16:53	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 16:53	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 16:53	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 16:53	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 16:53	1
1,2,4-Trimethylbenzene	**40**		1.0	0.82	ug/L			04/26/20 16:53	1
1,3,5-Trimethylbenzene	**8.5**		1.0	0.56	ug/L			04/26/20 16:53	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 16:53	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 16:53	1
Xylenes, Total	**66**		10	1.6	ug/L			04/26/20 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/26/20 16:53*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/26/20 16:53*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/26/20 16:53*	*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		04/22/20 08:21	04/24/20 16:52	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/22/20 08:21	04/24/20 16:52	1
Anthracene	ND		0.20	0.030	ug/L		04/22/20 08:21	04/24/20 16:52	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 16:52	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/22/20 08:21	04/24/20 16:52	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 16:52	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:21	04/24/20 16:52	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/22/20 08:21	04/24/20 16:52	1
Chrysene	ND		0.20	0.073	ug/L		04/22/20 08:21	04/24/20 16:52	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 16:52	1
Fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 16:52	1
Fluorene	ND		0.20	0.11	ug/L		04/22/20 08:21	04/24/20 16:52	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:21	04/24/20 16:52	1
Phenanthrene	ND		0.20	0.035	ug/L		04/22/20 08:21	04/24/20 16:52	1
Pyrene	ND		0.20	0.039	ug/L		04/22/20 08:21	04/24/20 16:52	1
1-Methylnaphthalene	**1.4**		0.20	0.073	ug/L		04/22/20 08:21	04/27/20 15:46	1
2-Methylnaphthalene	**1.9**		0.20	0.059	ug/L		04/22/20 08:21	04/24/20 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*04/22/20 08:21*	*04/24/20 16:52*	*1*
2-Fluorobiphenyl	*66*		*15 - 122*	*04/22/20 08:21*	*04/24/20 16:52*	*1*

Client Sample ID: MW22-ROX-041520
Date Collected: 04/15/20 08:35
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*70*		*19 - 130*	*04/22/20 08:21*	*04/24/20 16:52*	*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		04/22/20 08:21	04/24/20 19:32	1
Benzenethiol	ND	*1 US	9.8	1.7	ug/L		04/22/20 08:21	04/24/20 19:32	1
Benzoic acid	ND		29	7.2	ug/L		04/22/20 08:21	04/24/20 19:32	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 19:32	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/22/20 08:21	04/24/20 19:32	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		04/22/20 08:21	04/24/20 19:32	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		04/22/20 08:21	04/24/20 19:32	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/22/20 08:21	04/24/20 19:32	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/22/20 08:21	04/24/20 19:32	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/22/20 08:21	04/24/20 19:32	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 19:32	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/22/20 08:21	04/24/20 19:32	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 19:32	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/22/20 08:21	04/24/20 19:32	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 19:32	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/22/20 08:21	04/24/20 19:32	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 19:32	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 19:32	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		04/22/20 08:21	04/24/20 19:32	1
Hexachlorocyclopentadiene	ND	US	20	2.6	ug/L		04/22/20 08:21	04/24/20 19:32	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/22/20 08:21	04/24/20 19:32	1
Indene	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 19:32	1
Isophorone	ND		9.8	0.56	ug/L		04/22/20 08:21	04/24/20 19:32	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 19:32	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:21	04/24/20 19:32	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 19:32	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/22/20 08:21	04/24/20 19:32	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/22/20 08:21	04/24/20 19:32	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/22/20 08:21	04/24/20 19:32	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/22/20 08:21	04/24/20 19:32	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 19:32	1

Client Sample ID: MW22-ROX-041520
Date Collected: 04/15/20 08:35
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-3
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		9.8	3.2	ug/L		04/22/20 08:21	04/24/20 19:32	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/22/20 08:21	04/24/20 19:32	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:21	04/24/20 19:32	1
Phenol	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 19:32	1
Pyridine	ND		9.8	3.1	ug/L		04/22/20 08:21	04/24/20 19:32	1
Quinoline	ND		9.8	5.9	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/22/20 08:21	04/24/20 19:32	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*04/22/20 08:21*	*04/24/20 19:32*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/22/20 08:21*	*04/24/20 19:32*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*04/22/20 08:21*	*04/24/20 19:32*	*1*
Phenol-d5	*46*		*10 - 120*	*04/22/20 08:21*	*04/24/20 19:32*	*1*
Terphenyl-d14	*75*		*53 - 125*	*04/22/20 08:21*	*04/24/20 19:32*	*1*
2,4,6-Tribromophenol	*98*		*15 - 135*	*04/22/20 08:21*	*04/24/20 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	*	0.029	0.0053	ug/L		04/27/20 09:51	04/27/20 17:37	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/27/20 09:51	04/27/20 17:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*113*		*51 - 149*	*04/27/20 09:51*	*04/27/20 17:37*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-EB
Date Collected: 04/15/20 09:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-4
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			04/27/20 17:24	1
Acrolein	ND		20	10	ug/L			04/27/20 17:24	1
Acrylonitrile	ND		10	2.8	ug/L			04/27/20 17:24	1
Benzene	ND		1.0	0.38	ug/L			04/27/20 17:24	1
Bromobenzene	ND		1.0	0.54	ug/L			04/27/20 17:24	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/27/20 17:24	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Bromoform	ND		5.0	0.71	ug/L			04/27/20 17:24	1
Bromomethane	ND		1.0	0.98	ug/L			04/27/20 17:24	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/27/20 17:24	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Chloroethane	ND		1.0	0.76	ug/L			04/27/20 17:24	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/27/20 17:24	1
Chloroform	ND		1.0	0.60	ug/L			04/27/20 17:24	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/27/20 17:24	1
Chloromethane	ND		1.0	0.83	ug/L			04/27/20 17:24	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/27/20 17:24	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/27/20 17:24	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/27/20 17:24	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/27/20 17:24	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/27/20 17:24	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/27/20 17:24	1
2-Hexanone	ND		25	3.1	ug/L			04/27/20 17:24	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/27/20 17:24	1
Methylene bromide	ND		5.0	0.59	ug/L			04/27/20 17:24	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/27/20 17:24	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/27/20 17:24	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/27/20 17:24	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/27/20 17:24	1
Naphthalene	ND		1.0	1.0	ug/L			04/27/20 17:24	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/27/20 17:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/27/20 17:24	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/27/20 17:24	1
o-Xylene	ND		5.0	0.60	ug/L			04/27/20 17:24	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/27/20 17:24	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/27/20 17:24	1

Client Sample ID: ROST4PZG-ROX-041520-EB

Date Collected: 04/15/20 09:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-4

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			04/27/20 17:24	1
Styrene	ND		1.0	1.0	ug/L			04/27/20 17:24	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/27/20 17:24	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/27/20 17:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/27/20 17:24	1
Toluene	ND		1.0	0.41	ug/L			04/27/20 17:24	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/27/20 17:24	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/27/20 17:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/27/20 17:24	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/27/20 17:24	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/27/20 17:24	1
Trichloroethene	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/27/20 17:24	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/27/20 17:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/27/20 17:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/27/20 17:24	1
Vinyl acetate	ND		25	2.0	ug/L			04/27/20 17:24	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/27/20 17:24	1
Xylenes, Total	ND		10	1.6	ug/L			04/27/20 17:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/27/20 17:24*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/27/20 17:24*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/27/20 17:24*	*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	0.031	ug/L		04/22/20 08:21	04/24/20 17:10	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/22/20 08:21	04/24/20 17:10	1
Anthracene	ND		0.19	0.030	ug/L		04/22/20 08:21	04/24/20 17:10	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/22/20 08:21	04/24/20 17:10	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		04/22/20 08:21	04/24/20 17:10	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		04/22/20 08:21	04/24/20 17:10	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		04/22/20 08:21	04/24/20 17:10	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/22/20 08:21	04/24/20 17:10	1
Chrysene	ND		0.19	0.071	ug/L		04/22/20 08:21	04/24/20 17:10	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/22/20 08:21	04/24/20 17:10	1
Fluoranthene	ND		0.19	0.065	ug/L		04/22/20 08:21	04/24/20 17:10	1
Fluorene	ND		0.19	0.11	ug/L		04/22/20 08:21	04/24/20 17:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.11	ug/L		04/22/20 08:21	04/24/20 17:10	1
Phenanthrene	ND		0.19	0.034	ug/L		04/22/20 08:21	04/24/20 17:10	1
Pyrene	ND		0.19	0.038	ug/L		04/22/20 08:21	04/24/20 17:10	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		04/22/20 08:21	04/24/20 17:10	1
2-Methylnaphthalene	ND		0.19	0.057	ug/L		04/22/20 08:21	04/24/20 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*04/22/20 08:21*	*04/24/20 17:10*	*1*
2-Fluorobiphenyl	*74*		*15 - 122*	*04/22/20 08:21*	*04/24/20 17:10*	*1*

Client Sample ID: ROST4PZG-ROX-041520-EB
Date Collected: 04/15/20 09:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	04/22/20 08:21	04/24/20 17:10	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		04/22/20 08:21	04/24/20 19:54	1
Benzenethiol	ND	*1	9.6	1.6	ug/L		04/22/20 08:21	04/24/20 19:54	1
Benzoic acid	7.1	J	29	7.0	ug/L		04/22/20 08:21	04/24/20 19:54	1
Benzyl alcohol	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 19:54	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		04/22/20 08:21	04/24/20 19:54	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		04/22/20 08:21	04/24/20 19:54	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		04/22/20 08:21	04/24/20 19:54	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		04/22/20 08:21	04/24/20 19:54	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Chloroaniline	ND		9.6	3.3	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Chloro-3-methylphenol	ND		9.6	3.6	ug/L		04/22/20 08:21	04/24/20 19:54	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		04/22/20 08:21	04/24/20 19:54	1
2-Chlorophenol	ND		9.6	2.1	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 19:54	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		04/22/20 08:21	04/24/20 19:54	1
Dibenzofuran	ND		9.6	0.50	ug/L		04/22/20 08:21	04/24/20 19:54	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		04/22/20 08:21	04/24/20 19:54	1
Diethyl phthalate	ND		9.6	0.67	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4-Dimethylphenol	ND		9.6	3.3	ug/L		04/22/20 08:21	04/24/20 19:54	1
Dimethyl phthalate	ND		9.6	0.57	ug/L		04/22/20 08:21	04/24/20 19:54	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		04/22/20 08:21	04/24/20 19:54	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		04/22/20 08:21	04/24/20 19:54	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		04/22/20 08:21	04/24/20 19:54	1
1,4-Dioxane	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 19:54	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 19:54	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		04/22/20 08:21	04/24/20 19:54	1
Hexachlorocyclopentadiene	ND		19	2.5	ug/L		04/22/20 08:21	04/24/20 19:54	1
Hexachloroethane	ND		9.6	4.0	ug/L		04/22/20 08:21	04/24/20 19:54	1
Indene	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 19:54	1
Isophorone	ND		9.6	0.55	ug/L		04/22/20 08:21	04/24/20 19:54	1
2-Methylphenol	ND		9.6	1.7	ug/L		04/22/20 08:21	04/24/20 19:54	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/22/20 08:21	04/24/20 19:54	1
2-Nitroaniline	ND		9.6	2.1	ug/L		04/22/20 08:21	04/24/20 19:54	1
3-Nitroaniline	ND		9.6	1.7	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Nitroaniline	ND		9.6	2.4	ug/L		04/22/20 08:21	04/24/20 19:54	1
Nitrobenzene	ND		9.6	0.53	ug/L		04/22/20 08:21	04/24/20 19:54	1
2-Nitrophenol	ND		9.6	0.62	ug/L		04/22/20 08:21	04/24/20 19:54	1
4-Nitrophenol	ND		9.6	2.0	ug/L		04/22/20 08:21	04/24/20 19:54	1
N-Nitrosodimethylamine	ND		9.6	3.3	ug/L		04/22/20 08:21	04/24/20 19:54	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-EB
Date Collected: 04/15/20 09:00
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-4
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		04/22/20 08:21	04/24/20 19:54	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		04/22/20 08:21	04/24/20 19:54	1
Pentachlorophenol	ND		19	1.7	ug/L		04/22/20 08:21	04/24/20 19:54	1
Phenol	ND		9.6	2.5	ug/L		04/22/20 08:21	04/24/20 19:54	1
Pyridine	ND		9.6	3.1	ug/L		04/22/20 08:21	04/24/20 19:54	1
Quinoline	ND		9.6	5.7	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4,5-Trichlorophenol	ND		9.6	3.5	ug/L		04/22/20 08:21	04/24/20 19:54	1
2,4,6-Trichlorophenol	ND		9.6	3.3	ug/L		04/22/20 08:21	04/24/20 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*04/22/20 08:21*	*04/24/20 19:54*	*1*
2-Fluorophenol	*41*		*10 - 120*	*04/22/20 08:21*	*04/24/20 19:54*	*1*
Nitrobenzene-d5	*66*		*27 - 120*	*04/22/20 08:21*	*04/24/20 19:54*	*1*
Phenol-d5	*54*		*10 - 120*	*04/22/20 08:21*	*04/24/20 19:54*	*1*
Terphenyl-d14	*99*		*53 - 125*	*04/22/20 08:21*	*04/24/20 19:54*	*1*
2,4,6-Tribromophenol	*88*		*15 - 135*	*04/22/20 08:21*	*04/24/20 19:54*	*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	0.0053	ug/L		04/27/20 09:51	04/27/20 17:56	1
1,2-Dibromoethane	ND		0.019	0.0049	ug/L		04/27/20 09:51	04/27/20 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*108*		*51 - 149*	*04/27/20 09:51*	*04/27/20 17:56*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-5
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			04/26/20 17:42	1
Acrolein	ND		20	10	ug/L			04/26/20 17:42	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 17:42	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 17:42	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 17:42	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 17:42	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 17:42	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 17:42	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 17:42	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 17:42	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 17:42	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 17:42	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 17:42	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 17:42	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 17:42	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 17:42	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 17:42	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 17:42	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 17:42	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 17:42	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 17:42	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 17:42	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 17:42	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 17:42	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 17:42	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 17:42	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 17:42	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 17:42	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 17:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 17:42	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 17:42	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 17:42	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 17:42	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 17:42	1

Client Sample ID: ROST4PZG-ROX-041520
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-5
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			04/26/20 17:42	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 17:42	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 17:42	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 17:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 17:42	1
Toluene	**2.5**		1.0	0.41	ug/L			04/26/20 17:42	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 17:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 17:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 17:42	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 17:42	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 17:42	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 17:42	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 17:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 17:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 17:42	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 17:42	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 17:42	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*78 - 118*		*04/26/20 17:42*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/26/20 17:42*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*04/26/20 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		04/22/20 08:21	04/24/20 17:28	1
Acenaphthylene	ND		0.19	0.043	ug/L		04/22/20 08:21	04/24/20 17:28	1
Anthracene	ND		0.19	0.030	ug/L		04/22/20 08:21	04/24/20 17:28	1
Benzo[a]anthracene	ND		0.19	0.044	ug/L		04/22/20 08:21	04/24/20 17:28	1
Benzo[a]pyrene	ND		0.19	0.040	ug/L		04/22/20 08:21	04/24/20 17:28	1
Benzo[b]fluoranthene	ND		0.19	0.065	ug/L		04/22/20 08:21	04/24/20 17:28	1
Benzo[g,h,i]perylene	ND		0.19	0.12	ug/L		04/22/20 08:21	04/24/20 17:28	1
Benzo[k]fluoranthene	ND		0.19	0.096	ug/L		04/22/20 08:21	04/24/20 17:28	1
Chrysene	ND		0.19	0.071	ug/L		04/22/20 08:21	04/24/20 17:28	1
Dibenz(a,h)anthracene	ND		0.19	0.044	ug/L		04/22/20 08:21	04/24/20 17:28	1
Fluoranthene	ND		0.19	0.065	ug/L		04/22/20 08:21	04/24/20 17:28	1
Fluorene	ND		0.19	0.11	ug/L		04/22/20 08:21	04/24/20 17:28	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/22/20 08:21	04/24/20 17:28	1
Phenanthrene	ND		0.19	0.035	ug/L		04/22/20 08:21	04/24/20 17:28	1
Pyrene	ND		0.19	0.038	ug/L		04/22/20 08:21	04/24/20 17:28	1
1-Methylnaphthalene	ND		0.19	0.071	ug/L		04/22/20 08:21	04/24/20 17:28	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/22/20 08:21	04/24/20 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*79*		*33 - 138*	*04/22/20 08:21*	*04/24/20 17:28*	*1*
2-Fluorobiphenyl	*75*		*15 - 122*	*04/22/20 08:21*	*04/24/20 17:28*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	71		19 - 130	04/22/20 08:21	04/24/20 17:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.6	3.7	ug/L		04/22/20 08:21	04/24/20 20:15	1
Benzenethiol	ND	**1 UJ	9.6	1.6	ug/L		04/22/20 08:21	04/24/20 20:15	1
Benzoic acid	ND		29	7.0	ug/L		04/22/20 08:21	04/24/20 20:15	1
Benzyl alcohol	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 20:15	1
Bis(2-chloroethoxy)methane	ND		9.6	0.66	ug/L		04/22/20 08:21	04/24/20 20:15	1
Bis(2-chloroethyl)ether	ND		9.6	0.71	ug/L		04/22/20 08:21	04/24/20 20:15	1
bis (2-chloroisopropyl) ether	ND		9.6	0.78	ug/L		04/22/20 08:21	04/24/20 20:15	1
Bis(2-ethylhexyl) phthalate	ND		9.6	4.8	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Bromophenyl phenyl ether	ND		9.6	0.31	ug/L		04/22/20 08:21	04/24/20 20:15	1
Butyl benzyl phthalate	ND		9.6	0.66	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Chloroaniline	ND		9.6	3.3	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Chloro-3-methylphenol	ND		9.6	3.7	ug/L		04/22/20 08:21	04/24/20 20:15	1
2-Chloronaphthalene	ND		9.6	0.50	ug/L		04/22/20 08:21	04/24/20 20:15	1
2-Chlorophenol	ND		9.6	2.1	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Chlorophenyl phenyl ether	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 20:15	1
Dibenz[a,h]acridine	ND		9.6	2.9	ug/L		04/22/20 08:21	04/24/20 20:15	1
Dibenzofuran	ND		9.6	0.50	ug/L		04/22/20 08:21	04/24/20 20:15	1
3,3'-Dichlorobenzidine	ND		9.6	2.5	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4-Dichlorophenol	ND		9.6	2.9	ug/L		04/22/20 08:21	04/24/20 20:15	1
Diethyl phthalate	ND		9.6	0.67	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4-Dimethylphenol	ND		9.6	3.4	ug/L		04/22/20 08:21	04/24/20 20:15	1
Dimethyl phthalate	ND		9.6	0.58	ug/L		04/22/20 08:21	04/24/20 20:15	1
Di-n-butyl phthalate	ND		9.6	2.6	ug/L		04/22/20 08:21	04/24/20 20:15	1
4,6-Dinitro-ortho-cresol	ND		9.6	1.9	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4-Dinitrotoluene	ND		9.6	1.8	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,6-Dinitrotoluene	ND		9.6	1.8	ug/L		04/22/20 08:21	04/24/20 20:15	1
Di-n-octyl phthalate	ND		9.6	0.42	ug/L		04/22/20 08:21	04/24/20 20:15	1
1,4-Dioxane	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 20:15	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 20:15	1
Hexachlorobenzene	ND		9.6	0.24	ug/L		04/22/20 08:21	04/24/20 20:15	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		04/22/20 08:21	04/24/20 20:15	1
Hexachloroethane	ND		9.6	4.0	ug/L		04/22/20 08:21	04/24/20 20:15	1
Indene	ND		9.6	0.96	ug/L		04/22/20 08:21	04/24/20 20:15	1
Isophorone	ND		9.6	0.55	ug/L		04/22/20 08:21	04/24/20 20:15	1
2-Methylphenol	ND		9.6	1.7	ug/L		04/22/20 08:21	04/24/20 20:15	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/22/20 08:21	04/24/20 20:15	1
2-Nitroaniline	ND		9.6	2.1	ug/L		04/22/20 08:21	04/24/20 20:15	1
3-Nitroaniline	ND		9.6	1.7	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Nitroaniline	ND		9.6	2.4	ug/L		04/22/20 08:21	04/24/20 20:15	1
Nitrobenzene	ND		9.6	0.53	ug/L		04/22/20 08:21	04/24/20 20:15	1
2-Nitrophenol	ND		9.6	0.62	ug/L		04/22/20 08:21	04/24/20 20:15	1
4-Nitrophenol	ND		9.6	2.0	ug/L		04/22/20 08:21	04/24/20 20:15	1
N-Nitrosodimethylamine	ND		9.6	3.4	ug/L		04/22/20 08:21	04/24/20 20:15	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-5
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		04/22/20 08:21	04/24/20 20:15	1
N-Nitrosodiphenylamine	ND		9.6	0.45	ug/L		04/22/20 08:21	04/24/20 20:15	1
Pentachlorophenol	ND		19	1.7	ug/L		04/22/20 08:21	04/24/20 20:15	1
Phenol	ND		9.6	2.5	ug/L		04/22/20 08:21	04/24/20 20:15	1
Pyridine	ND		9.6	3.1	ug/L		04/22/20 08:21	04/24/20 20:15	1
Quinoline	ND		9.6	5.8	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4,5-Trichlorophenol	ND		9.6	3.6	ug/L		04/22/20 08:21	04/24/20 20:15	1
2,4,6-Trichlorophenol	ND		9.6	3.4	ug/L		04/22/20 08:21	04/24/20 20:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*78*		*34 - 120*	*04/22/20 08:21*	*04/24/20 20:15*	*1*
2-Fluorophenol	*34*		*10 - 120*	*04/22/20 08:21*	*04/24/20 20:15*	*1*
Nitrobenzene-d5	*60*		*27 - 120*	*04/22/20 08:21*	*04/24/20 20:15*	*1*
Phenol-d5	*48*		*10 - 120*	*04/22/20 08:21*	*04/24/20 20:15*	*1*
Terphenyl-d14	*80*		*53 - 125*	*04/22/20 08:21*	*04/24/20 20:15*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*04/22/20 08:21*	*04/24/20 20:15*	*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	*	0.028	0.0052	ug/L		04/27/20 09:51	04/27/20 18:36	1
1,2-Dibromoethane	ND		0.019	0.0047	ug/L		04/27/20 09:51	04/27/20 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*51 - 149*	*04/27/20 09:51*	*04/27/20 18:36*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-DUP
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-6
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			04/26/20 18:06	1
Acrolein	ND		20	10	ug/L			04/26/20 18:06	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 18:06	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 18:06	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 18:06	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 18:06	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 18:06	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 18:06	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 18:06	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 18:06	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 18:06	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 18:06	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 18:06	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 18:06	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 18:06	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 18:06	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 18:06	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 18:06	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 18:06	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 18:06	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 18:06	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 18:06	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 18:06	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 18:06	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 18:06	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 18:06	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 18:06	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 18:06	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 18:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 18:06	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 18:06	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 18:06	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 18:06	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 18:06	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-DUP
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-6
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			04/26/20 18:06	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 18:06	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 18:06	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 18:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 18:06	1
Toluene	**1.8**		1.0	0.41	ug/L			04/26/20 18:06	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 18:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 18:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 18:06	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:06	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 18:06	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 18:06	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 18:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 18:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 18:06	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 18:06	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 18:06	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*04/26/20 18:06*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/26/20 18:06*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/26/20 18:06*	*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		0.20	0.032	ug/L		04/22/20 08:21	04/24/20 17:45	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 17:45	1
Anthracene	ND		0.20	0.031	ug/L		04/22/20 08:21	04/24/20 17:45	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/22/20 08:21	04/24/20 17:45	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/22/20 08:21	04/24/20 17:45	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 17:45	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:21	04/24/20 17:45	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/22/20 08:21	04/24/20 17:45	1
Chrysene	ND		0.20	0.073	ug/L		04/22/20 08:21	04/24/20 17:45	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/22/20 08:21	04/24/20 17:45	1
Fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 17:45	1
Fluorene	ND		0.20	0.11	ug/L		04/22/20 08:21	04/24/20 17:45	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:21	04/24/20 17:45	1
Phenanthrene	ND		0.20	0.036	ug/L		04/22/20 08:21	04/24/20 17:45	1
Pyrene	ND		0.20	0.040	ug/L		04/22/20 08:21	04/24/20 17:45	1
1-Methylnaphthalene	**0.099**	J	0.20	0.073	ug/L		04/22/20 08:21	04/24/20 17:45	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/22/20 08:21	04/24/20 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*78*		*33 - 138*	*04/22/20 08:21*	*04/24/20 17:45*	*1*
2-Fluorobiphenyl	*71*		*15 - 122*	*04/22/20 08:21*	*04/24/20 17:45*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-DUP
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-6
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	17	X	19 - 130	04/22/20 08:21	04/24/20 17:45	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		04/22/20 08:21	04/24/20 20:36	1
Benzenethiol	ND	**1 UJ	9.9	1.7	ug/L		04/22/20 08:21	04/24/20 20:36	1
Benzoic acid	ND		30	7.2	ug/L		04/22/20 08:21	04/24/20 20:36	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/22/20 08:21	04/24/20 20:36	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/22/20 08:21	04/24/20 20:36	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/22/20 08:21	04/24/20 20:36	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/22/20 08:21	04/24/20 20:36	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/22/20 08:21	04/24/20 20:36	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/22/20 08:21	04/24/20 20:36	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/22/20 08:21	04/24/20 20:36	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/22/20 08:21	04/24/20 20:36	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/22/20 08:21	04/24/20 20:36	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/22/20 08:21	04/24/20 20:36	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/22/20 08:21	04/24/20 20:36	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/22/20 08:21	04/24/20 20:36	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/22/20 08:21	04/24/20 20:36	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/22/20 08:21	04/24/20 20:36	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/22/20 08:21	04/24/20 20:36	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/22/20 08:21	04/24/20 20:36	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/22/20 08:21	04/24/20 20:36	1
Indene	ND		9.9	0.99	ug/L		04/22/20 08:21	04/24/20 20:36	1
Isophorone	ND		9.9	0.56	ug/L		04/22/20 08:21	04/24/20 20:36	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/22/20 08:21	04/24/20 20:36	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:21	04/24/20 20:36	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/22/20 08:21	04/24/20 20:36	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/22/20 08:21	04/24/20 20:36	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/22/20 08:21	04/24/20 20:36	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/22/20 08:21	04/24/20 20:36	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/22/20 08:21	04/24/20 20:36	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/22/20 08:21	04/24/20 20:36	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-DUP
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-6
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		9.9	3.3	ug/L		04/22/20 08:21	04/24/20 20:36	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/22/20 08:21	04/24/20 20:36	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:21	04/24/20 20:36	1
Phenol	ND		9.9	2.6	ug/L		04/22/20 08:21	04/24/20 20:36	1
Pyridine	ND		9.9	3.2	ug/L		04/22/20 08:21	04/24/20 20:36	1
Quinoline	ND		9.9	5.9	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/22/20 08:21	04/24/20 20:36	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/22/20 08:21	04/24/20 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*74*		*34 - 120*	*04/22/20 08:21*	*04/24/20 20:36*	*1*
2-Fluorophenol	*5*	*X*	*10 - 120*	*04/22/20 08:21*	*04/24/20 20:36*	*1*
Nitrobenzene-d5	*18*	*X*	*27 - 120*	*04/22/20 08:21*	*04/24/20 20:36*	*1*
Phenol-d5	*1*	*X*	*10 - 120*	*04/22/20 08:21*	*04/24/20 20:36*	*1*
Terphenyl-d14	*88*		*53 - 125*	*04/22/20 08:21*	*04/24/20 20:36*	*1*
2,4,6-Tribromophenol	*28*		*15 - 135*	*04/22/20 08:21*	*04/24/20 20:36*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND	H	9.5	3.6	ug/L		04/28/20 10:43	04/30/20 19:26	1
Benzenethiol	ND	H	9.5	1.6	ug/L		04/28/20 10:43	04/30/20 19:26	1
Benzoic acid	ND	H	28	6.9	ug/L		04/28/20 10:43	04/30/20 19:26	1
Benzyl alcohol	ND	H	9.5	1.9	ug/L		04/28/20 10:43	04/30/20 19:26	1
Bis(2-chloroethoxy)methane	ND	H	9.5	0.65	ug/L		04/28/20 10:43	04/30/20 19:26	1
Bis(2-chloroethyl)ether	ND	H	9.5	0.70	ug/L		04/28/20 10:43	04/30/20 19:26	1
bis (2-chloroisopropyl) ether	ND	H	9.5	0.77	ug/L		04/28/20 10:43	04/30/20 19:26	1
Bis(2-ethylhexyl) phthalate	ND	H	9.5	4.7	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Bromophenyl phenyl ether	ND	H	9.5	0.30	ug/L		04/28/20 10:43	04/30/20 19:26	1
Butyl benzyl phthalate	ND	H	9.5	0.65	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Chloroaniline	ND	H	9.5	3.2	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Chloro-3-methylphenol	ND	H	9.5	3.6	ug/L		04/28/20 10:43	04/30/20 19:26	1
2-Chloronaphthalene	ND	H	9.5	0.49	ug/L		04/28/20 10:43	04/30/20 19:26	1
2-Chlorophenol	ND	H	9.5	2.1	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Chlorophenyl phenyl ether	ND	H	9.5	1.9	ug/L		04/28/20 10:43	04/30/20 19:26	1
Dibenz[a,h]acridine	ND	H	9.5	2.8	ug/L		04/28/20 10:43	04/30/20 19:26	1
Dibenzofuran	**1.3**	**J H**	9.5	0.49	ug/L		04/28/20 10:43	04/30/20 19:26	1
3,3'-Dichlorobenzidine	ND	H	9.5	2.5	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4-Dichlorophenol	ND	H	9.5	2.8	ug/L		04/28/20 10:43	04/30/20 19:26	1
Diethyl phthalate	ND	H	9.5	0.66	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4-Dimethylphenol	ND	H	9.5	3.3	ug/L		04/28/20 10:43	04/30/20 19:26	1
Dimethyl phthalate	ND	H	9.5	0.57	ug/L		04/28/20 10:43	04/30/20 19:26	1
Di-n-butyl phthalate	ND	H	9.5	2.6	ug/L		04/28/20 10:43	04/30/20 19:26	1
4,6-Dinitro-ortho-cresol	ND	H	9.5	1.9	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4-Dinitrophenol	ND	H	28	3.2	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4-Dinitrotoluene	ND	H	9.5	1.8	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,6-Dinitrotoluene	ND	H	9.5	1.8	ug/L		04/28/20 10:43	04/30/20 19:26	1
Di-n-octyl phthalate	ND	H	9.5	0.42	ug/L		04/28/20 10:43	04/30/20 19:26	1
1,4-Dioxane	ND	H	9.5	0.95	ug/L		04/28/20 10:43	04/30/20 19:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND	H	9.5	0.95	ug/L		04/28/20 10:43	04/30/20 19:26	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZG-ROX-041520-DUP
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND	H	9.5	0.24	ug/L		04/28/20 10:43	04/30/20 19:26	1
Hexachlorocyclopentadiene	ND	H	19	2.5	ug/L		04/28/20 10:43	04/30/20 19:26	1
Hexachloroethane	ND	H	9.5	4.0	ug/L		04/28/20 10:43	04/30/20 19:26	1
Indene	ND	H	9.5	0.95	ug/L		04/28/20 10:43	04/30/20 19:26	1
Isophorone	ND	H	9.5	0.54	ug/L		04/28/20 10:43	04/30/20 19:26	1
2-Methylphenol	ND	H	9.5	1.7	ug/L		04/28/20 10:43	04/30/20 19:26	1
3 & 4 Methylphenol	ND	H	19	0.99	ug/L		04/28/20 10:43	04/30/20 19:26	1
2-Nitroaniline	ND	H	9.5	2.1	ug/L		04/28/20 10:43	04/30/20 19:26	1
3-Nitroaniline	ND	H	9.5	1.7	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Nitroaniline	ND	H	9.5	2.3	ug/L		04/28/20 10:43	04/30/20 19:26	1
Nitrobenzene	ND	H	9.5	0.52	ug/L		04/28/20 10:43	04/30/20 19:26	1
2-Nitrophenol	ND	H	9.5	0.62	ug/L		04/28/20 10:43	04/30/20 19:26	1
4-Nitrophenol	ND	H	9.5	2.0	ug/L		04/28/20 10:43	04/30/20 19:26	1
N-Nitrosodimethylamine	ND	H	9.5	3.3	ug/L		04/28/20 10:43	04/30/20 19:26	1
N-Nitrosodi-n-propylamine	ND	H	9.5	3.1	ug/L		04/28/20 10:43	04/30/20 19:26	1
N-Nitrosodiphenylamine	ND	H	9.5	0.45	ug/L		04/28/20 10:43	04/30/20 19:26	1
Pentachlorophenol	ND	H	19	1.7	ug/L		04/28/20 10:43	04/30/20 19:26	1
Phenol	ND	H	9.5	2.5	ug/L		04/28/20 10:43	04/30/20 19:26	1
Pyridine	ND	H	9.5	3.0	ug/L		04/28/20 10:43	04/30/20 19:26	1
Quinoline	ND	H	9.5	5.7	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4,5-Trichlorophenol	ND	H	9.5	3.5	ug/L		04/28/20 10:43	04/30/20 19:26	1
2,4,6-Trichlorophenol	ND	H	9.5	3.3	ug/L		04/28/20 10:43	04/30/20 19:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*04/28/20 10:43*	*04/30/20 19:26*	*1*
2-Fluorophenol	*27*		*10 - 120*	*04/28/20 10:43*	*04/30/20 19:26*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*04/28/20 10:43*	*04/30/20 19:26*	*1*
Phenol-d5	*60*		*10 - 120*	*04/28/20 10:43*	*04/30/20 19:26*	*1*
Terphenyl-d14	*70*		*53 - 125*	*04/28/20 10:43*	*04/30/20 19:26*	*1*
2,4,6-Tribromophenol	*98*		*15 - 135*	*04/28/20 10:43*	*04/30/20 19:26*	*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	0.0052	ug/L		04/27/20 09:51	04/27/20 18:56	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/27/20 09:51	04/27/20 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*51 - 149*	*04/27/20 09:51*	*04/27/20 18:56*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZC-ROX-041520
Date Collected: 04/15/20 11:30
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-7
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			04/26/20 18:31	1
Acrolein	ND		20	10	ug/L			04/26/20 18:31	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 18:31	1
Benzene	**4.7**		1.0	0.38	ug/L			04/26/20 18:31	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 18:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 18:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 18:31	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 18:31	1
2-Butanone (MEK)	**3.0**	**J**	25	2.6	ug/L			04/26/20 18:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 18:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 18:31	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 18:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 18:31	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 18:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 18:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 18:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 18:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 18:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Ethylbenzene	**47**		1.0	0.50	ug/L			04/26/20 18:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 18:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 18:31	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 18:31	1
Isopropylbenzene	**6.0**		1.0	0.53	ug/L			04/26/20 18:31	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 18:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 18:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 18:31	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 18:31	1
m-Xylene & p-Xylene	**86**		5.0	1.6	ug/L			04/26/20 18:31	1
Naphthalene	**55**		1.0	1.0	ug/L			04/26/20 18:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 18:31	1
N-Propylbenzene	**10**		1.0	0.69	ug/L			04/26/20 18:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 18:31	1
o-Xylene	**1.6**	**J**	5.0	0.60	ug/L			04/26/20 18:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 18:31	1
p-Isopropyltoluene	**0.71**	**J**	1.0	0.71	ug/L			04/26/20 18:31	1

Client Sample ID: ROST4PZC-ROX-041520

Date Collected: 04/15/20 11:30
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-7

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			04/26/20 18:31	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 18:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 18:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 18:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 18:31	1
Toluene	**8.8**		1.0	0.41	ug/L			04/26/20 18:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 18:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 18:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 18:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 18:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 18:31	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 18:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 18:31	1
1,2,4-Trimethylbenzene	**23**		1.0	0.82	ug/L			04/26/20 18:31	1
1,3,5-Trimethylbenzene	**4.9**		1.0	0.56	ug/L			04/26/20 18:31	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 18:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 18:31	1
Xylenes, Total	**88**		10	1.6	ug/L			04/26/20 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/26/20 18:31*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/26/20 18:31*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*04/26/20 18:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**2.0**		0.20	0.031	ug/L		04/22/20 08:21	04/24/20 18:03	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/22/20 08:21	04/24/20 18:03	1
Anthracene	**0.42**		0.20	0.030	ug/L		04/22/20 08:21	04/24/20 18:03	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 18:03	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/22/20 08:21	04/24/20 18:03	1
Benzo[b]fluoranthene	ND		0.20	0.066	ug/L		04/22/20 08:21	04/24/20 18:03	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:21	04/24/20 18:03	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/22/20 08:21	04/24/20 18:03	1
Chrysene	ND		0.20	0.072	ug/L		04/22/20 08:21	04/24/20 18:03	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 18:03	1
Fluoranthene	ND		0.20	0.066	ug/L		04/22/20 08:21	04/24/20 18:03	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:21	04/24/20 18:03	1
Phenanthrene	**3.7**		0.20	0.035	ug/L		04/22/20 08:21	04/24/20 18:03	1
Pyrene	**0.059**	J	0.20	0.039	ug/L		04/22/20 08:21	04/24/20 18:03	1
2-Methylnaphthalene	**25**		0.20	0.059	ug/L		04/22/20 08:21	04/24/20 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*65*		*33 - 138*	*04/22/20 08:21*	*04/24/20 18:03*	*1*
2-Fluorobiphenyl	*62*		*15 - 122*	*04/22/20 08:21*	*04/24/20 18:03*	*1*
Nitrobenzene-d5	*68*		*19 - 130*	*04/22/20 08:21*	*04/24/20 18:03*	*1*

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZC-ROX-041520
Date Collected: 04/15/20 11:30
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	1.5		0.98	0.54	ug/L		04/22/20 08:21	04/27/20 16:02	5
1-Methylnaphthalene	54		0.98	0.36	ug/L		04/22/20 08:21	04/27/20 16:02	5

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		04/22/20 08:21	04/24/20 20:57	1
Benzenethiol	ND	**1 UJ	9.8	1.7	ug/L		04/22/20 08:21	04/24/20 20:57	1
Benzoic acid	ND		29	7.1	ug/L		04/22/20 08:21	04/24/20 20:57	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 20:57	1
Bis(2-chloroethoxy)methane	ND		9.8	0.67	ug/L		04/22/20 08:21	04/24/20 20:57	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		04/22/20 08:21	04/24/20 20:57	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		04/22/20 08:21	04/24/20 20:57	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Bromophenyl phenyl ether	ND		9.8	0.31	ug/L		04/22/20 08:21	04/24/20 20:57	1
Butyl benzyl phthalate	ND		9.8	0.67	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/22/20 08:21	04/24/20 20:57	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/22/20 08:21	04/24/20 20:57	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 20:57	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
Dibenzofuran	1.6	J	9.8	0.51	ug/L		04/22/20 08:21	04/24/20 20:57	1
3,3'-Dichlorobenzidine	ND		9.8	2.5	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
Diethyl phthalate	ND		9.8	0.68	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 20:57	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/22/20 08:21	04/24/20 20:57	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 20:57	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/22/20 08:21	04/24/20 20:57	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 20:57	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 20:57	1
Hexachlorobenzene	ND		9.8	0.24	ug/L		04/22/20 08:21	04/24/20 20:57	1
Hexachlorocyclopentadiene	ND	UJ	20	2.5	ug/L		04/22/20 08:21	04/24/20 20:57	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/22/20 08:21	04/24/20 20:57	1
Indene	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 20:57	1
Isophorone	ND		9.8	0.56	ug/L		04/22/20 08:21	04/24/20 20:57	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 20:57	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:21	04/24/20 20:57	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 20:57	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/22/20 08:21	04/24/20 20:57	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/22/20 08:21	04/24/20 20:57	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/22/20 08:21	04/24/20 20:57	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/22/20 08:21	04/24/20 20:57	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 20:57	1

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

Job ID: 400-186792-1

Client Sample ID: ROST4PZC-ROX-041520
Date Collected: 04/15/20 11:30
Date Received: 04/16/20 08:55

Lab Sample ID: 400-186792-7
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		04/22/20 08:21	04/24/20 20:57	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/22/20 08:21	04/24/20 20:57	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:21	04/24/20 20:57	1
Phenol	ND		9.8	2.5	ug/L		04/22/20 08:21	04/24/20 20:57	1
Pyridine	ND		9.8	3.1	ug/L		04/22/20 08:21	04/24/20 20:57	1
Quinoline	ND		9.8	5.9	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/22/20 08:21	04/24/20 20:57	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*04/22/20 08:21*	*04/24/20 20:57*	*1*
2-Fluorophenol	*31*		*10 - 120*	*04/22/20 08:21*	*04/24/20 20:57*	*1*
Nitrobenzene-d5	*62*		*27 - 120*	*04/22/20 08:21*	*04/24/20 20:57*	*1*
Phenol-d5	*49*		*10 - 120*	*04/22/20 08:21*	*04/24/20 20:57*	*1*
Terphenyl-d14	*76*		*53 - 125*	*04/22/20 08:21*	*04/24/20 20:57*	*1*
2,4,6-Tribromophenol	*88*		*15 - 135*	*04/22/20 08:21*	*04/24/20 20:57*	*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	0.0055	ug/L		04/27/20 09:51	04/27/20 19:15	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/27/20 09:51	04/27/20 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*107*		*51 - 149*	*04/27/20 09:51*	*04/27/20 19:15*	*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 or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD 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.
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186792-1

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	(78-118)	(81-121)	(80-120)
400-186792-1	TB-ROX-041520-8260	100	90	100
400-186792-3	MW22-ROX-041520	99	93	98
400-186792-4	ROST4PZG-ROX-041520-EB	96	92	102
400-186792-5	ROST4PZG-ROX-041520	103	93	97
400-186792-6	ROST4PZG-ROX-041520-DUP	98	94	98
400-186792-7	ROST4PZC-ROX-041520	99	93	99
LCS 400-487068/1002	Lab Control Sample	100	94	101
LCS 400-487162/1002	Lab Control Sample	95	97	101
MB 400-487068/4	Method Blank	99	93	98
MB 400-487162/16	Method Blank	97	93	103

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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186792-3	MW22-ROX-041520	74	23	64	46	75	98
400-186792-4	ROST4PZG-ROX-041520-EB	78	41	66	54	99	88
400-186792-5	ROST4PZG-ROX-041520	78	34	60	48	80	84
400-186792-6	ROST4PZG-ROX-041520-DUP	74	5 X	18 X	1 X	88	28
400-186792-6 - RERA	ROST4PZG-ROX-041520-DUP	58	27	73	60	70	98
400-186792-7	ROST4PZC-ROX-041520	72	31	62	49	76	88
LCS 400-486588/2-A	Lab Control Sample	67	29	60	46	80	86
LCS 400-486588/4-A	Lab Control Sample	66		18 X		81	
LCS 400-487115/25-A	Lab Control Sample	54	20	85	47	76	56
LCS 400-487115/2-A	Lab Control Sample	94	37	86	64	99	104
LCSD 400-486588/5-A	Lab Control Sample Dup	61		50		72	
LCSD 400-487115/26-A	Lab Control Sample Dup	44	17	51	42	61	51
MB 400-486588/1-A	Method Blank	70	23	59	42	85	64
MB 400-487115/1-A	Method Blank	96	39	84	65	97	85

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: 400-186792-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186792-3	MW22-ROX-041520	62	66	70
400-186792-4	ROST4PZG-ROX-041520-EB	87	74	71
400-186792-5	ROST4PZG-ROX-041520	79	75	71
400-186792-6	ROST4PZG-ROX-041520-DUP	78	71	17 X
400-186792-7	ROST4PZC-ROX-041520	65	62	68
LCS 400-486588/2-A	Lab Control Sample	103	79	91
MB 400-486588/1-A	Method Blank	62	57	63

Surrogate Legend

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	Client Sample ID	(51-149)
400-186792-2	TB-ROX-041520-8011	86
400-186792-3	MW22-ROX-041520	113
400-186792-4	ROST4PZG-ROX-041520-EB	108
400-186792-5	ROST4PZG-ROX-041520	98
400-186792-6	ROST4PZG-ROX-041520-DUP	99
400-186792-7	ROST4PZC-ROX-041520	107
LCS 400-487102/2-A	Lab Control Sample	105
LCSD 400-487102/3-A	Lab Control Sample Dup	104
MB 400-487102/1-A	Method Blank	92

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186792-1

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 TestAmerica, 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: 400-186792-1

Client Sample ID: TB-ROX-041520-8260

Lab Sample ID: 400-186792-1
Matrix: Water
Date Collected: 04/15/20 00:00
Date Received: 04/16/20 08:55

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	487068	04/26/20 15:39	RS	TAL PEN

Client Sample ID: TB-ROX-041520-8011

Lab Sample ID: 400-186792-2
Matrix: Water
Date Collected: 04/15/20 00:00
Date Received: 04/16/20 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.8 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 17:17	DS	TAL PEN

Client Sample ID: MW22-ROX-041520

Lab Sample ID: 400-186792-3
Matrix: Water
Date Collected: 04/15/20 08:35
Date Received: 04/16/20 08:55

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	487068	04/26/20 16:53	RS	TAL PEN
Total/NA	Prep	3520C			1019.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 19:32	VC1	TAL PEN
Total/NA	Prep	3520C			1019.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 16:52	DS	TAL PEN
Total/NA	Prep	3520C			1019.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 15:46	PP1	TAL PEN
Total/NA	Prep	8011			36.3 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 17:37	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-041520-EB

Lab Sample ID: 400-186792-4
Matrix: Water
Date Collected: 04/15/20 09:00
Date Received: 04/16/20 08:55

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	487162	04/27/20 17:24	RS	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 19:54	VC1	TAL PEN
Total/NA	Prep	3520C			1044.8 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 17:10	DS	TAL PEN
Total/NA	Prep	8011			36 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 17:56	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-041520

Lab Sample ID: 400-186792-5
Matrix: Water
Date Collected: 04/15/20 09:45
Date Received: 04/16/20 08:55

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	487068	04/26/20 17:42	RS	TAL PEN

Client Sample ID: ROST4PZG-ROX-041520

Lab Sample ID: 400-186792-5

Date Collected: 04/15/20 09:45
Matrix: Water
Date Received: 04/16/20 08:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1040.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 20:15	VC1	TAL PEN
Total/NA	Prep	3520C			1040.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 17:28	DS	TAL PEN
Total/NA	Prep	8011			36.9 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 18:36	DS	TAL PEN

Client Sample ID: ROST4PZG-ROX-041520-DUP

Lab Sample ID: 400-186792-6

Date Collected: 04/15/20 09:45
Matrix: Water
Date Received: 04/16/20 08:55

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	487068	04/26/20 18:06	RS	TAL PEN
Total/NA	Prep	3520C			1010.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 20:36	VC1	TAL PEN
Total/NA	Prep	3520C	RERA		1055.6 mL	1 mL	487115	04/28/20 10:43	JRW	TAL PEN
Total/NA	Analysis	8270D	RERA	1			487529	04/30/20 19:26	VC1	TAL PEN
Total/NA	Prep	3520C			1010.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 17:45	DS	TAL PEN
Total/NA	Prep	8011			36.8 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 18:56	DS	TAL PEN

Client Sample ID: ROST4PZC-ROX-041520

Lab Sample ID: 400-186792-7

Date Collected: 04/15/20 11:30
Matrix: Water
Date Received: 04/16/20 08:55

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	487068	04/26/20 18:31	RS	TAL PEN
Total/NA	Prep	3520C			1023 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 20:57	VC1	TAL PEN
Total/NA	Prep	3520C			1023 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 18:03	DS	TAL PEN
Total/NA	Prep	3520C	DL		1023 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			487148	04/27/20 16:02	PP1	TAL PEN
Total/NA	Prep	8011			34.8 mL	35 mL	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 19:15	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:34	VC1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 12:28	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487068/4
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	487068	04/26/20 10:43	RS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487102/1-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:00	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487115/1-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			1000 mL	1 mL	487115	04/27/20 11:03	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487529	04/30/20 16:20	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	487115	04/27/20 11:03	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487699	05/01/20 15:38	VC1	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487162/16
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	487162	04/27/20 15:43	RS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486588/2-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:56	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 12:46	DS	TAL PEN

Lab Chronicle

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

Job ID: 400-186792-1

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486588/4-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487068/1002
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	487068	04/26/20 09:19	RS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487102/2-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:19	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487115/25-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			1000 mL	1 mL	487115	04/28/20 10:43	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487529	04/30/20 19:46	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487115/2-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			1000 mL	1 mL	487115	04/27/20 11:03	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487699	05/01/20 16:04	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487162/1002
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	487162	04/27/20 14:50	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-186792-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486588/5-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487102/3-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	487102	04/27/20 09:51	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487173	04/27/20 15:39	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487115/26-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			1000 mL	1 mL	487115	04/28/20 10:43	JRW	TAL PEN
Total/NA	Analysis	8270D		1			487529	04/30/20 20:07	VC1	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 487068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-1	TB-ROX-041520-8260	Total/NA	Water	8260B	
400-186792-3	MW22-ROX-041520	Total/NA	Water	8260B	
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	8260B	
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8260B	
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	8260B	
MB 400-487068/4	Method Blank	Total/NA	Water	8260B	
LCS 400-487068/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 487162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	8260B	
MB 400-487162/16	Method Blank	Total/NA	Water	8260B	
LCS 400-487162/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-3	MW22-ROX-041520	Total/NA	Water	3520C	
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	3520C	
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	3520C	
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	3520C	
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	3520C	
400-186792-7 - DL	ROST4PZC-ROX-041520	Total/NA	Water	3520C	
MB 400-486588/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-3	MW22-ROX-041520	Total/NA	Water	8270D LL	486588
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	8270D LL	486588
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	8270D LL	486588
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8270D LL	486588
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	8270D LL	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D LL	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486588

Analysis Batch: 486937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-3	MW22-ROX-041520	Total/NA	Water	8270D	486588
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	8270D	486588
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	8270D	486588
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8270D	486588
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	8270D	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486588

GC/MS Semi VOA

Prep Batch: 487115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-6 - RERA	ROST4PZG-ROX-041520-DUP	Total/NA	Water	3520C	
MB 400-487115/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-487115/25-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-487115/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-487115/26-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-3	MW22-ROX-041520	Total/NA	Water	8270D LL	486588
400-186792-7 - DL	ROST4PZC-ROX-041520	Total/NA	Water	8270D LL	486588

Analysis Batch: 487529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-6 - RERA	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8270D	487115
MB 400-487115/1-A	Method Blank	Total/NA	Water	8270D	487115
LCS 400-487115/25-A	Lab Control Sample	Total/NA	Water	8270D	487115
LCSD 400-487115/26-A	Lab Control Sample Dup	Total/NA	Water	8270D	487115

Analysis Batch: 487699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-487115/1-A	Method Blank	Total/NA	Water	8270D	487115
LCS 400-487115/2-A	Lab Control Sample	Total/NA	Water	8270D	487115

GC Semi VOA

Prep Batch: 487102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-2	TB-ROX-041520-8011	Total/NA	Water	8011	
400-186792-3	MW22-ROX-041520	Total/NA	Water	8011	
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	8011	
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	8011	
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8011	
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	8011	
MB 400-487102/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487102/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487102/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186792-2	TB-ROX-041520-8011	Total/NA	Water	8011	487102
400-186792-3	MW22-ROX-041520	Total/NA	Water	8011	487102
400-186792-4	ROST4PZG-ROX-041520-EB	Total/NA	Water	8011	487102
400-186792-5	ROST4PZG-ROX-041520	Total/NA	Water	8011	487102
400-186792-6	ROST4PZG-ROX-041520-DUP	Total/NA	Water	8011	487102
400-186792-7	ROST4PZC-ROX-041520	Total/NA	Water	8011	487102
MB 400-487102/1-A	Method Blank	Total/NA	Water	8011	487102
LCS 400-487102/2-A	Lab Control Sample	Total/NA	Water	8011	487102
LCSD 400-487102/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487102

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

Lab Sample ID: MB 400-487068/4
Matrix: Water
Analysis Batch: 487068

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			04/26/20 10:43	1
Acrolein	ND		20	10	ug/L			04/26/20 10:43	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 10:43	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 10:43	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 10:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 10:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 10:43	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 10:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 10:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 10:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 10:43	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 10:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 10:43	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 10:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 10:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 10:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 10:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 10:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 10:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 10:43	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 10:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 10:43	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 10:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 10:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 10:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 10:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 10:43	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 10:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 10:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 10:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 10:43	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 10:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 10:43	1

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

Lab Sample ID: MB 400-487068/4
Matrix: Water
Analysis Batch: 487068

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			04/26/20 10:43	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/26/20 10:43	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 10:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 10:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 10:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 10:43	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 10:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 10:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 10:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 10:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 10:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 10:43	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 10:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 10:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 10:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 10:43	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 10:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 10:43	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 10:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*04/26/20 10:43*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/26/20 10:43*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*04/26/20 10:43*	*1*

Lab Sample ID: LCS 400-487068/1002
Matrix: Water
Analysis Batch: 487068

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	175		ug/L		88	43 - 160
Acrolein	500	468		ug/L		94	38 - 160
Acrylonitrile	500	483		ug/L		97	64 - 142
Benzene	50.0	50.0		ug/L		100	70 - 130
Bromobenzene	50.0	54.9		ug/L		110	70 - 132
Bromochloromethane	50.0	56.0		ug/L		112	70 - 130
Bromodichloromethane	50.0	48.5		ug/L		97	67 - 133
Bromoform	50.0	50.3		ug/L		101	57 - 140
Bromomethane	50.0	70.2		ug/L		140	10 - 160
2-Butanone (MEK)	200	193		ug/L		97	61 - 145
Carbon disulfide	50.0	50.9		ug/L		102	61 - 137
Carbon tetrachloride	50.0	50.4		ug/L		101	61 - 137
Chlorobenzene	50.0	52.1		ug/L		104	70 - 130
Dibromochloromethane	50.0	48.9		ug/L		98	67 - 135
Chloroethane	50.0	53.7		ug/L		107	55 - 141

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

Lab Sample ID: LCS 400-487068/1002
Matrix: Water
Analysis Batch: 487068

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	34.0		ug/L		68	10 - 160
Chloroform	50.0	58.0		ug/L		116	69 - 130
1-Chlorohexane	50.0	50.5		ug/L		101	69 - 130
Chloromethane	50.0	49.0		ug/L		98	58 - 137
cis-1,2-Dichloroethene	50.0	48.0		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	50.9		ug/L		102	69 - 132
1,2-Dichlorobenzene	50.0	55.0		ug/L		110	67 - 130
1,3-Dichlorobenzene	50.0	55.6		ug/L		111	70 - 130
1,4-Dichlorobenzene	50.0	56.7		ug/L		113	70 - 130
Dichlorodifluoromethane	50.0	60.8		ug/L		122	41 - 146
1,1-Dichloroethane	50.0	49.5		ug/L		99	70 - 130
1,2-Dichloroethane	50.0	44.6		ug/L		89	69 - 130
1,1-Dichloroethene	50.0	50.4		ug/L		101	63 - 134
1,2-Dichloropropane	50.0	49.1		ug/L		98	70 - 130
1,3-Dichloropropane	50.0	48.7		ug/L		97	70 - 130
2,2-Dichloropropane	50.0	50.6		ug/L		101	52 - 135
1,1-Dichloropropene	50.0	50.6		ug/L		101	70 - 130
Ethylbenzene	50.0	49.2		ug/L		98	70 - 130
Ethyl methacrylate	50.0	47.7		ug/L		95	68 - 130
Hexachlorobutadiene	50.0	52.4		ug/L		105	53 - 140
2-Hexanone	200	194		ug/L		97	65 - 137
Isopropylbenzene	50.0	51.4		ug/L		103	70 - 130
Methylene bromide	50.0	48.2		ug/L		96	70 - 130
Methylene Chloride	50.0	55.0		ug/L		110	66 - 135
4-Methyl-2-pentanone (MIBK)	200	199		ug/L		100	69 - 138
Methyl tert-butyl ether	50.0	48.3		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	48.5		ug/L		97	70 - 130
Naphthalene	50.0	47.4		ug/L		95	47 - 149
n-Butylbenzene	50.0	56.8		ug/L		114	67 - 130
N-Propylbenzene	50.0	57.4		ug/L		115	70 - 130
o-Chlorotoluene	50.0	54.6		ug/L		109	70 - 130
o-Xylene	50.0	48.4		ug/L		97	70 - 130
p-Chlorotoluene	50.0	55.8		ug/L		112	70 - 130
p-Isopropyltoluene	50.0	57.2		ug/L		114	65 - 130
sec-Butylbenzene	50.0	57.2		ug/L		114	66 - 130
Styrene	50.0	50.7		ug/L		101	70 - 130
tert-Butylbenzene	50.0	51.9		ug/L		104	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.9		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	49.8		ug/L		100	70 - 131
Tetrachloroethene	50.0	48.2		ug/L		96	65 - 130
Toluene	50.0	46.9		ug/L		94	70 - 130
trans-1,2-Dichloroethene	50.0	57.7		ug/L		115	70 - 130
trans-1,3-Dichloropropene	50.0	47.7		ug/L		95	63 - 130
1,2,3-Trichlorobenzene	50.0	52.4		ug/L		105	60 - 138
1,2,4-Trichlorobenzene	50.0	53.4		ug/L		107	60 - 140
1,1,1-Trichloroethane	50.0	52.2		ug/L		104	68 - 130
1,1,2-Trichloroethane	50.0	47.2		ug/L		94	70 - 130
Trichloroethene	50.0	52.5		ug/L		105	70 - 130
Trichlorofluoromethane	50.0	51.4		ug/L		103	65 - 138

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

Lab Sample ID: LCS 400-487068/1002
Matrix: Water
Analysis Batch: 487068

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	49.9		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	50.0	53.8		ug/L		108	70 - 130
1,3,5-Trimethylbenzene	50.0	55.8		ug/L		112	69 - 130
Vinyl acetate	100	117		ug/L		117	26 - 160
Vinyl chloride	50.0	60.0		ug/L		120	59 - 136
Xylenes, Total	100	96.9		ug/L		97	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*100*		*78 - 118*
Dibromofluoromethane	*94*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 400-487162/16
Matrix: Water
Analysis Batch: 487162

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			04/27/20 15:43	1
Acrolein	ND		20	10	ug/L			04/27/20 15:43	1
Acrylonitrile	ND		10	2.8	ug/L			04/27/20 15:43	1
Benzene	ND		1.0	0.38	ug/L			04/27/20 15:43	1
Bromobenzene	ND		1.0	0.54	ug/L			04/27/20 15:43	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/27/20 15:43	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Bromoform	ND		5.0	0.71	ug/L			04/27/20 15:43	1
Bromomethane	ND		1.0	0.98	ug/L			04/27/20 15:43	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/27/20 15:43	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Chloroethane	ND		1.0	0.76	ug/L			04/27/20 15:43	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/27/20 15:43	1
Chloroform	ND		1.0	0.60	ug/L			04/27/20 15:43	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/27/20 15:43	1
Chloromethane	ND		1.0	0.83	ug/L			04/27/20 15:43	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/27/20 15:43	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/27/20 15:43	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/27/20 15:43	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/27/20 15:43	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/27/20 15:43	1

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

Lab Sample ID: MB 400-487162/16
Matrix: Water
Analysis Batch: 487162

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/27/20 15:43	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/27/20 15:43	1
2-Hexanone	ND		25	3.1	ug/L			04/27/20 15:43	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/27/20 15:43	1
Methylene bromide	ND		5.0	0.59	ug/L			04/27/20 15:43	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/27/20 15:43	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/27/20 15:43	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/27/20 15:43	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/27/20 15:43	1
Naphthalene	ND		1.0	1.0	ug/L			04/27/20 15:43	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/27/20 15:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/27/20 15:43	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/27/20 15:43	1
o-Xylene	ND		5.0	0.60	ug/L			04/27/20 15:43	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/27/20 15:43	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/27/20 15:43	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/27/20 15:43	1
Styrene	ND		1.0	1.0	ug/L			04/27/20 15:43	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/27/20 15:43	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/27/20 15:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/27/20 15:43	1
Toluene	ND		1.0	0.41	ug/L			04/27/20 15:43	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/27/20 15:43	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/27/20 15:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/27/20 15:43	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/27/20 15:43	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/27/20 15:43	1
Trichloroethene	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/27/20 15:43	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/27/20 15:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/27/20 15:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/27/20 15:43	1
Vinyl acetate	ND		25	2.0	ug/L			04/27/20 15:43	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/27/20 15:43	1
Xylenes, Total	ND		10	1.6	ug/L			04/27/20 15:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*04/27/20 15:43*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/27/20 15:43*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/27/20 15:43*	*1*

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

Lab Sample ID: LCS 400-487162/1002
Matrix: Water
Analysis Batch: 487162

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	213		ug/L		107	43 - 160
Acrolein	500	491		ug/L		98	38 - 160
Acrylonitrile	500	523		ug/L		105	64 - 142
Benzene	50.0	52.9		ug/L		106	70 - 130
Bromobenzene	50.0	52.0		ug/L		104	70 - 132
Bromochloromethane	50.0	49.7		ug/L		99	70 - 130
Bromodichloromethane	50.0	47.2		ug/L		94	67 - 133
Bromoform	50.0	40.0		ug/L		80	57 - 140
Bromomethane	50.0	60.5		ug/L		121	10 - 160
2-Butanone (MEK)	200	208		ug/L		104	61 - 145
Carbon disulfide	50.0	48.9		ug/L		98	61 - 137
Carbon tetrachloride	50.0	49.8		ug/L		100	61 - 137
Chlorobenzene	50.0	52.2		ug/L		104	70 - 130
Dibromochloromethane	50.0	45.1		ug/L		90	67 - 135
Chloroethane	50.0	50.5		ug/L		101	55 - 141
2-Chloroethyl vinyl ether	50.0	47.4		ug/L		95	10 - 160
Chloroform	50.0	52.3		ug/L		105	69 - 130
1-Chlorohexane	50.0	63.0		ug/L		126	69 - 130
Chloromethane	50.0	52.4		ug/L		105	58 - 137
cis-1,2-Dichloroethene	50.0	54.3		ug/L		109	68 - 130
cis-1,3-Dichloropropene	50.0	53.5		ug/L		107	69 - 132
1,2-Dichlorobenzene	50.0	51.2		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	52.4		ug/L		105	70 - 130
1,4-Dichlorobenzene	50.0	50.8		ug/L		102	70 - 130
Dichlorodifluoromethane	50.0	58.1		ug/L		116	41 - 146
1,1-Dichloroethane	50.0	55.2		ug/L		110	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	59.0		ug/L		118	63 - 134
1,2-Dichloropropane	50.0	53.0		ug/L		106	70 - 130
1,3-Dichloropropane	50.0	52.9		ug/L		106	70 - 130
2,2-Dichloropropane	50.0	55.7		ug/L		111	52 - 135
1,1-Dichloropropene	50.0	55.7		ug/L		111	70 - 130
Ethylbenzene	50.0	54.5		ug/L		109	70 - 130
Ethyl methacrylate	50.0	55.3		ug/L		111	68 - 130
Hexachlorobutadiene	50.0	59.3		ug/L		119	53 - 140
2-Hexanone	200	226		ug/L		113	65 - 137
Isopropylbenzene	50.0	55.5		ug/L		111	70 - 130
Methylene bromide	50.0	50.8		ug/L		102	70 - 130
Methylene Chloride	50.0	52.1		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	221		ug/L		111	69 - 138
Methyl tert-butyl ether	50.0	50.9		ug/L		102	66 - 130
m-Xylene & p-Xylene	50.0	54.2		ug/L		108	70 - 130
Naphthalene	50.0	49.9		ug/L		100	47 - 149
n-Butylbenzene	50.0	55.4		ug/L		111	67 - 130
N-Propylbenzene	50.0	54.1		ug/L		108	70 - 130
o-Chlorotoluene	50.0	51.9		ug/L		104	70 - 130
o-Xylene	50.0	54.1		ug/L		108	70 - 130
p-Chlorotoluene	50.0	53.0		ug/L		106	70 - 130

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

Lab Sample ID: LCS 400-487162/1002
Matrix: Water
Analysis Batch: 487162

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	54.7		ug/L		109	65 - 130
sec-Butylbenzene	50.0	55.0		ug/L		110	66 - 130
Styrene	50.0	53.0		ug/L		106	70 - 130
tert-Butylbenzene	50.0	53.4		ug/L		107	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/L		102	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.6		ug/L		101	70 - 131
Tetrachloroethene	50.0	51.7		ug/L		103	65 - 130
Toluene	50.0	52.9		ug/L		106	70 - 130
trans-1,2-Dichloroethene	50.0	53.1		ug/L		106	70 - 130
trans-1,3-Dichloropropene	50.0	55.8		ug/L		112	63 - 130
1,2,3-Trichlorobenzene	50.0	52.4		ug/L		105	60 - 138
1,2,4-Trichlorobenzene	50.0	54.0		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	52.8		ug/L		106	68 - 130
1,1,2-Trichloroethane	50.0	51.9		ug/L		104	70 - 130
Trichloroethene	50.0	52.7		ug/L		105	70 - 130
Trichlorofluoromethane	50.0	47.1		ug/L		94	65 - 138
1,2,3-Trichloropropane	50.0	50.4		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	53.6		ug/L		107	70 - 130
1,3,5-Trimethylbenzene	50.0	53.7		ug/L		107	69 - 130
Vinyl acetate	100	105		ug/L		105	26 - 160
Vinyl chloride	50.0	49.0		ug/L		98	59 - 136
Xylenes, Total	100	108		ug/L		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*97*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzenethiol	ND		10	1.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzoic acid	ND		30	7.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzyl alcohol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/21/20 16:04	04/24/20 14:34	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/21/20 16:04	04/24/20 14:34	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloroaniline	ND		10	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chlorophenol	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenzofuran	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Diethyl phthalate	ND		10	0.70	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/21/20 16:04	04/24/20 14:34	1
1,4-Dioxane	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachloroethane	ND		10	4.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Indene	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Isophorone	ND		10	0.57	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Methylphenol	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitroaniline	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
3-Nitroaniline	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitroaniline	ND		10	2.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Nitrobenzene	ND		10	0.55	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitrophenol	ND		10	0.65	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitrophenol	ND		10	2.1	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Phenol	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pyridine	ND		10	3.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Quinoline	ND		10	6.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Phenol-d5	*42*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Terphenyl-d14	*85*		*53 - 125*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*04/21/20 16:04*	*04/24/20 14:34*	*1*

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	14.0		ug/L		47	29 - 120
Benzoic acid	116	74.2		ug/L		64	10 - 150
Benzyl alcohol	30.0	17.1		ug/L		57	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.4		ug/L		55	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	11.7		ug/L		39	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.6		ug/L		62	48 - 150
4-Bromophenyl phenyl ether	30.0	23.6		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	18.2		ug/L		61	46 - 145
4-Chloroaniline	30.0	15.2		ug/L		51	30 - 120
4-Chloro-3-methylphenol	30.0	20.7		ug/L		69	39 - 140
2-Chloronaphthalene	30.0	19.3		ug/L		64	52 - 120
2-Chlorophenol	30.0	15.9		ug/L		53	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.4		ug/L		71	58 - 124
Dibenz[a,h]acridine	29.6	13.9		ug/L		47	46 - 149
Dibenzofuran	30.0	19.9		ug/L		66	58 - 123
3,3'-Dichlorobenzidine	40.0	37.3		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.9		ug/L		73	39 - 128
Diethyl phthalate	30.0	20.9		ug/L		70	44 - 146
2,4-Dimethylphenol	30.0	20.3		ug/L		68	44 - 120
Dimethyl phthalate	30.0	21.4		ug/L		71	50 - 131
Di-n-butyl phthalate	30.0	17.6		ug/L		59	55 - 131
4,6-Dinitro-ortho-cresol	60.0	36.5		ug/L		61	10 - 150
2,4-Dinitrophenol	60.0	45.3		ug/L		76	10 - 150
2,4-Dinitrotoluene	30.0	21.1		ug/L		70	58 - 140
2,6-Dinitrotoluene	30.0	23.0		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	11.5		ug/L		38	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.7		ug/L		52	47 - 123
Hexachlorobenzene	30.0	23.8		ug/L		79	52 - 131
Hexachlorocyclopentadiene	30.0	7.15	J	ug/L		24	10 - 129
Hexachloroethane	30.0	11.4		ug/L		38	20 - 120
Indene	30.0	16.2		ug/L		54	47 - 120
Isophorone	30.0	17.3		ug/L		58	49 - 120
2-Methylphenol	30.0	17.0		ug/L		57	39 - 123
3 & 4 Methylphenol	30.0	16.8	J	ug/L		56	38 - 121
2-Nitroaniline	30.0	17.5		ug/L		58	47 - 150
3-Nitroaniline	30.0	15.6		ug/L		52	34 - 132
4-Nitroaniline	30.0	15.2		ug/L		51	41 - 135
Nitrobenzene	30.0	16.9		ug/L		56	47 - 120
2-Nitrophenol	30.0	17.0		ug/L		57	28 - 136
4-Nitrophenol	60.0	35.2		ug/L		59	10 - 150
N-Nitrosodimethylamine	30.0	15.4		ug/L		51	22 - 148
N-Nitrosodi-n-propylamine	30.0	15.6		ug/L		52	44 - 120
N-Nitrosodiphenylamine	29.8	20.9		ug/L		70	56 - 120
Pentachlorophenol	60.0	43.5		ug/L		73	15 - 141
Phenol	30.0	13.7		ug/L		46	33 - 120
Pyridine	60.0	23.5		ug/L		39	26 - 120

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	16.3		ug/L		55	51 - 129
2,4,5-Trichlorophenol	30.0	22.6		ug/L		75	38 - 147
2,4,6-Trichlorophenol	30.0	23.0		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*29*		*10 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*
2,4,6-Tribromophenol	*86*		*15 - 135*

Lab Sample ID: LCS 400-486588/4-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*66*		*34 - 120*
Nitrobenzene-d5	*18*	*X*	*27 - 120*
Terphenyl-d14	*81*		*53 - 125*

Lab Sample ID: LCSD 400-486588/5-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	3.05	J *1	ug/L		10	10 - 120	129	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
Nitrobenzene-d5	*50*		*27 - 120*
Terphenyl-d14	*72*		*53 - 125*

Lab Sample ID: MB 400-487115/1-A
Matrix: Water
Analysis Batch: 487529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzenethiol	ND		10	1.7	ug/L		04/27/20 11:03	04/30/20 16:20	1

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

Lab Sample ID: MB 400-487115/1-A
Matrix: Water
Analysis Batch: 487699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/27/20 11:03	05/01/20 15:38	1
Benzoic acid	ND		30	7.3	ug/L		04/27/20 11:03	05/01/20 15:38	1
Benzyl alcohol	ND		10	2.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/27/20 11:03	05/01/20 15:38	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/27/20 11:03	05/01/20 15:38	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/27/20 11:03	05/01/20 15:38	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/27/20 11:03	05/01/20 15:38	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Chloroaniline	ND		10	3.4	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/27/20 11:03	05/01/20 15:38	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/27/20 11:03	05/01/20 15:38	1
2-Chlorophenol	ND		10	2.2	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Dibenzofuran	ND		10	0.52	ug/L		04/27/20 11:03	05/01/20 15:38	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Diethyl phthalate	ND		10	0.70	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/27/20 11:03	05/01/20 15:38	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/27/20 11:03	05/01/20 15:38	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/27/20 11:03	05/01/20 15:38	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/27/20 11:03	05/01/20 15:38	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/27/20 11:03	05/01/20 15:38	1
1,4-Dioxane	ND		10	1.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/27/20 11:03	05/01/20 15:38	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/27/20 11:03	05/01/20 15:38	1
Hexachloroethane	ND		10	4.2	ug/L		04/27/20 11:03	05/01/20 15:38	1
Indene	ND		10	1.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
Isophorone	ND		10	0.57	ug/L		04/27/20 11:03	05/01/20 15:38	1
2-Methylphenol	ND		10	1.8	ug/L		04/27/20 11:03	05/01/20 15:38	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
2-Nitroaniline	ND		10	2.2	ug/L		04/27/20 11:03	05/01/20 15:38	1
3-Nitroaniline	ND		10	1.8	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Nitroaniline	ND		10	2.5	ug/L		04/27/20 11:03	05/01/20 15:38	1
Nitrobenzene	ND		10	0.55	ug/L		04/27/20 11:03	05/01/20 15:38	1
2-Nitrophenol	ND		10	0.65	ug/L		04/27/20 11:03	05/01/20 15:38	1
4-Nitrophenol	ND		10	2.1	ug/L		04/27/20 11:03	05/01/20 15:38	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/27/20 11:03	05/01/20 15:38	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/27/20 11:03	05/01/20 15:38	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/27/20 11:03	05/01/20 15:38	1
Pentachlorophenol	ND		20	1.8	ug/L		04/27/20 11:03	05/01/20 15:38	1
Phenol	ND		10	2.6	ug/L		04/27/20 11:03	05/01/20 15:38	1
Pyridine	ND		10	3.2	ug/L		04/27/20 11:03	05/01/20 15:38	1

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

Lab Sample ID: MB 400-487115/1-A
Matrix: Water
Analysis Batch: 487699

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487115

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Quinoline	ND		10	6.0	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/27/20 11:03	05/01/20 15:38	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/27/20 11:03	05/01/20 15:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*96*		*34 - 120*	*04/27/20 11:03*	*05/01/20 15:38*	*1*
2-Fluorophenol	*39*		*10 - 120*	*04/27/20 11:03*	*05/01/20 15:38*	*1*
Nitrobenzene-d5	*84*		*27 - 120*	*04/27/20 11:03*	*05/01/20 15:38*	*1*
Phenol-d5	*65*		*10 - 120*	*04/27/20 11:03*	*05/01/20 15:38*	*1*
Terphenyl-d14	*97*		*53 - 125*	*04/27/20 11:03*	*05/01/20 15:38*	*1*
2,4,6-Tribromophenol	*85*		*15 - 135*	*04/27/20 11:03*	*05/01/20 15:38*	*1*

Lab Sample ID: LCS 400-487115/25-A
Matrix: Water
Analysis Batch: 487529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		3	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*54*		*34 - 120*
2-Fluorophenol	*20*		*10 - 120*
Nitrobenzene-d5	*85*		*27 - 120*
Phenol-d5	*47*		*10 - 120*
Terphenyl-d14	*76*		*53 - 125*
2,4,6-Tribromophenol	*56*		*15 - 135*

Lab Sample ID: LCS 400-487115/2-A
Matrix: Water
Analysis Batch: 487699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.5		ug/L		82	29 - 120
Benzoic acid	116	86.3		ug/L		74	10 - 150
Benzyl alcohol	30.0	27.7		ug/L		92	19 - 125
Bis(2-chloroethoxy)methane	30.0	25.9		ug/L		86	45 - 120
Bis(2-chloroethyl)ether	30.0	29.9		ug/L		100	48 - 120
bis (2-chloroisopropyl) ether	30.0	22.7		ug/L		76	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	25.1		ug/L		84	48 - 150
4-Bromophenyl phenyl ether	30.0	22.0		ug/L		73	55 - 122
Butyl benzyl phthalate	30.0	24.7		ug/L		82	46 - 145
4-Chloroaniline	30.0	19.0		ug/L		63	30 - 120
4-Chloro-3-methylphenol	30.0	26.4		ug/L		88	39 - 140
2-Chloronaphthalene	30.0	24.8		ug/L		83	52 - 120
2-Chlorophenol	30.0	21.1		ug/L		70	34 - 120
4-Chlorophenyl phenyl ether	30.0	23.3		ug/L		78	58 - 124
Dibenz[a,h]acridine	29.6	11.9	*	ug/L		40	46 - 149
Dibenzofuran	30.0	24.8		ug/L		83	58 - 123

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

Lab Sample ID: LCS 400-487115/2-A
Matrix: Water
Analysis Batch: 487699

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487115

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
3,3'-Dichlorobenzidine	60.0	49.2		ug/L		82	39 - 135
2,4-Dichlorophenol	30.0	26.0		ug/L		87	39 - 128
Diethyl phthalate	30.0	32.8		ug/L		109	44 - 146
2,4-Dimethylphenol	30.0	28.0		ug/L		93	44 - 120
Dimethyl phthalate	30.0	30.3		ug/L		101	50 - 131
Di-n-butyl phthalate	30.0	27.1		ug/L		90	55 - 131
4,6-Dinitro-ortho-cresol	60.0	71.1		ug/L		118	10 - 150
2,4-Dinitrophenol	60.0	76.1		ug/L		127	10 - 150
2,4-Dinitrotoluene	30.0	33.4		ug/L		111	58 - 140
2,6-Dinitrotoluene	30.0	31.3		ug/L		104	57 - 130
Di-n-octyl phthalate	30.0	25.7		ug/L		86	50 - 150
1,4-Dioxane	30.0	16.6		ug/L		55	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	21.5		ug/L		72	47 - 123
Hexachlorobenzene	30.0	22.1		ug/L		74	52 - 131
Hexachlorocyclopentadiene	30.0	11.6	J	ug/L		39	10 - 129
Hexachloroethane	30.0	17.7		ug/L		59	20 - 120
Indene	30.0	26.4		ug/L		88	47 - 120
Isophorone	30.0	25.6		ug/L		85	49 - 120
2-Methylphenol	30.0	25.4		ug/L		85	39 - 123
3 & 4 Methylphenol	30.0	25.4		ug/L		85	38 - 121
2-Nitroaniline	30.0	29.2		ug/L		97	47 - 150
3-Nitroaniline	30.0	22.8		ug/L		76	34 - 132
4-Nitroaniline	30.0	30.0		ug/L		100	41 - 135
Nitrobenzene	30.0	25.6		ug/L		85	47 - 120
2-Nitrophenol	30.0	27.6		ug/L		92	28 - 136
4-Nitrophenol	60.0	69.0		ug/L		115	10 - 150
N-Nitrosodimethylamine	30.0	24.4		ug/L		81	22 - 148
N-Nitrosodi-n-propylamine	30.0	28.8		ug/L		96	44 - 120
N-Nitrosodiphenylamine	29.8	26.9		ug/L		90	56 - 120
Pentachlorophenol	60.0	63.2		ug/L		105	15 - 141
Phenol	30.0	21.0		ug/L		70	33 - 120
Pyridine	60.0	36.1		ug/L		60	26 - 120
Quinoline	29.6	24.1		ug/L		81	51 - 129
2,4,5-Trichlorophenol	30.0	30.4		ug/L		101	38 - 147
2,4,6-Trichlorophenol	30.0	31.0		ug/L		103	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*94*		*34 - 120*
2-Fluorophenol	*37*		*10 - 120*
Nitrobenzene-d5	*86*		*27 - 120*
Phenol-d5	*64*		*10 - 120*
Terphenyl-d14	*99*		*53 - 125*
2,4,6-Tribromophenol	*104*		*15 - 135*

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

Lab Sample ID: LCSD 400-487115/26-A
Matrix: Water
Analysis Batch: 487529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487115

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		4	10 - 120	8	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*44*		*34 - 120*
2-Fluorophenol	*17*		*10 - 120*
Nitrobenzene-d5	*51*		*27 - 120*
Phenol-d5	*42*		*10 - 120*
Terphenyl-d14	*61*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/21/20 16:04	04/24/20 12:28	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 12:28	1
Anthracene	ND		0.20	0.031	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/21/20 16:04	04/24/20 12:28	1
Chrysene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 12:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 12:28	1
Phenanthrene	ND		0.20	0.036	ug/L		04/21/20 16:04	04/24/20 12:28	1
Pyrene	ND		0.20	0.040	ug/L		04/21/20 16:04	04/24/20 12:28	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/21/20 16:04	04/24/20 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*04/21/20 16:04*	*04/24/20 12:28*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	29.4		ug/L		98	41 - 120
Acenaphthylene	30.0	28.5		ug/L		95	44 - 120
Anthracene	30.0	29.1		ug/L		97	49 - 120

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	30.0	31.1		ug/L		104	61 - 135
Benzo[a]pyrene	30.0	30.1		ug/L		100	52 - 120
Benzo[b]fluoranthene	30.0	32.0		ug/L		107	53 - 134
Benzo[g,h,i]perylene	30.0	21.9		ug/L		73	47 - 133
Benzo[k]fluoranthene	30.0	32.5		ug/L		108	57 - 134
Chrysene	30.0	32.4		ug/L		108	55 - 122
Dibenz(a,h)anthracene	30.0	22.9		ug/L		76	48 - 146
Fluoranthene	30.0	31.4		ug/L		105	54 - 128
Fluorene	30.0	30.0		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.5		ug/L		75	43 - 142
Phenanthrene	30.0	27.7		ug/L		92	48 - 120
Pyrene	30.0	30.9		ug/L		103	48 - 132
1-Methylnaphthalene	30.0	25.0		ug/L		83	41 - 120
2-Methylnaphthalene	30.0	26.8		ug/L		89	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*103*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*91*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487102/1-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487102

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/27/20 09:51	04/27/20 15:00	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/27/20 09:51	04/27/20 15:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*04/27/20 09:51*	*04/27/20 15:00*	*1*

Lab Sample ID: LCS 400-487102/2-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487102

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.167	*	ug/L		166	60 - 140
1,2-Dibromoethane	0.101	0.133		ug/L		132	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: LCSD 400-487102/3-A
Matrix: Water
Analysis Batch: 487173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487102

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.162	*	ug/L		161	60 - 140	3	30
1,2-Dibromoethane			0.101	0.130		ug/L		129	60 - 140	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*104*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1364589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL

☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES

☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	**GSAP Project ID**
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES DATE: 4/15/20

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LEG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA | State: IL

AECOM Project / Task Number: Roxana Quarterly GW | 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): TJ. Burleson, TJ. Howell

LAB USE ONLY

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDO DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 | UNIT COST 60619901 - 1.03.0022

400-186792 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-Rox-041520-8260	4/15/20	0000	Water	2					2	X			
	TB-Rox-041520-8011		0000		2					2			X	
	MW22-Rox-041520		0835		6			2		8	X	X	X	X
	Rox4P26-Rox-041520-EDX		0900		6			2		8	X	X	X	X
	Rox4P26-Rox-041520		0945		6			2		8	X	X	X	X
	Rox4P26-Rox-041520-DUP		0945		6			2		8	X	X	X	X
	Rox4P26-Rox-041520		1130		6			2		8	X	X	X	X
										4/15/20				

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
	Fedex: 1352 9706 1096, 1352 9706 1085	4/15/20	1400
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Received by: (Signature)	Date	Time
		4-16-20	8:55

Version: 14Dec15

Custody Seal #: 1142205, 1142207
1142204, 1142206

0.0°C, 0.9°C IR9

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5/6/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186792-1

Login Number: 186792
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.9°C IR-9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-186792-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186850-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/19/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041620-8260	TB-ROX-041620-8011
MW28-ROX-041620	ROST4PZE-ROX-041620

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 the benzenethiol LCS recovery and LCS/LCSD RPD were outside evaluation criteria. The SVOC surrogate recovery for nitrobenzene-d_5 was outside criteria in the laboratory control sample. VOCs and several PAHs in sample ROST4PZE-ROX-041620 were diluted due to the nature of the sample matrix. The continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low; and fluoranthene was outside acceptance criteria, biased high. 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 400-486588/4-A/5-A	SVOCs	Benzenethiol	**2**/10	**129**	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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
MW28-ROX-041620	SVOCs	Benzenethiol	**UJ**
ROST4PZE-ROX-041620	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
LCS 400-486588/4-A	SVOCs	Nitrobenzene-d_5	**18**	27-120

Laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

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 hexachlorocyclopentadiene was outside acceptance criteria, biased low; and fluoranthene was outside acceptance criteria, biased high. These are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
MW28-ROX-041620	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZE-ROX-041620	SVOCs	Hexachlorocyclopentadiene	**UJ**
ROST4PZE-ROX-041620	PAHs	Fluoranthene	**J**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186850-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
4/29/2020 2:53:38 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/19/20
MK

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186850-1

Job ID: 400-186850-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186850-1

Comments
No additional comments.

Receipt
The samples were received on 4/17/2020 8:56 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

GC/MS VOA
Method 8260B: The following sample was diluted to bring the concentration of target analytes within the calibration range: ROST4PZE-ROX-041620 (400-186850-4). Elevated reporting limits (RLs) are provided.

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-041620-8260 (400-186850-1), MW28-ROX-041620 (400-186850-3) and ROST4PZE-ROX-041620 (400-186850-4). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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 400-486588 and analytical batch 400-486937 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 400-486588 and analytical batch 400-486937 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered above the upper control limit for Hexachlorobenzene, 2,4-Dichlorophenol and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: 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: (LCS 400-486588/4-A). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486926 recovered above the upper control limit for Benzo[k]fluoranthene, Fluoranthene, Fluorene and 1-Methylnaphthalene. The samples associated with this CCV were non-detects and/or recovered below the reporting limit (RL) for the affected analytes; therefore, the data have been reported.

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

GC Semi VOA
Method 8011: The continuing calibration verification (CCV) associated with batch 400-487261 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

Job ID: 400-186850-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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

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

Sample Summary

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

Job ID: 400-186850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186850-1	TB-ROX-041620-8260	Water	04/16/20 00:00	04/17/20 08:56	
400-186850-2	TB-ROX-041620-8011	Water	04/16/20 00:00	04/17/20 08:56	
400-186850-3	MW28-ROX-041620	Water	04/16/20 09:55	04/17/20 08:56	
400-186850-4	ROST4PZE-ROX-041620	Water	04/16/20 10:50	04/17/20 08:56	

Detection Summary

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

Job ID: 400-186850-1

Client Sample ID: TB-ROX-041620-8260 — Lab Sample ID: 400-186850-1

No Detections.

Client Sample ID: TB-ROX-041620-8011 — Lab Sample ID: 400-186850-2

No Detections.

Client Sample ID: MW28-ROX-041620 — Lab Sample ID: 400-186850-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	12		1.0	0.38	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	0.95	J	1.0	0.53	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	50		1.0	0.74	ug/L	1		8260B	Total/NA
sec-Butylbenzene	1.1		1.0	0.70	ug/L	1		8260B	Total/NA

Client Sample ID: ROST4PZE-ROX-041620 — Lab Sample ID: 400-186850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	88		5.0	1.9	ug/L	5		8260B	Total/NA
Carbon disulfide	2.5	J	5.0	2.5	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	3.9	J	5.0	2.5	ug/L	5		8260B	Total/NA
Ethylbenzene	430		5.0	2.5	ug/L	5		8260B	Total/NA
Isopropylbenzene	16		5.0	2.7	ug/L	5		8260B	Total/NA
m-Xylene & p-Xylene	470		25	8.0	ug/L	5		8260B	Total/NA
Naphthalene	140		5.0	5.0	ug/L	5		8260B	Total/NA
N-Propylbenzene	25		5.0	3.5	ug/L	5		8260B	Total/NA
o-Xylene	74		25	3.0	ug/L	5		8260B	Total/NA
Toluene	40		5.0	2.1	ug/L	5		8260B	Total/NA
1,2,4-Trimethylbenzene	180		5.0	4.1	ug/L	5		8260B	Total/NA
1,3,5-Trimethylbenzene	28		5.0	2.8	ug/L	5		8260B	Total/NA
Xylenes, Total	550		50	8.0	ug/L	5		8260B	Total/NA
Acenaphthene	2.2		0.19	0.031	ug/L	1		8270D LL	Total/NA
Anthracene	1.0		0.19	0.030	ug/L	1		8270D LL	Total/NA
Fluoranthene	0.12	J	0.19	0.066	ug/L	1		8270D LL	Total/NA
Phenanthrene	7.0		0.19	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.39		0.19	0.039	ug/L	1		8270D LL	Total/NA
Fluorene - DL	2.3		0.97	0.53	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene - DL	76		0.97	0.36	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene - DL	90		0.97	0.29	ug/L	5		8270D LL	Total/NA
Dibenzofuran	2.3	J	9.7	0.50	ug/L	1		8270D	Total/NA
Indene	6.4	J	9.7	0.97	ug/L	1		8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-041620-8260
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-1
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			04/26/20 12:52	1
Acrolein	ND		20	10	ug/L			04/26/20 12:52	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 12:52	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 12:52	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 12:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 12:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 12:52	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 12:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 12:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 12:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 12:52	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 12:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 12:52	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 12:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 12:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 12:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 12:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 12:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 12:52	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 12:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 12:52	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 12:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 12:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 12:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 12:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 12:52	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 12:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 12:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 12:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 12:52	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 12:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 12:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 12:52	1

Client Sample ID: TB-ROX-041620-8260
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-1
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			04/26/20 12:52	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 12:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 12:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 12:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 12:52	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 12:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 12:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 12:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 12:52	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 12:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 12:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 12:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 12:52	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 12:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 12:52	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/26/20 12:52*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/26/20 12:52*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/26/20 12:52*	*1*

Client Sample ID: TB-ROX-041620-8011
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-2
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		0.029	0.0052	ug/L		04/28/20 11:02	04/28/20 15:16	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*04/28/20 11:02*	*04/28/20 15:16*	*1*

Client Sample ID: MW28-ROX-041620
Date Collected: 04/16/20 09:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-3
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			04/26/20 13:13	1
Acrolein	ND		20	10	ug/L			04/26/20 13:13	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 13:13	1
Benzene	**12**		1.0	0.38	ug/L			04/26/20 13:13	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 13:13	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 13:13	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 13:13	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 13:13	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 13:13	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 13:13	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 13:13	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 13:13	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 13:13	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 13:13	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.50	ug/L			04/26/20 13:13	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 13:13	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 13:13	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 13:13	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 13:13	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 13:13	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 13:13	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 13:13	1
Isopropylbenzene	**0.95**	J	1.0	0.53	ug/L			04/26/20 13:13	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 13:13	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 13:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 13:13	1
Methyl tert-butyl ether	**50**		1.0	0.74	ug/L			04/26/20 13:13	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 13:13	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 13:13	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 13:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 13:13	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 13:13	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 13:13	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 13:13	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 13:13	1

Client Sample ID: MW28-ROX-041620
Date Collected: 04/16/20 09:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**1.1**		1.0	0.70	ug/L			04/26/20 13:13	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 13:13	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 13:13	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 13:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 13:13	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 13:13	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 13:13	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 13:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 13:13	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 13:13	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 13:13	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 13:13	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 13:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 13:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 13:13	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 13:13	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 13:13	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/26/20 13:13*	*1*
Dibromofluoromethane	*94*		*81 - 121*		*04/26/20 13:13*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/26/20 13:13*	*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		04/22/20 08:21	04/24/20 18:20	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 18:20	1
Anthracene	ND		0.20	0.031	ug/L		04/22/20 08:21	04/24/20 18:20	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/22/20 08:21	04/24/20 18:20	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/22/20 08:21	04/24/20 18:20	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/22/20 08:21	04/24/20 18:20	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:21	04/24/20 18:20	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/22/20 08:21	04/24/20 18:20	1
Chrysene	ND		0.20	0.074	ug/L		04/22/20 08:21	04/24/20 18:20	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/22/20 08:21	04/24/20 18:20	1
Fluoranthene	ND		0.20	0.068	ug/L		04/22/20 08:21	04/24/20 18:20	1
Fluorene	ND		0.20	0.11	ug/L		04/22/20 08:21	04/24/20 18:20	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:21	04/24/20 18:20	1
Phenanthrene	ND		0.20	0.036	ug/L		04/22/20 08:21	04/24/20 18:20	1
Pyrene	ND		0.20	0.040	ug/L		04/22/20 08:21	04/24/20 18:20	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/22/20 08:21	04/24/20 18:20	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/22/20 08:21	04/24/20 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 138*	*04/22/20 08:21*	*04/24/20 18:20*	*1*
2-Fluorobiphenyl	*72*		*15 - 122*	*04/22/20 08:21*	*04/24/20 18:20*	*1*

Client Sample ID: MW28-ROX-041620
Date Collected: 04/16/20 09:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	95		19 - 130	04/22/20 08:21	04/24/20 18:20	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		04/22/20 08:21	04/24/20 21:18	1
Benzenethiol	ND	**1 UJ	10	1.7	ug/L		04/22/20 08:21	04/24/20 21:18	1
Benzoic acid	ND		30	7.3	ug/L		04/22/20 08:21	04/24/20 21:18	1
Benzyl alcohol	ND		10	2.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/22/20 08:21	04/24/20 21:18	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/22/20 08:21	04/24/20 21:18	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/22/20 08:21	04/24/20 21:18	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/22/20 08:21	04/24/20 21:18	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Chloroaniline	ND		10	3.4	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/22/20 08:21	04/24/20 21:18	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/22/20 08:21	04/24/20 21:18	1
2-Chlorophenol	ND		10	2.2	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Dibenzofuran	ND		10	0.52	ug/L		04/22/20 08:21	04/24/20 21:18	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Diethyl phthalate	ND		10	0.70	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/22/20 08:21	04/24/20 21:18	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/22/20 08:21	04/24/20 21:18	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/22/20 08:21	04/24/20 21:18	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/22/20 08:21	04/24/20 21:18	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/22/20 08:21	04/24/20 21:18	1
1,4-Dioxane	ND		10	1.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/22/20 08:21	04/24/20 21:18	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		04/22/20 08:21	04/24/20 21:18	1
Hexachloroethane	ND		10	4.2	ug/L		04/22/20 08:21	04/24/20 21:18	1
Indene	ND		10	1.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
Isophorone	ND		10	0.57	ug/L		04/22/20 08:21	04/24/20 21:18	1
2-Methylphenol	ND		10	1.8	ug/L		04/22/20 08:21	04/24/20 21:18	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
2-Nitroaniline	ND		10	2.2	ug/L		04/22/20 08:21	04/24/20 21:18	1
3-Nitroaniline	ND		10	1.8	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Nitroaniline	ND		10	2.5	ug/L		04/22/20 08:21	04/24/20 21:18	1
Nitrobenzene	ND		10	0.55	ug/L		04/22/20 08:21	04/24/20 21:18	1
2-Nitrophenol	ND		10	0.65	ug/L		04/22/20 08:21	04/24/20 21:18	1
4-Nitrophenol	ND		10	2.1	ug/L		04/22/20 08:21	04/24/20 21:18	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/22/20 08:21	04/24/20 21:18	1

Client Sample ID: MW28-ROX-041620
Date Collected: 04/16/20 09:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-3
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		04/22/20 08:21	04/24/20 21:18	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/22/20 08:21	04/24/20 21:18	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:21	04/24/20 21:18	1
Phenol	ND		10	2.6	ug/L		04/22/20 08:21	04/24/20 21:18	1
Pyridine	ND		10	3.2	ug/L		04/22/20 08:21	04/24/20 21:18	1
Quinoline	ND		10	6.0	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/22/20 08:21	04/24/20 21:18	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/22/20 08:21	04/24/20 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*92*		*34 - 120*	*04/22/20 08:21*	*04/24/20 21:18*	*1*
2-Fluorophenol	*17*		*10 - 120*	*04/22/20 08:21*	*04/24/20 21:18*	*1*
Nitrobenzene-d5	*86*		*27 - 120*	*04/22/20 08:21*	*04/24/20 21:18*	*1*
Phenol-d5	*46*		*10 - 120*	*04/22/20 08:21*	*04/24/20 21:18*	*1*
Terphenyl-d14	*114*		*53 - 125*	*04/22/20 08:21*	*04/24/20 21:18*	*1*
2,4,6-Tribromophenol	*113*		*15 - 135*	*04/22/20 08:21*	*04/24/20 21:18*	*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	0.0054	ug/L		04/28/20 11:02	04/28/20 15:36	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/28/20 11:02	04/28/20 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*04/28/20 11:02*	*04/28/20 15:36*	*1*

Client Sample ID: ROST4PZE-ROX-041620
Date Collected: 04/16/20 10:50
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-4
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			04/26/20 14:54	5
Acrolein	ND		100	50	ug/L			04/26/20 14:54	5
Acrylonitrile	ND		50	14	ug/L			04/26/20 14:54	5
Benzene	**88**		5.0	1.9	ug/L			04/26/20 14:54	5
Bromobenzene	ND		5.0	2.7	ug/L			04/26/20 14:54	5
Bromochloromethane	ND		5.0	2.6	ug/L			04/26/20 14:54	5
Bromodichloromethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Bromoform	ND		25	3.6	ug/L			04/26/20 14:54	5
Bromomethane	ND		5.0	4.9	ug/L			04/26/20 14:54	5
2-Butanone (MEK)	ND		130	13	ug/L			04/26/20 14:54	5
Carbon disulfide	**2.5**	J	5.0	2.5	ug/L			04/26/20 14:54	5
Carbon tetrachloride	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Chlorobenzene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Dibromochloromethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Chloroethane	ND		5.0	3.8	ug/L			04/26/20 14:54	5
2-Chloroethyl vinyl ether	ND		25	10	ug/L			04/26/20 14:54	5
Chloroform	ND		5.0	3.0	ug/L			04/26/20 14:54	5
1-Chlorohexane	ND		5.0	3.5	ug/L			04/26/20 14:54	5
Chloromethane	ND		5.0	4.2	ug/L			04/26/20 14:54	5
cis-1,2-Dichloroethene	**3.9**	J	5.0	2.5	ug/L			04/26/20 14:54	5
cis-1,3-Dichloropropene	ND		25	2.5	ug/L			04/26/20 14:54	5
1,2-Dichlorobenzene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,3-Dichlorobenzene	ND		5.0	2.7	ug/L			04/26/20 14:54	5
1,4-Dichlorobenzene	ND		5.0	3.2	ug/L			04/26/20 14:54	5
Dichlorodifluoromethane	ND		5.0	4.3	ug/L			04/26/20 14:54	5
1,1-Dichloroethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,2-Dichloroethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,1-Dichloroethene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,2-Dichloropropane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,3-Dichloropropane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
2,2-Dichloropropane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,1-Dichloropropene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Ethylbenzene	**430**		5.0	2.5	ug/L			04/26/20 14:54	5
Ethyl methacrylate	ND		5.0	3.0	ug/L			04/26/20 14:54	5
Hexachlorobutadiene	ND		25	4.5	ug/L			04/26/20 14:54	5
2-Hexanone	ND		130	16	ug/L			04/26/20 14:54	5
Isopropylbenzene	**16**		5.0	2.7	ug/L			04/26/20 14:54	5
Methylene bromide	ND		25	3.0	ug/L			04/26/20 14:54	5
Methylene Chloride	ND		25	15	ug/L			04/26/20 14:54	5
4-Methyl-2-pentanone (MIBK)	ND		130	9.0	ug/L			04/26/20 14:54	5
Methyl tert-butyl ether	ND		5.0	3.7	ug/L			04/26/20 14:54	5
m-Xylene & p-Xylene	**470**		25	8.0	ug/L			04/26/20 14:54	5
Naphthalene	**140**		5.0	5.0	ug/L			04/26/20 14:54	5
n-Butylbenzene	ND		5.0	3.8	ug/L			04/26/20 14:54	5
N-Propylbenzene	**25**		5.0	3.5	ug/L			04/26/20 14:54	5
o-Chlorotoluene	ND		5.0	2.9	ug/L			04/26/20 14:54	5
o-Xylene	**74**		25	3.0	ug/L			04/26/20 14:54	5
p-Chlorotoluene	ND		5.0	2.8	ug/L			04/26/20 14:54	5
p-Isopropyltoluene	ND		5.0	3.6	ug/L			04/26/20 14:54	5

Client Sample ID: ROST4PZE-ROX-041620
Date Collected: 04/16/20 10:50
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		5.0	3.5	ug/L			04/26/20 14:54	5
Styrene	ND		5.0	5.0	ug/L			04/26/20 14:54	5
tert-Butylbenzene	ND		5.0	3.2	ug/L			04/26/20 14:54	5
1,1,1,2-Tetrachloroethane	ND		5.0	2.6	ug/L			04/26/20 14:54	5
1,1,2,2-Tetrachloroethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Tetrachloroethene	ND		5.0	2.9	ug/L			04/26/20 14:54	5
Toluene	**40**		5.0	2.1	ug/L			04/26/20 14:54	5
trans-1,2-Dichloroethene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
trans-1,3-Dichloropropene	ND		25	2.5	ug/L			04/26/20 14:54	5
1,2,3-Trichlorobenzene	ND		5.0	3.5	ug/L			04/26/20 14:54	5
1,2,4-Trichlorobenzene	ND		5.0	4.1	ug/L			04/26/20 14:54	5
1,1,1-Trichloroethane	ND		5.0	2.5	ug/L			04/26/20 14:54	5
1,1,2-Trichloroethane	ND		25	2.5	ug/L			04/26/20 14:54	5
Trichloroethene	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Trichlorofluoromethane	ND		5.0	2.6	ug/L			04/26/20 14:54	5
1,2,3-Trichloropropane	ND		25	4.2	ug/L			04/26/20 14:54	5
1,2,4-Trimethylbenzene	**180**		5.0	4.1	ug/L			04/26/20 14:54	5
1,3,5-Trimethylbenzene	**28**		5.0	2.8	ug/L			04/26/20 14:54	5
Vinyl acetate	ND		130	10	ug/L			04/26/20 14:54	5
Vinyl chloride	ND		5.0	2.5	ug/L			04/26/20 14:54	5
Xylenes, Total	**550**		50	8.0	ug/L			04/26/20 14:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*94*		*78 - 118*		*04/26/20 14:54*	*5*
Dibromofluoromethane	*94*		*81 - 121*		*04/26/20 14:54*	*5*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/26/20 14:54*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**2.2**		0.19	0.031	ug/L		04/22/20 08:21	04/24/20 18:38	1
Acenaphthylene	ND		0.19	0.044	ug/L		04/22/20 08:21	04/24/20 18:38	1
Anthracene	**1.0**		0.19	0.030	ug/L		04/22/20 08:21	04/24/20 18:38	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		04/22/20 08:21	04/24/20 18:38	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/22/20 08:21	04/24/20 18:38	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/22/20 08:21	04/24/20 18:38	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/22/20 08:21	04/24/20 18:38	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/22/20 08:21	04/24/20 18:38	1
Chrysene	ND		0.19	0.072	ug/L		04/22/20 08:21	04/24/20 18:38	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		04/22/20 08:21	04/24/20 18:38	1
Fluoranthene	**0.12**	J	0.19	0.066	ug/L		04/22/20 08:21	04/24/20 18:38	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/22/20 08:21	04/24/20 18:38	1
Phenanthrene	**7.0**		0.19	0.035	ug/L		04/22/20 08:21	04/24/20 18:38	1
Pyrene	**0.39**		0.19	0.039	ug/L		04/22/20 08:21	04/24/20 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*55*		*33 - 138*	*04/22/20 08:21*	*04/24/20 18:38*	*1*
2-Fluorobiphenyl	*65*		*15 - 122*	*04/22/20 08:21*	*04/24/20 18:38*	*1*
Nitrobenzene-d5	*54*		*19 - 130*	*04/22/20 08:21*	*04/24/20 18:38*	*1*

Client Sample Results

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

Job ID: 400-186850-1

Client Sample ID: ROST4PZE-ROX-041620
Date Collected: 04/16/20 10:50
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**2.3**		0.97	0.53	ug/L		04/22/20 08:21	04/27/20 16:33	5
1-Methylnaphthalene	**76**		0.97	0.36	ug/L		04/22/20 08:21	04/27/20 16:33	5
2-Methylnaphthalene	**90**		0.97	0.29	ug/L		04/22/20 08:21	04/27/20 16:33	5

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		04/22/20 08:21	04/24/20 21:40	1
Benzenethiol	ND	**1 UJ	9.7	1.6	ug/L		04/22/20 08:21	04/24/20 21:40	1
Benzoic acid	ND		29	7.1	ug/L		04/22/20 08:21	04/24/20 21:40	1
Benzyl alcohol	ND		9.7	1.9	ug/L		04/22/20 08:21	04/24/20 21:40	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/22/20 08:21	04/24/20 21:40	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		04/22/20 08:21	04/24/20 21:40	1
bis (2-chloroisopropyl) ether	ND		9.7	0.78	ug/L		04/22/20 08:21	04/24/20 21:40	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.8	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		04/22/20 08:21	04/24/20 21:40	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		04/22/20 08:21	04/24/20 21:40	1
2-Chloronaphthalene	ND		9.7	0.50	ug/L		04/22/20 08:21	04/24/20 21:40	1
2-Chlorophenol	ND		9.7	2.1	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		04/22/20 08:21	04/24/20 21:40	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		04/22/20 08:21	04/24/20 21:40	1
Dibenzofuran	**2.3**	J	9.7	0.50	ug/L		04/22/20 08:21	04/24/20 21:40	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		04/22/20 08:21	04/24/20 21:40	1
Diethyl phthalate	ND		9.7	0.68	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		04/22/20 08:21	04/24/20 21:40	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		04/22/20 08:21	04/24/20 21:40	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		04/22/20 08:21	04/24/20 21:40	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4-Dinitrotoluene	ND		9.7	1.8	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,6-Dinitrotoluene	ND		9.7	1.8	ug/L		04/22/20 08:21	04/24/20 21:40	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		04/22/20 08:21	04/24/20 21:40	1
1,4-Dioxane	ND		9.7	0.97	ug/L		04/22/20 08:21	04/24/20 21:40	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		04/22/20 08:21	04/24/20 21:40	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		04/22/20 08:21	04/24/20 21:40	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		04/22/20 08:21	04/24/20 21:40	1
Hexachloroethane	ND		9.7	4.1	ug/L		04/22/20 08:21	04/24/20 21:40	1
Indene	**6.4**	J	9.7	0.97	ug/L		04/22/20 08:21	04/24/20 21:40	1
Isophorone	ND		9.7	0.55	ug/L		04/22/20 08:21	04/24/20 21:40	1
2-Methylphenol	ND		9.7	1.7	ug/L		04/22/20 08:21	04/24/20 21:40	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/22/20 08:21	04/24/20 21:40	1
2-Nitroaniline	ND		9.7	2.1	ug/L		04/22/20 08:21	04/24/20 21:40	1
3-Nitroaniline	ND		9.7	1.7	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Nitroaniline	ND		9.7	2.4	ug/L		04/22/20 08:21	04/24/20 21:40	1
Nitrobenzene	ND		9.7	0.53	ug/L		04/22/20 08:21	04/24/20 21:40	1
2-Nitrophenol	ND		9.7	0.63	ug/L		04/22/20 08:21	04/24/20 21:40	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/22/20 08:21	04/24/20 21:40	1

Client Sample ID: ROST4PZE-ROX-041620
Date Collected: 04/16/20 10:50
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186850-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		04/22/20 08:21	04/24/20 21:40	1
N-Nitrosodi-n-propylamine	ND		9.7	3.2	ug/L		04/22/20 08:21	04/24/20 21:40	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		04/22/20 08:21	04/24/20 21:40	1
Pentachlorophenol	ND		19	1.8	ug/L		04/22/20 08:21	04/24/20 21:40	1
Phenol	ND		9.7	2.5	ug/L		04/22/20 08:21	04/24/20 21:40	1
Pyridine	ND		9.7	3.1	ug/L		04/22/20 08:21	04/24/20 21:40	1
Quinoline	ND		9.7	5.8	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		04/22/20 08:21	04/24/20 21:40	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		04/22/20 08:21	04/24/20 21:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*79*		*34 - 120*	*04/22/20 08:21*	*04/24/20 21:40*	*1*
2-Fluorophenol	*25*		*10 - 120*	*04/22/20 08:21*	*04/24/20 21:40*	*1*
Nitrobenzene-d5	*64*		*27 - 120*	*04/22/20 08:21*	*04/24/20 21:40*	*1*
Phenol-d5	*54*		*10 - 120*	*04/22/20 08:21*	*04/24/20 21:40*	*1*
Terphenyl-d14	*76*		*53 - 125*	*04/22/20 08:21*	*04/24/20 21:40*	*1*
2,4,6-Tribromophenol	*112*		*15 - 135*	*04/22/20 08:21*	*04/24/20 21:40*	*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	0.0057	ug/L		04/28/20 11:02	04/28/20 15:55	1
1,2-Dibromoethane	ND		0.021	0.0052	ug/L		04/28/20 11:02	04/28/20 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*105*		*51 - 149*	*04/28/20 11:02*	*04/28/20 15:55*	*1*

Definitions/Glossary

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

Job ID: 400-186850-1

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 or LCSD is outside acceptance limits.
*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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186850-1

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	(78-118)	(81-121)	(80-120)
400-186850-1	TB-ROX-041620-8260	96	95	103
400-186850-3	MW28-ROX-041620	96	94	101
400-186850-4	ROST4PZE-ROX-041620	94	94	102
LCS 400-487065/1002	Lab Control Sample	95	99	100
MB 400-487065/4	Method Blank	95	95	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186850-3	MW28-ROX-041620	92	17	86	46	114	113
400-186850-4	ROST4PZE-ROX-041620	79	25	64	54	76	112
LCS 400-486588/2-A	Lab Control Sample	67	29	60	46	80	86
LCS 400-486588/4-A	Lab Control Sample	66		18 X		81	
LCSD 400-486588/5-A	Lab Control Sample Dup	61		50		72	
MB 400-486588/1-A	Method Blank	70	23	59	42	85	64

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186850-3	MW28-ROX-041620	87	72	95
400-186850-4	ROST4PZE-ROX-041620	55	65	54
LCS 400-486588/2-A	Lab Control Sample	103	79	91
MB 400-486588/1-A	Method Blank	62	57	63

Surrogate Legend

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

Surrogate Summary

Client: AECOM Technical Services Inc. Job ID: 400-186850-1
Project/Site: ROXANA QUARTERLY GW

Method: 8011 - EDB and DBCP in Water by Microextraction

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

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB2 (51-149)
400-186850-2	TB-ROX-041620-8011	86
400-186850-3	MW28-ROX-041620	86
400-186850-4	ROST4PZE-ROX-041620	105
LCS 400-487253/2-A	Lab Control Sample	105
LCSD 400-487253/3-A	Lab Control Sample Dup	103
MB 400-487253/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186850-1

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 TestAmerica, 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: 400-186850-1

Client Sample ID: TB-ROX-041620-8260

Lab Sample ID: 400-186850-1

Date Collected: 04/16/20 00:00
Matrix: Water
Date Received: 04/17/20 08:56

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	487065	04/26/20 12:52	RS	TAL PEN

Client Sample ID: TB-ROX-041620-8011

Lab Sample ID: 400-186850-2

Date Collected: 04/16/20 00:00
Matrix: Water
Date Received: 04/17/20 08:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.8 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 15:16	DS	TAL PEN

Client Sample ID: MW28-ROX-041620

Lab Sample ID: 400-186850-3

Date Collected: 04/16/20 09:55
Matrix: Water
Date Received: 04/17/20 08:56

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	487065	04/26/20 13:13	RS	TAL PEN
Total/NA	Prep	3520C			994.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 21:18	VC1	TAL PEN
Total/NA	Prep	3520C			994.2 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 18:20	DS	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 15:36	DS	TAL PEN

Client Sample ID: ROST4PZE-ROX-041620

Lab Sample ID: 400-186850-4

Date Collected: 04/16/20 10:50
Matrix: Water
Date Received: 04/17/20 08:56

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	487065	04/26/20 14:54	RS	TAL PEN
Total/NA	Prep	3520C			1032.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 21:40	VC1	TAL PEN
Total/NA	Prep	3520C			1032.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 18:38	DS	TAL PEN
Total/NA	Prep	3520C	DL		1032.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL	DL	5			487148	04/27/20 16:33	PP1	TAL PEN
Total/NA	Prep	8011			33.5 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 15:55	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:34	VC1	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 12:28	DS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-487065/4
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	487065	04/26/20 09:10	RS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-487253/1-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:16	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/2-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:56	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 12:46	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/4-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-487065/1002
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	487065	04/26/20 08:17	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-186850-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-487253/2-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	8011			35 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:36	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486588/5-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487253/3-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:56	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186850-1

GC/MS VOA

Analysis Batch: 487065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-1	TB-ROX-041620-8260	Total/NA	Water	8260B	
400-186850-3	MW28-ROX-041620	Total/NA	Water	8260B	
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	8260B	
MB 400-487065/4	Method Blank	Total/NA	Water	8260B	
LCS 400-487065/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-3	MW28-ROX-041620	Total/NA	Water	3520C	
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	3520C	
400-186850-4 - DL	ROST4PZE-ROX-041620	Total/NA	Water	3520C	
MB 400-486588/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-3	MW28-ROX-041620	Total/NA	Water	8270D LL	486588
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	8270D LL	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D LL	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486588

Analysis Batch: 486937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-3	MW28-ROX-041620	Total/NA	Water	8270D	486588
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	8270D	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486588

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-4 - DL	ROST4PZE-ROX-041620	Total/NA	Water	8270D LL	486588

GC Semi VOA

Prep Batch: 487253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-2	TB-ROX-041620-8011	Total/NA	Water	8011	
400-186850-3	MW28-ROX-041620	Total/NA	Water	8011	
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	8011	
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-2	TB-ROX-041620-8011	Total/NA	Water	8011	487253

GC Semi VOA (Continued)

Analysis Batch: 487261 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186850-3	MW28-ROX-041620	Total/NA	Water	8011	487253
400-186850-4	ROST4PZE-ROX-041620	Total/NA	Water	8011	487253
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	487253
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	487253
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487253

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

Lab Sample ID: MB 400-487065/4
Matrix: Water
Analysis Batch: 487065

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			04/26/20 09:10	1
Acrolein	ND		20	10	ug/L			04/26/20 09:10	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 09:10	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 09:10	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 09:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 09:10	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 09:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 09:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 09:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 09:10	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 09:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 09:10	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 09:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 09:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 09:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 09:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 09:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 09:10	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 09:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 09:10	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 09:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 09:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 09:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 09:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 09:10	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 09:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 09:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 09:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 09:10	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 09:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 09:10	1

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

Lab Sample ID: MB 400-487065/4
Matrix: Water
Analysis Batch: 487065

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			04/26/20 09:10	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/26/20 09:10	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 09:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 09:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 09:10	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 09:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 09:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 09:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 09:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 09:10	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 09:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 09:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 09:10	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 09:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/26/20 09:10*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/26/20 09:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/26/20 09:10*	*1*

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	215		ug/L		108	43 - 160
Acrolein	500	492		ug/L		98	38 - 160
Acrylonitrile	500	528		ug/L		106	64 - 142
Benzene	50.0	52.3		ug/L		105	70 - 130
Bromobenzene	50.0	52.6		ug/L		105	70 - 132
Bromochloromethane	50.0	48.2		ug/L		96	70 - 130
Bromodichloromethane	50.0	50.2		ug/L		100	67 - 133
Bromoform	50.0	46.9		ug/L		94	57 - 140
Bromomethane	50.0	38.7		ug/L		77	10 - 160
2-Butanone (MEK)	200	214		ug/L		107	61 - 145
Carbon disulfide	50.0	55.6		ug/L		111	61 - 137
Carbon tetrachloride	50.0	49.6		ug/L		99	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Dibromochloromethane	50.0	49.5		ug/L		99	67 - 135
Chloroethane	50.0	48.9		ug/L		98	55 - 141

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

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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	39.0		ug/L		78	10 - 160
Chloroform	50.0	51.7		ug/L		103	69 - 130
1-Chlorohexane	50.0	60.9		ug/L		122	69 - 130
Chloromethane	50.0	52.5		ug/L		105	58 - 137
cis-1,2-Dichloroethene	50.0	52.8		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	54.7		ug/L		109	69 - 132
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	51.8		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	52.9		ug/L		106	41 - 146
1,1-Dichloroethane	50.0	52.8		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	57.3		ug/L		115	63 - 134
1,2-Dichloropropane	50.0	52.1		ug/L		104	70 - 130
1,3-Dichloropropane	50.0	52.3		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	52.8		ug/L		106	52 - 135
1,1-Dichloropropene	50.0	54.5		ug/L		109	70 - 130
Ethylbenzene	50.0	53.6		ug/L		107	70 - 130
Ethyl methacrylate	50.0	55.1		ug/L		110	68 - 130
Hexachlorobutadiene	50.0	57.5		ug/L		115	53 - 140
2-Hexanone	200	225		ug/L		112	65 - 137
Isopropylbenzene	50.0	53.9		ug/L		108	70 - 130
Methylene bromide	50.0	50.9		ug/L		102	70 - 130
Methylene Chloride	50.0	51.0		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	223		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	49.9		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.7		ug/L		105	70 - 130
Naphthalene	50.0	49.3		ug/L		99	47 - 149
n-Butylbenzene	50.0	54.0		ug/L		108	67 - 130
N-Propylbenzene	50.0	53.9		ug/L		108	70 - 130
o-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
o-Xylene	50.0	52.8		ug/L		106	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	54.3		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.2		ug/L		108	66 - 130
Styrene	50.0	52.1		ug/L		104	70 - 130
tert-Butylbenzene	50.0	52.3		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.9		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 131
Tetrachloroethene	50.0	51.7		ug/L		103	65 - 130
Toluene	50.0	51.2		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	56.1		ug/L		112	63 - 130
1,2,3-Trichlorobenzene	50.0	52.0		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	53.1		ug/L		106	68 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/L		105	70 - 130
Trichloroethene	50.0	55.0		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	44.0		ug/L		88	65 - 138

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

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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	51.8		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	50.0	52.6		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	50.0	52.8		ug/L		106	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	46.4		ug/L		93	59 - 136
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzenethiol	ND		10	1.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzoic acid	ND		30	7.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzyl alcohol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/21/20 16:04	04/24/20 14:34	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/21/20 16:04	04/24/20 14:34	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloroaniline	ND		10	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chlorophenol	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenzofuran	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Diethyl phthalate	ND		10	0.70	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/21/20 16:04	04/24/20 14:34	1
1,4-Dioxane	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachloroethane	ND		10	4.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Indene	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Isophorone	ND		10	0.57	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Methylphenol	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitroaniline	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
3-Nitroaniline	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitroaniline	ND		10	2.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Nitrobenzene	ND		10	0.55	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitrophenol	ND		10	0.65	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitrophenol	ND		10	2.1	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Phenol	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pyridine	ND		10	3.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Quinoline	ND		10	6.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Phenol-d5	*42*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Terphenyl-d14	*85*		*53 - 125*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*04/21/20 16:04*	*04/24/20 14:34*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	14.0		ug/L		47	29 - 120
Benzoic acid	116	74.2		ug/L		64	10 - 150
Benzyl alcohol	30.0	17.1		ug/L		57	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.4		ug/L		55	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	11.7		ug/L		39	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.6		ug/L		62	48 - 150
4-Bromophenyl phenyl ether	30.0	23.6		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	18.2		ug/L		61	46 - 145
4-Chloroaniline	30.0	15.2		ug/L		51	30 - 120
4-Chloro-3-methylphenol	30.0	20.7		ug/L		69	39 - 140

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	19.3		ug/L		64	52 - 120
2-Chlorophenol	30.0	15.9		ug/L		53	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.4		ug/L		71	58 - 124
Dibenz[a,h]acridine	29.6	13.9		ug/L		47	46 - 149
Dibenzofuran	30.0	19.9		ug/L		66	58 - 123
3,3'-Dichlorobenzidine	40.0	37.3		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.9		ug/L		73	39 - 128
Diethyl phthalate	30.0	20.9		ug/L		70	44 - 146
2,4-Dimethylphenol	30.0	20.3		ug/L		68	44 - 120
Dimethyl phthalate	30.0	21.4		ug/L		71	50 - 131
Di-n-butyl phthalate	30.0	17.6		ug/L		59	55 - 131
4,6-Dinitro-ortho-cresol	60.0	36.5		ug/L		61	10 - 150
2,4-Dinitrophenol	60.0	45.3		ug/L		76	10 - 150
2,4-Dinitrotoluene	30.0	21.1		ug/L		70	58 - 140
2,6-Dinitrotoluene	30.0	23.0		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	11.5		ug/L		38	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.7		ug/L		52	47 - 123
Hexachlorobenzene	30.0	23.8		ug/L		79	52 - 131
Hexachlorocyclopentadiene	30.0	7.15	J	ug/L		24	10 - 129
Hexachloroethane	30.0	11.4		ug/L		38	20 - 120
Indene	30.0	16.2		ug/L		54	47 - 120
Isophorone	30.0	17.3		ug/L		58	49 - 120
2-Methylphenol	30.0	17.0		ug/L		57	39 - 123
3 & 4 Methylphenol	30.0	16.8	J	ug/L		56	38 - 121
2-Nitroaniline	30.0	17.5		ug/L		58	47 - 150
3-Nitroaniline	30.0	15.6		ug/L		52	34 - 132
4-Nitroaniline	30.0	15.2		ug/L		51	41 - 135
Nitrobenzene	30.0	16.9		ug/L		56	47 - 120
2-Nitrophenol	30.0	17.0		ug/L		57	28 - 136
4-Nitrophenol	60.0	35.2		ug/L		59	10 - 150
N-Nitrosodimethylamine	30.0	15.4		ug/L		51	22 - 148
N-Nitrosodi-n-propylamine	30.0	15.6		ug/L		52	44 - 120
N-Nitrosodiphenylamine	29.8	20.9		ug/L		70	56 - 120
Pentachlorophenol	60.0	43.5		ug/L		73	15 - 141
Phenol	30.0	13.7		ug/L		46	33 - 120
Pyridine	60.0	23.5		ug/L		39	26 - 120
Quinoline	29.6	16.3		ug/L		55	51 - 129
2,4,5-Trichlorophenol	30.0	22.6		ug/L		75	38 - 147
2,4,6-Trichlorophenol	30.0	23.0		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*29*		*10 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	86		15 - 135

Lab Sample ID: LCS 400-486588/4-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	66		34 - 120
Nitrobenzene-d5	18	X	27 - 120
Terphenyl-d14	81		53 - 125

Lab Sample ID: LCSD 400-486588/5-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	3.05	J *1	ug/L		10	10 - 120	129	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	61		34 - 120
Nitrobenzene-d5	50		27 - 120
Terphenyl-d14	72		53 - 125

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/21/20 16:04	04/24/20 12:28	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 12:28	1
Anthracene	ND		0.20	0.031	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/21/20 16:04	04/24/20 12:28	1
Chrysene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 12:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 12:28	1
Phenanthrene	ND		0.20	0.036	ug/L		04/21/20 16:04	04/24/20 12:28	1
Pyrene	ND		0.20	0.040	ug/L		04/21/20 16:04	04/24/20 12:28	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/21/20 16:04	04/24/20 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*04/21/20 16:04*	*04/24/20 12:28*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	29.4		ug/L		98	41 - 120
Acenaphthylene	30.0	28.5		ug/L		95	44 - 120
Anthracene	30.0	29.1		ug/L		97	49 - 120
Benzo[a]anthracene	30.0	31.1		ug/L		104	61 - 135
Benzo[a]pyrene	30.0	30.1		ug/L		100	52 - 120
Benzo[b]fluoranthene	30.0	32.0		ug/L		107	53 - 134
Benzo[g,h,i]perylene	30.0	21.9		ug/L		73	47 - 133
Benzo[k]fluoranthene	30.0	32.5		ug/L		108	57 - 134
Chrysene	30.0	32.4		ug/L		108	55 - 122
Dibenz(a,h)anthracene	30.0	22.9		ug/L		76	48 - 146
Fluoranthene	30.0	31.4		ug/L		105	54 - 128
Fluorene	30.0	30.0		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.5		ug/L		75	43 - 142
Phenanthrene	30.0	27.7		ug/L		92	48 - 120
Pyrene	30.0	30.9		ug/L		103	48 - 132
1-Methylnaphthalene	30.0	25.0		ug/L		83	41 - 120
2-Methylnaphthalene	30.0	26.8		ug/L		89	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*103*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*91*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/28/20 11:02	04/28/20 14:16	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*04/28/20 11:02*	*04/28/20 14:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: LCS 400-487253/2-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487253

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,2-Dibromo-3-Chloropropane			0.101	0.0915		ug/L		91	60 - 140		
1,2-Dibromoethane			0.101	0.118		ug/L		117	60 - 140		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487253/3-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487253

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane			0.101	0.0980		ug/L		98	60 - 140	7	30
1,2-Dibromoethane			0.101	0.117		ug/L		116	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

LAB (LOCATION)

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other ~~Lab Vendor # 1304569 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☒ OTHER _ENV. SERVICES	

Print Bill To Contact Name: Bob Billman

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT DATE: 4/16/20

PAGE: 1

400-188650 COC

SAMPLING COMPANY: AECOM

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

REP. DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): B. Burkson, D. Havel

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

EDF / Contract E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002: VOC 8260 | SVOC 8270

UNIT COST 60619901 - 1.03.0022: VOC 8011 | PAH 8270LL

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL
	TB-ROX-041620-8260C	4/16/20	0000	Water	2					2	X			
	TB-ROX-041620-8011C		0000		2					2			X	
	MW28-ROX-041620		0955		6			2		8	X	X	X	X
	ROSTYPE-ROX-041620		1050		6			2		8	X	X	X	X

Relinquished by: (Signature) — Received by: (Print) — Date: 4/16/20 — Time: 1300

Relinquished by: (Signature) — Received by: — Date: — Time:

Relinquished by: (Signature) — Received by: — Date: — Time:

Fedex: Dep: Wgt: 10.00 LBS DV: 0.00

SHIPPING: SPECIAL: 0.00 HANDLING: 0.00 TOTAL: 0.00

Gvos: PRIORITY OVERNIGHT Master 1194 6302 0020
TRCK: 1194 6302 0031

Version: 14Dec15

custody seal #: 1099515, 1099514

4-17-20 0856
2.1°C IR-7

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4/29/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186850-1

Login Number: 186850
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

Job ID: 400-186850-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186870-1-Rev. 1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/20/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041620-8011-SS	TB-ROX-041620-8260-SS
P93C-ROX-041620	P56-ROX-041620

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 the benzenethiol LCS recovery and LCS/LCSD RPD were outside evaluation criteria. Several SVOC surrogate recoveries were outside criteria in sample P56-ROX-041620 and the laboratory control sample. These issues are addressed further in the appropriate sections of this data review. Additionally, the laboratory report was revised to include the detection summary, which was initially inadvertently omitted; no qualification of data was required.

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 400-486588/4-A/5-A	SVOCs	Benzenethiol	**2**/10	**129**	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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P93C-ROX-041620	SVOCs	Benzenethiol	**UJ**
P56-ROX-041620	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P56-ROX-041620	SVOCs	2-Fluorophenol	**0.02**	10-120
P56-ROX-041620	SVOCs	Terphenyl-d_{14}	**46**	53-125
LCS 400-486588/4-A	SVOCs	Nitrobenzene-d_5	**18**	27-120

Qualifications due to surrogate recoveries were not required if only one of three acid and/or base/neutral SVOC surrogate recoveries were outside evaluation criteria in sample P56-ROX-041620. Laboratory control samples are quality control samples and do not require qualification. No qualification of data was required.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; samples analyzed did not require dilution.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 400-186870-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/4/2020 4:37:22 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com



LINKS

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Reviewed 5/20/202
LR

The test results in this report meet all 2003 NELAC and 2009 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: 400-186870-1

Job ID: 400-186870-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186870-1

Comments
Revised Report
Report revised to correct the Detection Summary page.
Supersedes report dated 4-30-2020

Receipt
The samples were received on 4/17/2020 8:56 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.9° C.

GC/MS VOA
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-041620-8260-SS (400-186870-2), P93C-ROX-041620 (400-186870-3) and P56-ROX-041620 (400-186870-4). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

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 400-486588 and analytical batch 400-486937 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 400-486588 and analytical batch 400-486937 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: 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: (LCS 400-486588/2-A). These results have been reported and qualified.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: P56-ROX-041620 (400-186870-4). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered above the upper control limit for Hexachlorobenzene, 2,4-Dichlorophenol, Hexachlorocyclopentadiene and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486926 recovered above the upper control limit for Benzo[k]fluoranthene, Fluoranthene, Fluorene and 1-Methylnaphthalene. The samples associated with this CCV were non-detects and/or recovered below the reporting limit (RL) for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 400-486588 and analytical batch 400-486926 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.

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 400-487261 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.

Job ID: 400-186870-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

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: 400-186870-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186870-1	TB-ROX-041620-8011-SS	Water	04/16/20 00:00	04/17/20 08:56	
400-186870-2	TB-ROX-041620-8260-SS	Water	04/16/20 00:00	04/17/20 08:56	
400-186870-3	P93C-ROX-041620	Water	04/16/20 10:55	04/17/20 08:56	
400-186870-4	P56-ROX-041620	Water	04/16/20 12:20	04/17/20 08:56	

Detection Summary

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

Job ID: 400-186870-1

Client Sample ID: TB-ROX-041620-8011-SS

Lab Sample ID: 400-186870-1

No Detections.

Client Sample ID: TB-ROX-041620-8260-SS

Lab Sample ID: 400-186870-2

No Detections.

Client Sample ID: P93C-ROX-041620

Lab Sample ID: 400-186870-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.40	J	1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	3.0		1.0	0.74	ug/L	1		8260B	Total/NA

Client Sample ID: P56-ROX-041620

Lab Sample ID: 400-186870-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	74		25	10	ug/L	1		8260B	Total/NA
Benzene	3.8		1.0	0.38	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	15	J	25	2.6	ug/L	1		8260B	Total/NA
Chloroform	2.1		1.0	0.60	ug/L	1		8260B	Total/NA
Ethylbenzene	69		1.0	0.50	ug/L	1		8260B	Total/NA
Isopropylbenzene	28		1.0	0.53	ug/L	1		8260B	Total/NA
m-Xylene & p-Xylene	150		5.0	1.6	ug/L	1		8260B	Total/NA
Naphthalene	18		1.0	1.0	ug/L	1		8260B	Total/NA
n-Butylbenzene	1.8		1.0	0.76	ug/L	1		8260B	Total/NA
N-Propylbenzene	31		1.0	0.69	ug/L	1		8260B	Total/NA
o-Xylene	5.5		5.0	0.60	ug/L	1		8260B	Total/NA
p-Isopropyltoluene	1.6		1.0	0.71	ug/L	1		8260B	Total/NA
sec-Butylbenzene	2.9		1.0	0.70	ug/L	1		8260B	Total/NA
Toluene	7.3		1.0	0.41	ug/L	1		8260B	Total/NA
1,2,4-Trimethylbenzene	59		1.0	0.82	ug/L	1		8260B	Total/NA
1,3,5-Trimethylbenzene	14		1.0	0.56	ug/L	1		8260B	Total/NA
Xylenes, Total	160		10	1.6	ug/L	1		8260B	Total/NA
Acenaphthene	0.39		0.20	0.032	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.67		0.20	0.035	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	13		0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	13		0.20	0.059	ug/L	1		8270D LL	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TB-ROX-041620-8011-SS
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-1
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	0.0055	ug/L		04/28/20 11:02	04/28/20 16:15	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*51 - 149*	*04/28/20 11:02*	*04/28/20 16:15*	*1*

Client Sample ID: TB-ROX-041620-8260-SS

Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-2

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			04/26/20 11:52	1
Acrolein	ND		20	10	ug/L			04/26/20 11:52	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 11:52	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 11:52	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 11:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 11:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 11:52	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 11:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 11:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 11:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 11:52	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 11:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 11:52	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 11:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 11:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 11:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 11:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 11:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 11:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 11:52	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 11:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 11:52	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 11:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 11:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 11:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 11:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 11:52	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 11:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 11:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 11:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 11:52	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 11:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 11:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 11:52	1

Client Sample ID: TB-ROX-041620-8260-SS
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-2
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			04/26/20 11:52	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 11:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 11:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 11:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 11:52	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 11:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 11:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 11:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 11:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 11:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 11:52	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 11:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 11:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 11:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 11:52	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 11:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 11:52	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*04/26/20 11:52*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/26/20 11:52*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*04/26/20 11:52*	*1*

Client Sample Results

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

Job ID: 400-186870-1

Client Sample ID: P93C-ROX-041620
Date Collected: 04/16/20 10:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-3
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			04/26/20 12:12	1
Acrolein	ND		20	10	ug/L			04/26/20 12:12	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 12:12	1
Benzene	**0.40**	**J**	1.0	0.38	ug/L			04/26/20 12:12	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 12:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 12:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 12:12	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 12:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 12:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 12:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 12:12	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 12:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 12:12	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 12:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 12:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 12:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 12:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 12:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 12:12	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 12:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 12:12	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 12:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 12:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 12:12	1
Methyl tert-butyl ether	**3.0**		1.0	0.74	ug/L			04/26/20 12:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 12:12	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 12:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 12:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 12:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 12:12	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 12:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 12:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/26/20 12:12	1

Client Sample ID: P93C-ROX-041620

Date Collected: 04/16/20 10:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-3

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			04/26/20 12:12	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 12:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 12:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 12:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 12:12	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 12:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 12:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 12:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 12:12	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 12:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 12:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 12:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 12:12	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 12:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 12:12	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/26/20 12:12*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/26/20 12:12*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/26/20 12:12*	*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		04/22/20 08:21	04/24/20 18:56	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/22/20 08:21	04/24/20 18:56	1
Anthracene	ND		0.20	0.031	ug/L		04/22/20 08:21	04/24/20 18:56	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 18:56	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/22/20 08:21	04/24/20 18:56	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 18:56	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:21	04/24/20 18:56	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/22/20 08:21	04/24/20 18:56	1
Chrysene	ND		0.20	0.073	ug/L		04/22/20 08:21	04/24/20 18:56	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/22/20 08:21	04/24/20 18:56	1
Fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:21	04/24/20 18:56	1
Fluorene	ND		0.20	0.11	ug/L		04/22/20 08:21	04/24/20 18:56	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:21	04/24/20 18:56	1
Phenanthrene	ND		0.20	0.035	ug/L		04/22/20 08:21	04/24/20 18:56	1
Pyrene	ND		0.20	0.039	ug/L		04/22/20 08:21	04/24/20 18:56	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/22/20 08:21	04/24/20 18:56	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/22/20 08:21	04/24/20 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*67*		*33 - 138*	*04/22/20 08:21*	*04/24/20 18:56*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*04/22/20 08:21*	*04/24/20 18:56*	*1*

Client Sample ID: P93C-ROX-041620
Date Collected: 04/16/20 10:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	56		19 - 130	04/22/20 08:21	04/24/20 18:56	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		04/22/20 08:21	04/24/20 22:01	1
Benzenethiol	ND	* us	9.8	1.7	ug/L		04/22/20 08:21	04/24/20 22:01	1
Benzoic acid	ND		30	7.2	ug/L		04/22/20 08:21	04/24/20 22:01	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/22/20 08:21	04/24/20 22:01	1
Bis(2-chloroethyl)ether	ND		9.8	0.73	ug/L		04/22/20 08:21	04/24/20 22:01	1
bis (2-chloroisopropyl) ether	ND		9.8	0.80	ug/L		04/22/20 08:21	04/24/20 22:01	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Bromophenyl phenyl ether	ND		9.8	0.32	ug/L		04/22/20 08:21	04/24/20 22:01	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/22/20 08:21	04/24/20 22:01	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/22/20 08:21	04/24/20 22:01	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
Dibenz[a,h]acridine	ND		9.8	3.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/22/20 08:21	04/24/20 22:01	1
3,3'-Dichlorobenzidine	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4-Dichlorophenol	ND		9.8	3.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 22:01	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/22/20 08:21	04/24/20 22:01	1
Di-n-butyl phthalate	ND		9.8	2.7	ug/L		04/22/20 08:21	04/24/20 22:01	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/22/20 08:21	04/24/20 22:01	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/22/20 08:21	04/24/20 22:01	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 22:01	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 22:01	1
Hexachlorobenzene	ND		9.8	0.25	ug/L		04/22/20 08:21	04/24/20 22:01	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/22/20 08:21	04/24/20 22:01	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/22/20 08:21	04/24/20 22:01	1
Indene	ND		9.8	0.98	ug/L		04/22/20 08:21	04/24/20 22:01	1
Isophorone	ND		9.8	0.56	ug/L		04/22/20 08:21	04/24/20 22:01	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 22:01	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:21	04/24/20 22:01	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/22/20 08:21	04/24/20 22:01	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/22/20 08:21	04/24/20 22:01	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/22/20 08:21	04/24/20 22:01	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/22/20 08:21	04/24/20 22:01	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/22/20 08:21	04/24/20 22:01	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 22:01	1

Client Sample ID: P93C-ROX-041620
Date Collected: 04/16/20 10:55
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-3
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		9.8	3.2	ug/L		04/22/20 08:21	04/24/20 22:01	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/22/20 08:21	04/24/20 22:01	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:21	04/24/20 22:01	1
Phenol	ND		9.8	2.6	ug/L		04/22/20 08:21	04/24/20 22:01	1
Pyridine	ND		9.8	3.2	ug/L		04/22/20 08:21	04/24/20 22:01	1
Quinoline	ND		9.8	5.9	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/22/20 08:21	04/24/20 22:01	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/22/20 08:21	04/24/20 22:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*34 - 120*	*04/22/20 08:21*	*04/24/20 22:01*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/22/20 08:21*	*04/24/20 22:01*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/22/20 08:21*	*04/24/20 22:01*	*1*
Phenol-d5	*43*		*10 - 120*	*04/22/20 08:21*	*04/24/20 22:01*	*1*
Terphenyl-d14	*86*		*53 - 125*	*04/22/20 08:21*	*04/24/20 22:01*	*1*
2,4,6-Tribromophenol	*91*		*15 - 135*	*04/22/20 08:21*	*04/24/20 22:01*	*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	0.0055	ug/L		04/28/20 11:02	04/28/20 16:35	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*82*		*51 - 149*	*04/28/20 11:02*	*04/28/20 16:35*	*1*

Client Sample ID: P56-ROX-041620
Date Collected: 04/16/20 12:20
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**74**		25	10	ug/L			04/26/20 12:32	1
Acrolein	ND		20	10	ug/L			04/26/20 12:32	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 12:32	1
Benzene	**3.8**		1.0	0.38	ug/L			04/26/20 12:32	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 12:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 12:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 12:32	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 12:32	1
2-Butanone (MEK)	**15**	J	25	2.6	ug/L			04/26/20 12:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 12:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 12:32	1
Chloroform	**2.1**		1.0	0.60	ug/L			04/26/20 12:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 12:32	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 12:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 12:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 12:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 12:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Ethylbenzene	**69**		1.0	0.50	ug/L			04/26/20 12:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 12:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 12:32	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 12:32	1
Isopropylbenzene	**28**		1.0	0.53	ug/L			04/26/20 12:32	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 12:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 12:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 12:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 12:32	1
m-Xylene & p-Xylene	**150**		5.0	1.6	ug/L			04/26/20 12:32	1
Naphthalene	**18**		1.0	1.0	ug/L			04/26/20 12:32	1
n-Butylbenzene	**1.8**		1.0	0.76	ug/L			04/26/20 12:32	1
N-Propylbenzene	**31**		1.0	0.69	ug/L			04/26/20 12:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 12:32	1
o-Xylene	**5.5**		5.0	0.60	ug/L			04/26/20 12:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 12:32	1
p-Isopropyltoluene	**1.6**		1.0	0.71	ug/L			04/26/20 12:32	1

Client Sample ID: P56-ROX-041620
Date Collected: 04/16/20 12:20
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	**2.9**		1.0	0.70	ug/L			04/26/20 12:32	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 12:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 12:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 12:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 12:32	1
Toluene	**7.3**		1.0	0.41	ug/L			04/26/20 12:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 12:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 12:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 12:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 12:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 12:32	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 12:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 12:32	1
1,2,4-Trimethylbenzene	**59**		1.0	0.82	ug/L			04/26/20 12:32	1
1,3,5-Trimethylbenzene	**14**		1.0	0.56	ug/L			04/26/20 12:32	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 12:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 12:32	1
Xylenes, Total	**160**		10	1.6	ug/L			04/26/20 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/26/20 12:32*	*1*
Dibromofluoromethane	*91*		*81 - 121*		*04/26/20 12:32*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/26/20 12:32*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.39**		0.20	0.032	ug/L		04/22/20 08:24	04/24/20 19:13	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/22/20 08:24	04/24/20 19:13	1
Anthracene	ND		0.20	0.031	ug/L		04/22/20 08:24	04/24/20 19:13	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/22/20 08:24	04/24/20 19:13	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/22/20 08:24	04/24/20 19:13	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:24	04/24/20 19:13	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/22/20 08:24	04/24/20 19:13	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/22/20 08:24	04/24/20 19:13	1
Chrysene	ND		0.20	0.073	ug/L		04/22/20 08:24	04/24/20 19:13	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/22/20 08:24	04/24/20 19:13	1
Fluoranthene	ND		0.20	0.067	ug/L		04/22/20 08:24	04/24/20 19:13	1
Fluorene	ND		0.20	0.11	ug/L		04/22/20 08:24	04/24/20 19:13	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/22/20 08:24	04/24/20 19:13	1
Phenanthrene	**0.67**		0.20	0.035	ug/L		04/22/20 08:24	04/24/20 19:13	1
Pyrene	ND		0.20	0.039	ug/L		04/22/20 08:24	04/24/20 19:13	1
1-Methylnaphthalene	**13**		0.20	0.073	ug/L		04/22/20 08:24	04/27/20 16:48	1
2-Methylnaphthalene	**13**		0.20	0.059	ug/L		04/22/20 08:24	04/24/20 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*40*		*33 - 138*	*04/22/20 08:24*	*04/24/20 19:13*	*1*
2-Fluorobiphenyl	*52*		*15 - 122*	*04/22/20 08:24*	*04/24/20 19:13*	*1*

Client Sample ID: P56-ROX-041620
Date Collected: 04/16/20 12:20
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	66		19 - 130	04/22/20 08:24	04/24/20 19:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.7	ug/L		04/22/20 08:24	04/24/20 22:22	1
Benzenethiol	ND	*	9.9	1.7	ug/L		04/22/20 08:24	04/24/20 22:22	1
Benzoic acid	ND		30	7.2	ug/L		04/22/20 08:24	04/24/20 22:22	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/22/20 08:24	04/24/20 22:22	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/22/20 08:24	04/24/20 22:22	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/22/20 08:24	04/24/20 22:22	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Bromophenyl phenyl ether	ND		9.9	0.32	ug/L		04/22/20 08:24	04/24/20 22:22	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Chloroaniline	ND		9.9	3.3	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Chloro-3-methylphenol	ND		9.9	3.7	ug/L		04/22/20 08:24	04/24/20 22:22	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/22/20 08:24	04/24/20 22:22	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/22/20 08:24	04/24/20 22:22	1
3,3'-Dichlorobenzidine	ND		9.9	2.6	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4-Dimethylphenol	ND		9.9	3.4	ug/L		04/22/20 08:24	04/24/20 22:22	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/22/20 08:24	04/24/20 22:22	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/22/20 08:24	04/24/20 22:22	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4-Dinitrophenol	ND		30	3.3	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/22/20 08:24	04/24/20 22:22	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/22/20 08:24	04/24/20 22:22	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/22/20 08:24	04/24/20 22:22	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/22/20 08:24	04/24/20 22:22	1
Hexachlorobenzene	ND		9.9	0.25	ug/L		04/22/20 08:24	04/24/20 22:22	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/22/20 08:24	04/24/20 22:22	1
Hexachloroethane	ND		9.9	4.1	ug/L		04/22/20 08:24	04/24/20 22:22	1
Indene	ND		9.9	0.99	ug/L		04/22/20 08:24	04/24/20 22:22	1
Isophorone	ND		9.9	0.56	ug/L		04/22/20 08:24	04/24/20 22:22	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/22/20 08:24	04/24/20 22:22	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/22/20 08:24	04/24/20 22:22	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/22/20 08:24	04/24/20 22:22	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Nitroaniline	ND		9.9	2.4	ug/L		04/22/20 08:24	04/24/20 22:22	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/22/20 08:24	04/24/20 22:22	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/22/20 08:24	04/24/20 22:22	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/22/20 08:24	04/24/20 22:22	1
N-Nitrosodimethylamine	ND		9.9	3.4	ug/L		04/22/20 08:24	04/24/20 22:22	1

Client Sample ID: P56-ROX-041620
Date Collected: 04/16/20 12:20
Date Received: 04/17/20 08:56

Lab Sample ID: 400-186870-4
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		9.9	3.3	ug/L		04/22/20 08:24	04/24/20 22:22	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/22/20 08:24	04/24/20 22:22	1
Pentachlorophenol	ND		20	1.8	ug/L		04/22/20 08:24	04/24/20 22:22	1
Phenol	ND		9.9	2.6	ug/L		04/22/20 08:24	04/24/20 22:22	1
Pyridine	ND		9.9	3.2	ug/L		04/22/20 08:24	04/24/20 22:22	1
Quinoline	ND		9.9	5.9	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4,5-Trichlorophenol	ND		9.9	3.6	ug/L		04/22/20 08:24	04/24/20 22:22	1
2,4,6-Trichlorophenol	ND		9.9	3.4	ug/L		04/22/20 08:24	04/24/20 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*04/22/20 08:24*	*04/24/20 22:22*	*1*
2-Fluorophenol	*0.02*	*X*	*10 - 120*	*04/22/20 08:24*	*04/24/20 22:22*	*1*
Nitrobenzene-d5	*49*		*27 - 120*	*04/22/20 08:24*	*04/24/20 22:22*	*1*
Phenol-d5	*17*		*10 - 120*	*04/22/20 08:24*	*04/24/20 22:22*	*1*
Terphenyl-d14	*46*	*X*	*53 - 125*	*04/22/20 08:24*	*04/24/20 22:22*	*1*
2,4,6-Tribromophenol	*72*		*15 - 135*	*04/22/20 08:24*	*04/24/20 22:22*	*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	0.0053	ug/L		04/28/20 11:02	04/28/20 16:55	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*88*		*51 - 149*	*04/28/20 11:02*	*04/28/20 16:55*	*1*

Definitions/Glossary

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

Job ID: 400-186870-1

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 or LCSD is outside acceptance limits.
*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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186870-1

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	(78-118)	(81-121)	(80-120)
400-186870-2	TB-ROX-041620-8260-SS	97	95	100
400-186870-3	P93C-ROX-041620	96	95	102
400-186870-4	P56-ROX-041620	95	91	101
LCS 400-487065/1002	Lab Control Sample	95	99	100
MB 400-487065/4	Method Blank	95	95	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186870-3	P93C-ROX-041620	72	23	59	43	86	91
400-186870-4	P56-ROX-041620	55	0.02 X	49	17	46 X	72
LCS 400-486588/2-A	Lab Control Sample	67	29	60	46	80	86
LCS 400-486588/4-A	Lab Control Sample	66		18 X		81	
LCSD 400-486588/5-A	Lab Control Sample Dup	61		50		72	
MB 400-486588/1-A	Method Blank	70	23	59	42	85	64

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186870-3	P93C-ROX-041620	67	57	56
400-186870-4	P56-ROX-041620	40	52	66
LCS 400-486588/2-A	Lab Control Sample	103	79	91
MB 400-486588/1-A	Method Blank	62	57	63

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-186870-1

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)**
400-186870-1	TB-ROX-041620-8011-SS	103
400-186870-3	P93C-ROX-041620	82
400-186870-4	P56-ROX-041620	88
LCS 400-487253/2-A	Lab Control Sample	105
LCSD 400-487253/3-A	Lab Control Sample Dup	103
MB 400-487253/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186870-1

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 TestAmerica, 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: 400-186870-1

Client Sample ID: TB-ROX-041620-8011-SS

Lab Sample ID: 400-186870-1
Matrix: Water
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

Prep 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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 16:15	DS	TAL PEN

Client Sample ID: TB-ROX-041620-8260-SS

Lab Sample ID: 400-186870-2
Matrix: Water
Date Collected: 04/16/20 00:00
Date Received: 04/17/20 08:56

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	487065	04/26/20 11:52	RS	TAL PEN

Client Sample ID: P93C-ROX-041620

Lab Sample ID: 400-186870-3
Matrix: Water
Date Collected: 04/16/20 10:55
Date Received: 04/17/20 08:56

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	487065	04/26/20 12:12	RS	TAL PEN
Total/NA	Prep	3520C			1015.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 22:01	VC1	TAL PEN
Total/NA	Prep	3520C			1015.4 mL	1 mL	486588	04/22/20 08:21	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 18:56	DS	TAL PEN
Total/NA	Prep	8011			35.3 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 16:35	DS	TAL PEN

Client Sample ID: P56-ROX-041620

Lab Sample ID: 400-186870-4
Matrix: Water
Date Collected: 04/16/20 12:20
Date Received: 04/17/20 08:56

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	487065	04/26/20 12:32	RS	TAL PEN
Total/NA	Prep	3520C			1015.2 mL	1 mL	486588	04/22/20 08:24	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 22:22	VC1	TAL PEN
Total/NA	Prep	3520C			1015.2 mL	1 mL	486588	04/22/20 08:24	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 19:13	DS	TAL PEN
Total/NA	Prep	3520C			1015.2 mL	1 mL	486588	04/22/20 08:24	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 16:48	PP1	TAL PEN
Total/NA	Prep	8011			36.2 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 16:55	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:34	VC1	TAL PEN

Lab Chronicle

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

Job ID: 400-186870-1

Client Sample ID: Method Blank
Lab Sample ID: MB 400-486588/1-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 12:28	DS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-487065/4
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	487065	04/26/20 09:10	RS	TAL PEN

Client Sample ID: Method Blank
Lab Sample ID: MB 400-487253/1-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:16	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/2-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 14:56	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 12:46	DS	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-486588/4-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:17	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 400-487065/1002
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	487065	04/26/20 08:17	RS	TAL PEN

Lab Chronicle

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

Job ID: 400-186870-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-487253/2-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	8011			35 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:36	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486588/5-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			1000 mL	1 mL	486588	04/21/20 16:04	JRW	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 15:38	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487253/3-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:56	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, 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: 400-186870-1

GC/MS VOA

Analysis Batch: 487065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-2	TB-ROX-041620-8260-SS	Total/NA	Water	8260B	
400-186870-3	P93C-ROX-041620	Total/NA	Water	8260B	
400-186870-4	P56-ROX-041620	Total/NA	Water	8260B	
MB 400-487065/4	Method Blank	Total/NA	Water	8260B	
LCS 400-487065/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486588

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-3	P93C-ROX-041620	Total/NA	Water	3520C	
400-186870-4	P56-ROX-041620	Total/NA	Water	3520C	
MB 400-486588/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-3	P93C-ROX-041620	Total/NA	Water	8270D LL	486588
400-186870-4	P56-ROX-041620	Total/NA	Water	8270D LL	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D LL	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486588

Analysis Batch: 486937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-3	P93C-ROX-041620	Total/NA	Water	8270D	486588
400-186870-4	P56-ROX-041620	Total/NA	Water	8270D	486588
MB 400-486588/1-A	Method Blank	Total/NA	Water	8270D	486588
LCS 400-486588/2-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCS 400-486588/4-A	Lab Control Sample	Total/NA	Water	8270D	486588
LCSD 400-486588/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486588

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-4	P56-ROX-041620	Total/NA	Water	8270D LL	486588

GC Semi VOA

Prep Batch: 487253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-1	TB-ROX-041620-8011-SS	Total/NA	Water	8011	
400-186870-3	P93C-ROX-041620	Total/NA	Water	8011	
400-186870-4	P56-ROX-041620	Total/NA	Water	8011	
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-1	TB-ROX-041620-8011-SS	Total/NA	Water	8011	487253
400-186870-3	P93C-ROX-041620	Total/NA	Water	8011	487253

GC Semi VOA (Continued)

Analysis Batch: 487261 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186870-4	P56-ROX-041620	Total/NA	Water	8011	487253
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	487253
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	487253
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487253

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

Lab Sample ID: MB 400-487065/4
Matrix: Water
Analysis Batch: 487065

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			04/26/20 09:10	1
Acrolein	ND		20	10	ug/L			04/26/20 09:10	1
Acrylonitrile	ND		10	2.8	ug/L			04/26/20 09:10	1
Benzene	ND		1.0	0.38	ug/L			04/26/20 09:10	1
Bromobenzene	ND		1.0	0.54	ug/L			04/26/20 09:10	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Bromoform	ND		5.0	0.71	ug/L			04/26/20 09:10	1
Bromomethane	ND		1.0	0.98	ug/L			04/26/20 09:10	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/26/20 09:10	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Chloroethane	ND		1.0	0.76	ug/L			04/26/20 09:10	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/26/20 09:10	1
Chloroform	ND		1.0	0.60	ug/L			04/26/20 09:10	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/26/20 09:10	1
Chloromethane	ND		1.0	0.83	ug/L			04/26/20 09:10	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/26/20 09:10	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/26/20 09:10	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/26/20 09:10	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/26/20 09:10	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/26/20 09:10	1
2-Hexanone	ND		25	3.1	ug/L			04/26/20 09:10	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/26/20 09:10	1
Methylene bromide	ND		5.0	0.59	ug/L			04/26/20 09:10	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/26/20 09:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/26/20 09:10	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/26/20 09:10	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/26/20 09:10	1
Naphthalene	ND		1.0	1.0	ug/L			04/26/20 09:10	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/26/20 09:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/26/20 09:10	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/26/20 09:10	1
o-Xylene	ND		5.0	0.60	ug/L			04/26/20 09:10	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/26/20 09:10	1

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

Lab Sample ID: MB 400-487065/4
Matrix: Water
Analysis Batch: 487065

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			04/26/20 09:10	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/26/20 09:10	1
Styrene	ND		1.0	1.0	ug/L			04/26/20 09:10	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/26/20 09:10	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/26/20 09:10	1
Toluene	ND		1.0	0.41	ug/L			04/26/20 09:10	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/26/20 09:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/26/20 09:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/26/20 09:10	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/26/20 09:10	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/26/20 09:10	1
Trichloroethene	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/26/20 09:10	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/26/20 09:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/26/20 09:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/26/20 09:10	1
Vinyl acetate	ND		25	2.0	ug/L			04/26/20 09:10	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/26/20 09:10	1
Xylenes, Total	ND		10	1.6	ug/L			04/26/20 09:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/26/20 09:10*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/26/20 09:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/26/20 09:10*	*1*

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	215		ug/L		108	43 - 160
Acrolein	500	492		ug/L		98	38 - 160
Acrylonitrile	500	528		ug/L		106	64 - 142
Benzene	50.0	52.3		ug/L		105	70 - 130
Bromobenzene	50.0	52.6		ug/L		105	70 - 132
Bromochloromethane	50.0	48.2		ug/L		96	70 - 130
Bromodichloromethane	50.0	50.2		ug/L		100	67 - 133
Bromoform	50.0	46.9		ug/L		94	57 - 140
Bromomethane	50.0	38.7		ug/L		77	10 - 160
2-Butanone (MEK)	200	214		ug/L		107	61 - 145
Carbon disulfide	50.0	55.6		ug/L		111	61 - 137
Carbon tetrachloride	50.0	49.6		ug/L		99	61 - 137
Chlorobenzene	50.0	51.0		ug/L		102	70 - 130
Dibromochloromethane	50.0	49.5		ug/L		99	67 - 135
Chloroethane	50.0	48.9		ug/L		98	55 - 141

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

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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	39.0		ug/L		78	10 - 160
Chloroform	50.0	51.7		ug/L		103	69 - 130
1-Chlorohexane	50.0	60.9		ug/L		122	69 - 130
Chloromethane	50.0	52.5		ug/L		105	58 - 137
cis-1,2-Dichloroethene	50.0	52.8		ug/L		106	68 - 130
cis-1,3-Dichloropropene	50.0	54.7		ug/L		109	69 - 132
1,2-Dichlorobenzene	50.0	51.1		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	51.8		ug/L		104	70 - 130
1,4-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	52.9		ug/L		106	41 - 146
1,1-Dichloroethane	50.0	52.8		ug/L		106	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	57.3		ug/L		115	63 - 134
1,2-Dichloropropane	50.0	52.1		ug/L		104	70 - 130
1,3-Dichloropropane	50.0	52.3		ug/L		105	70 - 130
2,2-Dichloropropane	50.0	52.8		ug/L		106	52 - 135
1,1-Dichloropropene	50.0	54.5		ug/L		109	70 - 130
Ethylbenzene	50.0	53.6		ug/L		107	70 - 130
Ethyl methacrylate	50.0	55.1		ug/L		110	68 - 130
Hexachlorobutadiene	50.0	57.5		ug/L		115	53 - 140
2-Hexanone	200	225		ug/L		112	65 - 137
Isopropylbenzene	50.0	53.9		ug/L		108	70 - 130
Methylene bromide	50.0	50.9		ug/L		102	70 - 130
Methylene Chloride	50.0	51.0		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	223		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	49.9		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.7		ug/L		105	70 - 130
Naphthalene	50.0	49.3		ug/L		99	47 - 149
n-Butylbenzene	50.0	54.0		ug/L		108	67 - 130
N-Propylbenzene	50.0	53.9		ug/L		108	70 - 130
o-Chlorotoluene	50.0	51.6		ug/L		103	70 - 130
o-Xylene	50.0	52.8		ug/L		106	70 - 130
p-Chlorotoluene	50.0	52.3		ug/L		105	70 - 130
p-Isopropyltoluene	50.0	54.3		ug/L		109	65 - 130
sec-Butylbenzene	50.0	54.2		ug/L		108	66 - 130
Styrene	50.0	52.1		ug/L		104	70 - 130
tert-Butylbenzene	50.0	52.3		ug/L		105	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.9		ug/L		104	67 - 131
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	70 - 131
Tetrachloroethene	50.0	51.7		ug/L		103	65 - 130
Toluene	50.0	51.2		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	52.5		ug/L		105	70 - 130
trans-1,3-Dichloropropene	50.0	56.1		ug/L		112	63 - 130
1,2,3-Trichlorobenzene	50.0	52.0		ug/L		104	60 - 138
1,2,4-Trichlorobenzene	50.0	52.8		ug/L		106	60 - 140
1,1,1-Trichloroethane	50.0	53.1		ug/L		106	68 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/L		105	70 - 130
Trichloroethene	50.0	55.0		ug/L		110	70 - 130
Trichlorofluoromethane	50.0	44.0		ug/L		88	65 - 138

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

Lab Sample ID: LCS 400-487065/1002
Matrix: Water
Analysis Batch: 487065

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	51.8		ug/L		104	70 - 130
1,2,4-Trimethylbenzene	50.0	52.6		ug/L		105	70 - 130
1,3,5-Trimethylbenzene	50.0	52.8		ug/L		106	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	46.4		ug/L		93	59 - 136
Xylenes, Total	100	106		ug/L		106	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzenethiol	ND		10	1.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzoic acid	ND		30	7.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
Benzyl alcohol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/21/20 16:04	04/24/20 14:34	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/21/20 16:04	04/24/20 14:34	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/21/20 16:04	04/24/20 14:34	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloroaniline	ND		10	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Chlorophenol	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dibenzofuran	ND		10	0.52	ug/L		04/21/20 16:04	04/24/20 14:34	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Diethyl phthalate	ND		10	0.70	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/21/20 16:04	04/24/20 14:34	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/21/20 16:04	04/24/20 14:34	1
1,4-Dioxane	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Hexachloroethane	ND		10	4.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Indene	ND		10	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
Isophorone	ND		10	0.57	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Methylphenol	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitroaniline	ND		10	2.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
3-Nitroaniline	ND		10	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitroaniline	ND		10	2.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
Nitrobenzene	ND		10	0.55	ug/L		04/21/20 16:04	04/24/20 14:34	1
2-Nitrophenol	ND		10	0.65	ug/L		04/21/20 16:04	04/24/20 14:34	1
4-Nitrophenol	ND		10	2.1	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/21/20 16:04	04/24/20 14:34	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pentachlorophenol	ND		20	1.8	ug/L		04/21/20 16:04	04/24/20 14:34	1
Phenol	ND		10	2.6	ug/L		04/21/20 16:04	04/24/20 14:34	1
Pyridine	ND		10	3.2	ug/L		04/21/20 16:04	04/24/20 14:34	1
Quinoline	ND		10	6.0	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/21/20 16:04	04/24/20 14:34	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/21/20 16:04	04/24/20 14:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*70*		*34 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Phenol-d5	*42*		*10 - 120*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
Terphenyl-d14	*85*		*53 - 125*	*04/21/20 16:04*	*04/24/20 14:34*	*1*
2,4,6-Tribromophenol	*64*		*15 - 135*	*04/21/20 16:04*	*04/24/20 14:34*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	14.0		ug/L		47	29 - 120
Benzoic acid	116	74.2		ug/L		64	10 - 150
Benzyl alcohol	30.0	17.1		ug/L		57	19 - 125
Bis(2-chloroethoxy)methane	30.0	16.4		ug/L		55	45 - 120
Bis(2-chloroethyl)ether	30.0	15.0		ug/L		50	48 - 120
bis (2-chloroisopropyl) ether	30.0	11.7		ug/L		39	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	18.6		ug/L		62	48 - 150
4-Bromophenyl phenyl ether	30.0	23.6		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	18.2		ug/L		61	46 - 145
4-Chloroaniline	30.0	15.2		ug/L		51	30 - 120
4-Chloro-3-methylphenol	30.0	20.7		ug/L		69	39 - 140

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	19.3		ug/L		64	52 - 120
2-Chlorophenol	30.0	15.9		ug/L		53	34 - 120
4-Chlorophenyl phenyl ether	30.0	21.4		ug/L		71	58 - 124
Dibenz[a,h]acridine	29.6	13.9		ug/L		47	46 - 149
Dibenzofuran	30.0	19.9		ug/L		66	58 - 123
3,3'-Dichlorobenzidine	40.0	37.3		ug/L		93	39 - 135
2,4-Dichlorophenol	30.0	21.9		ug/L		73	39 - 128
Diethyl phthalate	30.0	20.9		ug/L		70	44 - 146
2,4-Dimethylphenol	30.0	20.3		ug/L		68	44 - 120
Dimethyl phthalate	30.0	21.4		ug/L		71	50 - 131
Di-n-butyl phthalate	30.0	17.6		ug/L		59	55 - 131
4,6-Dinitro-ortho-cresol	60.0	36.5		ug/L		61	10 - 150
2,4-Dinitrophenol	60.0	45.3		ug/L		76	10 - 150
2,4-Dinitrotoluene	30.0	21.1		ug/L		70	58 - 140
2,6-Dinitrotoluene	30.0	23.0		ug/L		77	57 - 130
Di-n-octyl phthalate	30.0	18.4		ug/L		61	50 - 150
1,4-Dioxane	30.0	11.5		ug/L		38	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	15.7		ug/L		52	47 - 123
Hexachlorobenzene	30.0	23.8		ug/L		79	52 - 131
Hexachlorocyclopentadiene	30.0	7.15	J	ug/L		24	10 - 129
Hexachloroethane	30.0	11.4		ug/L		38	20 - 120
Indene	30.0	16.2		ug/L		54	47 - 120
Isophorone	30.0	17.3		ug/L		58	49 - 120
2-Methylphenol	30.0	17.0		ug/L		57	39 - 123
3 & 4 Methylphenol	30.0	16.8	J	ug/L		56	38 - 121
2-Nitroaniline	30.0	17.5		ug/L		58	47 - 150
3-Nitroaniline	30.0	15.6		ug/L		52	34 - 132
4-Nitroaniline	30.0	15.2		ug/L		51	41 - 135
Nitrobenzene	30.0	16.9		ug/L		56	47 - 120
2-Nitrophenol	30.0	17.0		ug/L		57	28 - 136
4-Nitrophenol	60.0	35.2		ug/L		59	10 - 150
N-Nitrosodimethylamine	30.0	15.4		ug/L		51	22 - 148
N-Nitrosodi-n-propylamine	30.0	15.6		ug/L		52	44 - 120
N-Nitrosodiphenylamine	29.8	20.9		ug/L		70	56 - 120
Pentachlorophenol	60.0	43.5		ug/L		73	15 - 141
Phenol	30.0	13.7		ug/L		46	33 - 120
Pyridine	60.0	23.5		ug/L		39	26 - 120
Quinoline	29.6	16.3		ug/L		55	51 - 129
2,4,5-Trichlorophenol	30.0	22.6		ug/L		75	38 - 147
2,4,6-Trichlorophenol	30.0	23.0		ug/L		77	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*67*		*34 - 120*
2-Fluorophenol	*29*		*10 - 120*
Nitrobenzene-d5	*60*		*27 - 120*
Phenol-d5	*46*		*10 - 120*
Terphenyl-d14	*80*		*53 - 125*

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

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	86		15 - 135

Lab Sample ID: LCS 400-486588/4-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	66		34 - 120
Nitrobenzene-d5	18	X	27 - 120
Terphenyl-d14	81		53 - 125

Lab Sample ID: LCSD 400-486588/5-A
Matrix: Water
Analysis Batch: 486937

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	3.05	J *1	ug/L		10	10 - 120	129	30

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2-Fluorobiphenyl	61		34 - 120
Nitrobenzene-d5	50		27 - 120
Terphenyl-d14	72		53 - 125

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/21/20 16:04	04/24/20 12:28	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/21/20 16:04	04/24/20 12:28	1
Anthracene	ND		0.20	0.031	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/21/20 16:04	04/24/20 12:28	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/21/20 16:04	04/24/20 12:28	1
Chrysene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluoranthene	ND		0.20	0.068	ug/L		04/21/20 16:04	04/24/20 12:28	1
Fluorene	ND		0.20	0.11	ug/L		04/21/20 16:04	04/24/20 12:28	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/21/20 16:04	04/24/20 12:28	1
Phenanthrene	ND		0.20	0.036	ug/L		04/21/20 16:04	04/24/20 12:28	1
Pyrene	ND		0.20	0.040	ug/L		04/21/20 16:04	04/24/20 12:28	1

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

Lab Sample ID: MB 400-486588/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486588

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/21/20 16:04	04/24/20 12:28	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/21/20 16:04	04/24/20 12:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*62*		*33 - 138*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
2-Fluorobiphenyl	*57*		*15 - 122*	*04/21/20 16:04*	*04/24/20 12:28*	*1*
Nitrobenzene-d5	*63*		*19 - 130*	*04/21/20 16:04*	*04/24/20 12:28*	*1*

Lab Sample ID: LCS 400-486588/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486588

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	29.4		ug/L		98	41 - 120
Acenaphthylene	30.0	28.5		ug/L		95	44 - 120
Anthracene	30.0	29.1		ug/L		97	49 - 120
Benzo[a]anthracene	30.0	31.1		ug/L		104	61 - 135
Benzo[a]pyrene	30.0	30.1		ug/L		100	52 - 120
Benzo[b]fluoranthene	30.0	32.0		ug/L		107	53 - 134
Benzo[g,h,i]perylene	30.0	21.9		ug/L		73	47 - 133
Benzo[k]fluoranthene	30.0	32.5		ug/L		108	57 - 134
Chrysene	30.0	32.4		ug/L		108	55 - 122
Dibenz(a,h)anthracene	30.0	22.9		ug/L		76	48 - 146
Fluoranthene	30.0	31.4		ug/L		105	54 - 128
Fluorene	30.0	30.0		ug/L		100	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	22.5		ug/L		75	43 - 142
Phenanthrene	30.0	27.7		ug/L		92	48 - 120
Pyrene	30.0	30.9		ug/L		103	48 - 132
1-Methylnaphthalene	30.0	25.0		ug/L		83	41 - 120
2-Methylnaphthalene	30.0	26.8		ug/L		89	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*103*		*33 - 138*
2-Fluorobiphenyl	*79*		*15 - 122*
Nitrobenzene-d5	*91*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/28/20 11:02	04/28/20 14:16	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*04/28/20 11:02*	*04/28/20 14:16*	*1*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: LCS 400-487253/2-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0915		ug/L		91	60 - 140
1,2-Dibromoethane	0.101	0.118		ug/L		117	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487253/3-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0980		ug/L		98	60 - 140	7	30
1,2-Dibromoethane	0.101	0.117		ug/L		116	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1304589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL

☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES

☐ TRANSPORTATION | ☑ OTHER _ENV. SERVICES_____

Print Bill To Contact Name: Bob Billman

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE 4/16/20

PAGE: 1 of 1

SAMPLING COMPANY: AECOM

LOC CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO, Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): Tony Jones, Joe Mayer

TELEPHONE: 314-429-0100

FAX: 314-429-0462

E-Mail To Contact: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

~~SPLIT~~ SPLIT Report

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 | UNIT COST 60619901 - 1.03.0022

400-186870 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°

Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-041620-8011-SS	4/16/20	0000	Water	X					2			2		SPLit sample
	TB-ROX-041620-8260-SS	"	0000	"	X					2	2				↓
	P93-ROX-041620-SS	"	1055	"	X			X		8	3	1	3	1	
	P56-ROX-041620-SS	↓	1220	↓	X			X		8	3	1	3	1	

TJ 4/16/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
TJ	Fedex: 1054 5423 6469	4/16/20	1600
		4-17-20	8:56

Version 14Dec15

Custody seal: 1099511 / 1099510

1.9 c IR7

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5/4/2020 (Rev. 1)

400-186870 COC

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1304569 (TestAmerica)~~

Please Check Appropriate Box: ☐ SGW FDG ☐ PIPELINE ☐ RETAIL ☐ CHEMICALS ☐ CONSULTANT ☐ LUBES ☐ TRANSPORTATION ☒ OTHER, ENV. SERVICES

Print Bill To Contact Name: Bob Billman

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/16/20

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 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Reporting): Elizabeth Kunkel, Bob Billman, Melissa Remiger

TELEPHONE: 314-429-0100 | FAX: 314-429-0462 | Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): Tony Jones Joe Mayer

LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

~~SPLIT~~ SPLIT Report

☒ SHELL CONTRACT RATE APPLIES
STATE REIMBURSEMENT RATE APPLIES
EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002 | UNIT COST 60619901 - 1.03.0022

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 1.9°C JR 17

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-041620-8011-SS	4/16/20	0000	Water	X					2			2		[illegible]
	TB-ROX-041620-8260-SS	↓	0000	↓	X					2	2				↓
	P93C-ROX-041620-SS MR	↓	1055	↓	X			X		8	3	1	3	1	↓
	P56-ROX-041620-SS MR	↓	1220	↓	X			X		8	3	1	3	1	↓

TJ 4/16/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
TJ	Fedex: 1054 5423 6469	4/16/20	11:00
	[signature] TA PGW	4/17/20	8:56

Version 14Dec15

custody seal: 1099511 / 1099510

5/4/2020 (Rev. 1)

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other ~~Lab Vendor # 1504589~~ (TestAmerica)

Please Check Appropriate Box:

☐ SGW FDG | ☐ PIPELINE | ☐ RETAIL

☐ CHEMICALS | ☐ CONSULTANT | ☐ LUBES

☐ TRANSPORTATION | ☑ OTHER ENV. SERVICES

Print Bill To Contact Name: Bob Billman

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

PlaNet Site or Project ID: 25278

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/16/20

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 60619901 - 1.03.002 | 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO: 314-802-1172, 314-449-2913, 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Offer ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger

SAMPLER NAME(S) (Print): Tony Jones for Maye

LAB USE ONLY

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS): ☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

~~SPLIT~~ SPLIT Report

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDO DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	PRESERVATIVE HNO3	PRESERVATIVE H2SO4	PRESERVATIVE NONE	PRESERVATIVE OTHER	NO OF CONT.	NON-UNIT COST 60619901 - 1.03.002: VOC 8260	NON-UNIT COST 60619901 - 1.03.002: SVOC 8270	UNIT COST 60619901 - 1.03.0022: VOC 8011	UNIT COST 60619901 - 1.03.0022: PAH 8270LL	FIELD NOTES: Container PID Readings or Laboratory Notes
	TB-ROX-041620-8011-SS	4/16/20	0000	Water	X					2			2		SPLit sample
	TB-ROX-041620-8260-SS	"	0000	"	X					2	2				↓
	P93C-ROX-041620-SS	"	1055	"	X			X		8	3	1	3	1	
	P56-ROX-041620-SS	↓	1220	↓	X			X		8	3	1	3	1	

TJ 4/16/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
TJ	Fedex: 1054 5423 6469	4/16/20	1600

Version 14Dec15

Custody seal: 1099511 / 1099510

5/4/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186870-1

Login Number: 186870
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1099511,1099510
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.9°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-186870-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186922-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/20/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041720-8260	TB-ROX-041720-8011
P74-ROX-041720-EB	P74-ROX-041720
P57-ROX-041720	P57-ROX-041720-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 the quinoline and benzenethiol LCS/LCSD recoveries and LCS/LCSD RPDs were outside evaluation criteria. The PAH internal standard recoveries for acenaphthene-d_{10} and phenanthrene- d_{10} were outside criteria in field duplicate pair P57-ROX-041720/P57-ROX-041720-Dup. VOCs and phenol in field duplicate pair P57-ROX-041720/P57-ROX-041720-Dup were diluted to bring analytes into calibration range of the instrument; fluorene was diluted due to the nature of the sample matrix. The continuing calibration verification for hexachlorocyclopentadiene was outside acceptance 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 400-486835/2-A/3-A	SVOCs	Quinoline	**46**/53	NaN	51-129/30
LCS/LCSD 400-486835/4-A/5-A	SVOCs	Benzenethiol	19/**2**	**162**	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; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P74-ROX-041720	SVOCs	Quinoline	**UJ**
P74-ROX-041720	SVOCs	Benzenethiol	**UJ**
P57-ROX-041720	SVOCs	Quinoline	**UJ**
P57-ROX-041720	SVOCs	Benzenethiol	**UJ**
P57-ROX-041720-Dup	SVOCs	Quinoline	**UJ**
P57-ROX-041720-Dup	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?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

No

Sample ID	Parameter	Analyte	IS Area Recovery	12/24 Hour Standard	IS Criteria
P57-ROX-041720 RA	PAHs	Acenaphthene-d_{10}	**801430**	392691	196346-785382
P57-ROX-041720-DUP RA	PAHs	Acenaphthene-d_{10}	**805026**	392691	196346-785382
P57-ROX-041720 RA	PAHs	Phenanthrene- d_{10}	**1033759**	581563	290782-1163126
P57-ROX-041720-DUP RA	PAHs	Phenanthrene- d_{10}	**1040669**	581563	290782-1163126

Analytical data reported from the re-analyses (RA) were not associated with internal standard recoveries outside evaluation criteria. No qualification of data was required.

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

Yes

Field ID	Field Duplicate ID
P57-ROX-041720	P57-ROX-041720-Dup

Were field duplicates within evaluation criteria?

Yes

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, the continuing calibration verification for hexachlorocyclopentadiene was outside acceptance criteria, biased low. These are qualified as summarized in the following table.

Sample ID	Parameter	Analyte	Qualification
P74-ROX-041720	SVOCs	Hexachlorocyclopentadiene	**UJ**
P57-ROX-041720	SVOCs	Hexachlorocyclopentadiene	**UJ**
P57-ROX-041720-Dup	SVOCs	Hexachlorocyclopentadiene	**UJ**

eurofins | Environment Testing TestAmerica



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186922-1
Client Project/Site: ROXANA QUARTERLY GW

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/1/2020 3:55:02 PM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/20/2020 LR

LINKS

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Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 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: 400-186922-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186922-1

Comments
No additional comments.

Receipt
The samples were received on 4/18/2020 8:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.2∫ C and 0.5∫ C.

GC/MS VOA
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-041720-8260 (400-186922-1), P74-ROX-041720-EB (400-186922-3), P74-ROX-041720 (400-186922-4), P57-ROX-041720 (400-186922-5) and P57-ROX-041720-DUP (400-186922-6). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P57-ROX-041720 (400-186922-5) and P57-ROX-041720-DUP (400-186922-6). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 400-486835 and analytical batch 400-486944 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 400-486835 and analytical batch 400-486944 recovered outside control limits for the following analytes: Benzenethiol.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered above the upper control limit for Hexachlorobenzene, 2,4-Dichlorophenol and 4-Bromophenyl phenyl ether. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-486937 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method 8270D: The following sample was diluted to bring the concentration of target analytes within the calibration range: P57-ROX-041720 (400-186922-5). Elevated reporting limits (RLs) are provided.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-486835 and analytical batch 400-486944 recovered outside control limits for the following analytes: 4-Nitrophenol, Bis(2-ethylhexyl) phthalate and Di-n-octyl phthalate.

Method 8270D: The following analyte(s) recovered outside control limits for the LCS associated with preparation batch 400-486835 and analytical batch 400-487181: Quinoline. 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 400-487181 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be

Job ID: 400-186922-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: (CCVIS 400-486937/3). These results have been reported and qualified.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-486926 recovered above the upper control limit for Benzo[k]fluoranthene, Fluoranthene, Fluorene and 1-Methylnaphthalene. The samples associated with this CCV were non-detects and/or recovered below the reporting limit (RL) for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The following samples were diluted due to the nature of the sample matrix: P57-ROX-041720 (400-186922-5) and P57-ROX-041720-DUP (400-186922-6). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-487261 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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: 400-186922-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186922-1	TB-ROX-041720-8260	Water	04/17/20 00:00	04/18/20 08:23	
400-186922-2	TB-ROX-041720-8011	Water	04/17/20 00:00	04/18/20 08:23	
400-186922-3	P74-ROX-041720-EB	Water	04/17/20 08:45	04/18/20 08:23	
400-186922-4	P74-ROX-041720	Water	04/17/20 10:35	04/18/20 08:23	
400-186922-5	P57-ROX-041720	Water	04/17/20 12:15	04/18/20 08:23	
400-186922-6	P57-ROX-041720-DUP	Water	04/17/20 12:15	04/18/20 08:23	

Detection Summary

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

Job ID: 400-186922-1

Client Sample ID: TB-ROX-041720-8260 — Lab Sample ID: 400-186922-1

No Detections.

Client Sample ID: TB-ROX-041720-8011 — Lab Sample ID: 400-186922-2

No Detections.

Client Sample ID: P74-ROX-041720-EB — Lab Sample ID: 400-186922-3

No Detections.

Client Sample ID: P74-ROX-041720 — Lab Sample ID: 400-186922-4

No Detections.

Client Sample ID: P57-ROX-041720 — Lab Sample ID: 400-186922-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2500		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	6.2	J	10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	19		10	5.3	ug/L	10		8260B	Total/NA
Naphthalene	69		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	22		10	6.9	ug/L	10		8260B	Total/NA
tert-Butylbenzene	7.2	J	10	6.3	ug/L	10		8260B	Total/NA
Toluene	7.8	J	10	4.1	ug/L	10		8260B	Total/NA
Acenaphthene	0.42		0.20	0.032	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.33		0.20	0.036	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	34		0.20	0.060	ug/L	1		8270D LL	Total/NA
Fluorene - DL	0.69		0.40	0.22	ug/L	2		8270D LL	Total/NA
1-Methylnaphthalene - RA	29		0.20	0.075	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.66	J	10	0.52	ug/L	1		8270D	Total/NA
Phenol - DL	180		50	13	ug/L	5		8270D	Total/NA

Client Sample ID: P57-ROX-041720-DUP — Lab Sample ID: 400-186922-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2800		10	3.8	ug/L	10		8260B	Total/NA
Ethylbenzene	6.9	J	10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	21		10	5.3	ug/L	10		8260B	Total/NA
Naphthalene	77		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	26		10	6.9	ug/L	10		8260B	Total/NA
tert-Butylbenzene	8.0	J	10	6.3	ug/L	10		8260B	Total/NA
Toluene	8.6	J	10	4.1	ug/L	10		8260B	Total/NA
Acenaphthene	0.37		0.20	0.032	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.41		0.20	0.036	ug/L	1		8270D LL	Total/NA
Fluorene - DL	0.60		0.40	0.22	ug/L	2		8270D LL	Total/NA
1-Methylnaphthalene - RA	29		0.20	0.074	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene - RA	36		0.20	0.060	ug/L	1		8270D LL	Total/NA
Dibenzofuran	0.72	J	10	0.52	ug/L	1		8270D	Total/NA
Phenol	67		10	2.6	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: 400-186922-1

Client Sample ID: TB-ROX-041720-8260
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-1
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			04/30/20 15:52	1
Acrolein	ND		20	10	ug/L			04/30/20 15:52	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 15:52	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 15:52	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 15:52	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 15:52	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 15:52	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 15:52	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 15:52	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 15:52	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 15:52	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 15:52	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 15:52	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 15:52	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 15:52	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 15:52	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 15:52	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 15:52	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 15:52	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 15:52	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 15:52	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 15:52	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 15:52	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 15:52	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 15:52	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 15:52	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 15:52	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 15:52	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 15:52	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 15:52	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 15:52	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 15:52	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 15:52	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/30/20 15:52	1

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

Job ID: 400-186922-1

Client Sample ID: TB-ROX-041720-8260
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-1
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			04/30/20 15:52	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 15:52	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 15:52	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 15:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 15:52	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 15:52	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 15:52	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 15:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 15:52	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:52	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 15:52	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 15:52	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 15:52	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 15:52	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 15:52	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 15:52	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 15:52	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/30/20 15:52*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/30/20 15:52*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/30/20 15:52*	*1*

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

Job ID: 400-186922-1

Client Sample ID: TB-ROX-041720-8011
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-2
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	0.0055	ug/L		04/28/20 11:02	04/28/20 17:15	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 17:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/28/20 11:02*	*04/28/20 17:15*	*1*

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

Job ID: 400-186922-1

Client Sample ID: P74-ROX-041720-EB
Date Collected: 04/17/20 08:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-3
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			04/30/20 16:12	1
Acrolein	ND		20	10	ug/L			04/30/20 16:12	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 16:12	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 16:12	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 16:12	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 16:12	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 16:12	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 16:12	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 16:12	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 16:12	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 16:12	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 16:12	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 16:12	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 16:12	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 16:12	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 16:12	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 16:12	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 16:12	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 16:12	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 16:12	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 16:12	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 16:12	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 16:12	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 16:12	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 16:12	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 16:12	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 16:12	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 16:12	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 16:12	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 16:12	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 16:12	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 16:12	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 16:12	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/30/20 16:12	1

Client Sample ID: P74-ROX-041720-EB
Date Collected: 04/17/20 08:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-3
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			04/30/20 16:12	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 16:12	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 16:12	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 16:12	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 16:12	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 16:12	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 16:12	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 16:12	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 16:12	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:12	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 16:12	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 16:12	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 16:12	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 16:12	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 16:12	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 16:12	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 16:12	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*04/30/20 16:12*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/30/20 16:12*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*04/30/20 16:12*	*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		04/23/20 13:48	04/24/20 20:59	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/23/20 13:48	04/24/20 20:59	1
Anthracene	ND		0.20	0.031	ug/L		04/23/20 13:48	04/24/20 20:59	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 20:59	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/23/20 13:48	04/24/20 20:59	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 20:59	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/23/20 13:48	04/24/20 20:59	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/23/20 13:48	04/24/20 20:59	1
Chrysene	ND		0.20	0.074	ug/L		04/23/20 13:48	04/24/20 20:59	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 20:59	1
Fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 20:59	1
Fluorene	ND		0.20	0.11	ug/L		04/23/20 13:48	04/24/20 20:59	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/23/20 13:48	04/24/20 20:59	1
Phenanthrene	ND		0.20	0.036	ug/L		04/23/20 13:48	04/24/20 20:59	1
Pyrene	ND		0.20	0.040	ug/L		04/23/20 13:48	04/24/20 20:59	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/23/20 13:48	04/24/20 20:59	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/23/20 13:48	04/24/20 20:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*33 - 138*	*04/23/20 13:48*	*04/24/20 20:59*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*04/23/20 13:48*	*04/24/20 20:59*	*1*

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

Job ID: 400-186922-1

Client Sample ID: P74-ROX-041720-EB
Date Collected: 04/17/20 08:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-3
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*76*		*19 - 130*	*04/23/20 13:48*	*04/24/20 20:59*	*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		04/23/20 13:48	04/24/20 22:43	1
Benzenethiol	ND	**1	10	1.7	ug/L		04/23/20 13:48	04/24/20 22:43	1
Benzoic acid	ND		30	7.3	ug/L		04/23/20 13:48	04/24/20 22:43	1
Benzyl alcohol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/23/20 13:48	04/24/20 22:43	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/23/20 13:48	04/24/20 22:43	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/23/20 13:48	04/24/20 22:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/23/20 13:48	04/24/20 22:43	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Chloroaniline	ND		10	3.4	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/23/20 13:48	04/24/20 22:43	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/23/20 13:48	04/24/20 22:43	1
2-Chlorophenol	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Dibenzofuran	ND		10	0.52	ug/L		04/23/20 13:48	04/24/20 22:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 22:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/24/20 22:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/24/20 22:43	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 22:43	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/23/20 13:48	04/24/20 22:43	1
1,4-Dioxane	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/23/20 13:48	04/24/20 22:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/23/20 13:48	04/24/20 22:43	1
Hexachloroethane	ND		10	4.2	ug/L		04/23/20 13:48	04/24/20 22:43	1
Indene	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
Isophorone	ND		10	0.57	ug/L		04/23/20 13:48	04/24/20 22:43	1
2-Methylphenol	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 22:43	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
2-Nitroaniline	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 22:43	1
3-Nitroaniline	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Nitroaniline	ND		10	2.5	ug/L		04/23/20 13:48	04/24/20 22:43	1
Nitrobenzene	ND		10	0.55	ug/L		04/23/20 13:48	04/24/20 22:43	1
2-Nitrophenol	ND		10	0.65	ug/L		04/23/20 13:48	04/24/20 22:43	1
4-Nitrophenol	ND		10	2.1	ug/L		04/23/20 13:48	04/24/20 22:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 22:43	1

Client Sample ID: P74-ROX-041720-EB
Date Collected: 04/17/20 08:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-3
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		04/23/20 13:48	04/24/20 22:43	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/23/20 13:48	04/24/20 22:43	1
Pentachlorophenol	ND		20	1.8	ug/L		04/23/20 13:48	04/24/20 22:43	1
Phenol	ND		10	2.6	ug/L		04/23/20 13:48	04/24/20 22:43	1
Pyridine	ND		10	3.2	ug/L		04/23/20 13:48	04/24/20 22:43	1
Quinoline	ND	*	10	6.0	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/23/20 13:48	04/24/20 22:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*34 - 120*	*04/23/20 13:48*	*04/24/20 22:43*	*1*
2-Fluorophenol	*39*		*10 - 120*	*04/23/20 13:48*	*04/24/20 22:43*	*1*
Nitrobenzene-d5	*73*		*27 - 120*	*04/23/20 13:48*	*04/24/20 22:43*	*1*
Phenol-d5	*61*		*10 - 120*	*04/23/20 13:48*	*04/24/20 22:43*	*1*
Terphenyl-d14	*118*		*53 - 125*	*04/23/20 13:48*	*04/24/20 22:43*	*1*
2,4,6-Tribromophenol	*104*		*15 - 135*	*04/23/20 13:48*	*04/24/20 22:43*	*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		0.029	0.0054	ug/L		04/28/20 11:02	04/28/20 17:55	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/28/20 11:02	04/28/20 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/28/20 11:02*	*04/28/20 17:55*	*1*

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

Job ID: 400-186922-1

Client Sample ID: P74-ROX-041720
Date Collected: 04/17/20 10:35
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-4
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			04/30/20 16:32	1
Acrolein	ND		20	10	ug/L			04/30/20 16:32	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 16:32	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 16:32	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 16:32	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 16:32	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 16:32	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 16:32	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 16:32	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 16:32	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 16:32	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 16:32	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 16:32	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 16:32	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 16:32	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 16:32	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 16:32	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 16:32	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 16:32	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 16:32	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 16:32	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 16:32	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 16:32	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 16:32	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 16:32	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 16:32	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 16:32	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 16:32	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 16:32	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 16:32	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 16:32	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 16:32	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 16:32	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/30/20 16:32	1

Client Sample ID: P74-ROX-041720
Date Collected: 04/17/20 10:35
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-4
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			04/30/20 16:32	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 16:32	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 16:32	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 16:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 16:32	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 16:32	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 16:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 16:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 16:32	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 16:32	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 16:32	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 16:32	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 16:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 16:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 16:32	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 16:32	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 16:32	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/30/20 16:32*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*04/30/20 16:32*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/30/20 16:32*	*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	0.031	ug/L		04/23/20 13:48	04/24/20 21:16	1
Acenaphthylene	ND		0.19	0.044	ug/L		04/23/20 13:48	04/24/20 21:16	1
Anthracene	ND		0.19	0.030	ug/L		04/23/20 13:48	04/24/20 21:16	1
Benzo[a]anthracene	ND		0.19	0.045	ug/L		04/23/20 13:48	04/24/20 21:16	1
Benzo[a]pyrene	ND		0.19	0.041	ug/L		04/23/20 13:48	04/24/20 21:16	1
Benzo[b]fluoranthene	ND		0.19	0.066	ug/L		04/23/20 13:48	04/24/20 21:16	1
Benzo[g,h,i]perylene	ND		0.19	0.13	ug/L		04/23/20 13:48	04/24/20 21:16	1
Benzo[k]fluoranthene	ND		0.19	0.097	ug/L		04/23/20 13:48	04/24/20 21:16	1
Chrysene	ND		0.19	0.072	ug/L		04/23/20 13:48	04/24/20 21:16	1
Dibenz(a,h)anthracene	ND		0.19	0.045	ug/L		04/23/20 13:48	04/24/20 21:16	1
Fluoranthene	ND		0.19	0.066	ug/L		04/23/20 13:48	04/24/20 21:16	1
Fluorene	ND		0.19	0.11	ug/L		04/23/20 13:48	04/24/20 21:16	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.12	ug/L		04/23/20 13:48	04/24/20 21:16	1
Phenanthrene	ND		0.19	0.035	ug/L		04/23/20 13:48	04/24/20 21:16	1
Pyrene	ND		0.19	0.039	ug/L		04/23/20 13:48	04/24/20 21:16	1
1-Methylnaphthalene	ND		0.19	0.072	ug/L		04/23/20 13:48	04/24/20 21:16	1
2-Methylnaphthalene	ND		0.19	0.058	ug/L		04/23/20 13:48	04/24/20 21:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*74*		*33 - 138*	*04/23/20 13:48*	*04/24/20 21:16*	*1*
2-Fluorobiphenyl	*64*		*15 - 122*	*04/23/20 13:48*	*04/24/20 21:16*	*1*

Client Sample ID: P74-ROX-041720
Date Collected: 04/17/20 10:35
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-4
Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*70*		*19 - 130*	*04/23/20 13:48*	*04/24/20 21:16*	*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		04/23/20 13:48	04/24/20 23:04	1
Benzenethiol	ND	**1 UJ	9.7	1.7	ug/L		04/23/20 13:48	04/24/20 23:04	1
Benzoic acid	ND		29	7.1	ug/L		04/23/20 13:48	04/24/20 23:04	1
Benzyl alcohol	ND		9.7	1.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
Bis(2-chloroethoxy)methane	ND		9.7	0.67	ug/L		04/23/20 13:48	04/24/20 23:04	1
Bis(2-chloroethyl)ether	ND		9.7	0.72	ug/L		04/23/20 13:48	04/24/20 23:04	1
bis (2-chloroisopropyl) ether	ND		9.7	0.79	ug/L		04/23/20 13:48	04/24/20 23:04	1
Bis(2-ethylhexyl) phthalate	ND		9.7	4.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Bromophenyl phenyl ether	ND		9.7	0.31	ug/L		04/23/20 13:48	04/24/20 23:04	1
Butyl benzyl phthalate	ND		9.7	0.67	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Chloroaniline	ND		9.7	3.3	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Chloro-3-methylphenol	ND		9.7	3.7	ug/L		04/23/20 13:48	04/24/20 23:04	1
2-Chloronaphthalene	ND		9.7	0.51	ug/L		04/23/20 13:48	04/24/20 23:04	1
2-Chlorophenol	ND		9.7	2.1	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Chlorophenyl phenyl ether	ND		9.7	1.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
Dibenz[a,h]acridine	ND		9.7	2.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
Dibenzofuran	ND		9.7	0.51	ug/L		04/23/20 13:48	04/24/20 23:04	1
3,3'-Dichlorobenzidine	ND		9.7	2.5	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4-Dichlorophenol	ND		9.7	2.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
Diethyl phthalate	ND		9.7	0.68	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4-Dimethylphenol	ND		9.7	3.4	ug/L		04/23/20 13:48	04/24/20 23:04	1
Dimethyl phthalate	ND		9.7	0.58	ug/L		04/23/20 13:48	04/24/20 23:04	1
Di-n-butyl phthalate	ND		9.7	2.6	ug/L		04/23/20 13:48	04/24/20 23:04	1
4,6-Dinitro-ortho-cresol	ND		9.7	1.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4-Dinitrotoluene	ND		9.7	1.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,6-Dinitrotoluene	ND		9.7	1.9	ug/L		04/23/20 13:48	04/24/20 23:04	1
Di-n-octyl phthalate	ND		9.7	0.43	ug/L		04/23/20 13:48	04/24/20 23:04	1
1,4-Dioxane	ND		9.7	0.97	ug/L		04/23/20 13:48	04/24/20 23:04	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.7	0.97	ug/L		04/23/20 13:48	04/24/20 23:04	1
Hexachlorobenzene	ND		9.7	0.24	ug/L		04/23/20 13:48	04/24/20 23:04	1
Hexachlorocyclopentadiene	ND	UJ	19	2.5	ug/L		04/23/20 13:48	04/24/20 23:04	1
Hexachloroethane	ND		9.7	4.1	ug/L		04/23/20 13:48	04/24/20 23:04	1
Indene	ND		9.7	0.97	ug/L		04/23/20 13:48	04/24/20 23:04	1
Isophorone	ND		9.7	0.56	ug/L		04/23/20 13:48	04/24/20 23:04	1
2-Methylphenol	ND		9.7	1.8	ug/L		04/23/20 13:48	04/24/20 23:04	1
3 & 4 Methylphenol	ND		19	1.0	ug/L		04/23/20 13:48	04/24/20 23:04	1
2-Nitroaniline	ND		9.7	2.1	ug/L		04/23/20 13:48	04/24/20 23:04	1
3-Nitroaniline	ND		9.7	1.8	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Nitroaniline	ND		9.7	2.4	ug/L		04/23/20 13:48	04/24/20 23:04	1
Nitrobenzene	ND		9.7	0.54	ug/L		04/23/20 13:48	04/24/20 23:04	1
2-Nitrophenol	ND		9.7	0.63	ug/L		04/23/20 13:48	04/24/20 23:04	1
4-Nitrophenol	ND		9.7	2.0	ug/L		04/23/20 13:48	04/24/20 23:04	1
N-Nitrosodimethylamine	ND		9.7	3.4	ug/L		04/23/20 13:48	04/24/20 23:04	1

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

Job ID: 400-186922-1

Client Sample ID: P74-ROX-041720
Date Collected: 04/17/20 10:35
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-4
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		04/23/20 13:48	04/24/20 23:04	1
N-Nitrosodiphenylamine	ND		9.7	0.46	ug/L		04/23/20 13:48	04/24/20 23:04	1
Pentachlorophenol	ND		19	1.8	ug/L		04/23/20 13:48	04/24/20 23:04	1
Phenol	ND		9.7	2.5	ug/L		04/23/20 13:48	04/24/20 23:04	1
Pyridine	ND		9.7	3.1	ug/L		04/23/20 13:48	04/24/20 23:04	1
Quinoline	ND	* UJ	9.7	5.8	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4,5-Trichlorophenol	ND		9.7	3.6	ug/L		04/23/20 13:48	04/24/20 23:04	1
2,4,6-Trichlorophenol	ND		9.7	3.4	ug/L		04/23/20 13:48	04/24/20 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*34 - 120*	*04/23/20 13:48*	*04/24/20 23:04*	*1*
2-Fluorophenol	*42*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:04*	*1*
Nitrobenzene-d5	*69*		*27 - 120*	*04/23/20 13:48*	*04/24/20 23:04*	*1*
Phenol-d5	*59*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:04*	*1*
Terphenyl-d14	*105*		*53 - 125*	*04/23/20 13:48*	*04/24/20 23:04*	*1*
2,4,6-Tribromophenol	*88*		*15 - 135*	*04/23/20 13:48*	*04/24/20 23:04*	*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		0.029	0.0053	ug/L		04/28/20 11:02	04/28/20 18:15	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*04/28/20 11:02*	*04/28/20 18:15*	*1*

Client Sample ID: P57-ROX-041720
Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			04/30/20 17:33	10
Acrolein	ND		200	100	ug/L			04/30/20 17:33	10
Acrylonitrile	ND		100	28	ug/L			04/30/20 17:33	10
Benzene	**2500**		10	3.8	ug/L			04/30/20 17:33	10
Bromobenzene	ND		10	5.4	ug/L			04/30/20 17:33	10
Bromochloromethane	ND		10	5.2	ug/L			04/30/20 17:33	10
Bromodichloromethane	ND		10	5.0	ug/L			04/30/20 17:33	10
Bromoform	ND		50	7.1	ug/L			04/30/20 17:33	10
Bromomethane	ND		10	9.8	ug/L			04/30/20 17:33	10
2-Butanone (MEK)	ND		250	26	ug/L			04/30/20 17:33	10
Carbon disulfide	ND		10	5.0	ug/L			04/30/20 17:33	10
Carbon tetrachloride	ND		10	5.0	ug/L			04/30/20 17:33	10
Chlorobenzene	ND		10	5.0	ug/L			04/30/20 17:33	10
Dibromochloromethane	ND		10	5.0	ug/L			04/30/20 17:33	10
Chloroethane	ND		10	7.6	ug/L			04/30/20 17:33	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			04/30/20 17:33	10
Chloroform	ND		10	6.0	ug/L			04/30/20 17:33	10
1-Chlorohexane	ND		10	7.0	ug/L			04/30/20 17:33	10
Chloromethane	ND		10	8.3	ug/L			04/30/20 17:33	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:33	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			04/30/20 17:33	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			04/30/20 17:33	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			04/30/20 17:33	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			04/30/20 17:33	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			04/30/20 17:33	10
1,1-Dichloroethane	ND		10	5.0	ug/L			04/30/20 17:33	10
1,2-Dichloroethane	ND		10	5.0	ug/L			04/30/20 17:33	10
1,1-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:33	10
1,2-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:33	10
1,3-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:33	10
2,2-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:33	10
1,1-Dichloropropene	ND		10	5.0	ug/L			04/30/20 17:33	10
Ethylbenzene	**6.2**	**J**	10	5.0	ug/L			04/30/20 17:33	10
Ethyl methacrylate	ND		10	6.0	ug/L			04/30/20 17:33	10
Hexachlorobutadiene	ND		50	9.0	ug/L			04/30/20 17:33	10
2-Hexanone	ND		250	31	ug/L			04/30/20 17:33	10
Isopropylbenzene	**19**		10	5.3	ug/L			04/30/20 17:33	10
Methylene bromide	ND		50	5.9	ug/L			04/30/20 17:33	10
Methylene Chloride	ND		50	30	ug/L			04/30/20 17:33	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			04/30/20 17:33	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			04/30/20 17:33	10
m-Xylene & p-Xylene	ND		50	16	ug/L			04/30/20 17:33	10
Naphthalene	**69**		10	10	ug/L			04/30/20 17:33	10
n-Butylbenzene	ND		10	7.6	ug/L			04/30/20 17:33	10
N-Propylbenzene	**22**		10	6.9	ug/L			04/30/20 17:33	10
o-Chlorotoluene	ND		10	5.7	ug/L			04/30/20 17:33	10
o-Xylene	ND		50	6.0	ug/L			04/30/20 17:33	10
p-Chlorotoluene	ND		10	5.6	ug/L			04/30/20 17:33	10
p-Isopropyltoluene	ND		10	7.1	ug/L			04/30/20 17:33	10

Client Sample ID: P57-ROX-041720

Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			04/30/20 17:33	10
Styrene	ND		10	10	ug/L			04/30/20 17:33	10
tert-Butylbenzene	**7.2**	**J**	10	6.3	ug/L			04/30/20 17:33	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			04/30/20 17:33	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			04/30/20 17:33	10
Tetrachloroethene	ND		10	5.8	ug/L			04/30/20 17:33	10
Toluene	**7.8**	**J**	10	4.1	ug/L			04/30/20 17:33	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:33	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			04/30/20 17:33	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			04/30/20 17:33	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			04/30/20 17:33	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			04/30/20 17:33	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			04/30/20 17:33	10
Trichloroethene	ND		10	5.0	ug/L			04/30/20 17:33	10
Trichlorofluoromethane	ND		10	5.2	ug/L			04/30/20 17:33	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			04/30/20 17:33	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			04/30/20 17:33	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			04/30/20 17:33	10
Vinyl acetate	ND		250	20	ug/L			04/30/20 17:33	10
Vinyl chloride	ND		10	5.0	ug/L			04/30/20 17:33	10
Xylenes, Total	ND		100	16	ug/L			04/30/20 17:33	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*04/30/20 17:33*	*10*
Dibromofluoromethane	*92*		*81 - 121*		*04/30/20 17:33*	*10*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/30/20 17:33*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.42**		0.20	0.032	ug/L		04/23/20 13:48	04/24/20 21:34	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/23/20 13:48	04/24/20 21:34	1
Anthracene	ND		0.20	0.031	ug/L		04/23/20 13:48	04/24/20 21:34	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 21:34	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/23/20 13:48	04/24/20 21:34	1
Benzo[b]fluoranthene	ND		0.20	0.069	ug/L		04/23/20 13:48	04/24/20 21:34	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/23/20 13:48	04/24/20 21:34	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/23/20 13:48	04/24/20 21:34	1
Chrysene	ND		0.20	0.075	ug/L		04/23/20 13:48	04/24/20 21:34	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 21:34	1
Fluoranthene	ND		0.20	0.069	ug/L		04/23/20 13:48	04/24/20 21:34	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/23/20 13:48	04/24/20 21:34	1
Phenanthrene	**0.33**		0.20	0.036	ug/L		04/23/20 13:48	04/24/20 21:34	1
Pyrene	ND		0.20	0.040	ug/L		04/23/20 13:48	04/24/20 21:34	1
2-Methylnaphthalene	**34**		0.20	0.060	ug/L		04/23/20 13:48	04/24/20 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*55*		*33 - 138*	*04/23/20 13:48*	*04/24/20 21:34*	*1*
2-Fluorobiphenyl	*64*		*15 - 122*	*04/23/20 13:48*	*04/24/20 21:34*	*1*
Nitrobenzene-d5	*71*		*19 - 130*	*04/23/20 13:48*	*04/24/20 21:34*	*1*

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

Job ID: 400-186922-1

Client Sample ID: P57-ROX-041720
Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.69		0.40	0.22	ug/L		04/23/20 13:48	04/29/20 15:18	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	29		0.20	0.075	ug/L		04/23/20 13:48	04/27/20 17:04	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		04/23/20 13:48	04/24/20 23:26	1
Benzenethiol	ND	*1 UJ	10	1.7	ug/L		04/23/20 13:48	04/24/20 23:26	1
Benzoic acid	ND		30	7.4	ug/L		04/23/20 13:48	04/24/20 23:26	1
Benzyl alcohol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Bis(2-chloroethoxy)methane	ND		10	0.70	ug/L		04/23/20 13:48	04/24/20 23:26	1
Bis(2-chloroethyl)ether	ND		10	0.75	ug/L		04/23/20 13:48	04/24/20 23:26	1
bis (2-chloroisopropyl) ether	ND		10	0.82	ug/L		04/23/20 13:48	04/24/20 23:26	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/23/20 13:48	04/24/20 23:26	1
Butyl benzyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Chloroaniline	ND		10	3.4	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/23/20 13:48	04/24/20 23:26	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/23/20 13:48	04/24/20 23:26	1
2-Chlorophenol	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Dibenzofuran	**0.66**	**J**	10	0.52	ug/L		04/23/20 13:48	04/24/20 23:26	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Diethyl phthalate	ND		10	0.71	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:26	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/24/20 23:26	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/24/20 23:26	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 23:26	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/23/20 13:48	04/24/20 23:26	1
1,4-Dioxane	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/23/20 13:48	04/24/20 23:26	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		04/23/20 13:48	04/24/20 23:26	1
Hexachloroethane	ND		10	4.2	ug/L		04/23/20 13:48	04/24/20 23:26	1
Indene	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
Isophorone	ND		10	0.57	ug/L		04/23/20 13:48	04/24/20 23:26	1
2-Methylphenol	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 23:26	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
2-Nitroaniline	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 23:26	1
3-Nitroaniline	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Nitroaniline	ND		10	2.5	ug/L		04/23/20 13:48	04/24/20 23:26	1
Nitrobenzene	ND		10	0.55	ug/L		04/23/20 13:48	04/24/20 23:26	1

Client Sample ID: P57-ROX-041720
Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		10	0.66	ug/L		04/23/20 13:48	04/24/20 23:26	1
4-Nitrophenol	ND		10	2.1	ug/L		04/23/20 13:48	04/24/20 23:26	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:26	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/23/20 13:48	04/24/20 23:26	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/23/20 13:48	04/24/20 23:26	1
Pentachlorophenol	ND		20	1.8	ug/L		04/23/20 13:48	04/24/20 23:26	1
Pyridine	ND		10	3.2	ug/L		04/23/20 13:48	04/24/20 23:26	1
Quinoline	ND	* UJ	10	6.0	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/23/20 13:48	04/24/20 23:26	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*34 - 120*	*04/23/20 13:48*	*04/24/20 23:26*	*1*
2-Fluorophenol	*45*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:26*	*1*
Nitrobenzene-d5	*72*		*27 - 120*	*04/23/20 13:48*	*04/24/20 23:26*	*1*
Phenol-d5	*59*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:26*	*1*
Terphenyl-d14	*75*		*53 - 125*	*04/23/20 13:48*	*04/24/20 23:26*	*1*
2,4,6-Tribromophenol	*116*		*15 - 135*	*04/23/20 13:48*	*04/24/20 23:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	180		50	13	ug/L		04/23/20 13:48	04/27/20 17:34	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		0.029	0.0054	ug/L		04/28/20 11:02	04/28/20 18:34	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/28/20 11:02	04/28/20 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/28/20 11:02*	*04/28/20 18:34*	*1*

Client Sample ID: P57-ROX-041720-DUP
Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		250	100	ug/L			04/30/20 17:54	10
Acrolein	ND		200	100	ug/L			04/30/20 17:54	10
Acrylonitrile	ND		100	28	ug/L			04/30/20 17:54	10
Benzene	**2800**		10	3.8	ug/L			04/30/20 17:54	10
Bromobenzene	ND		10	5.4	ug/L			04/30/20 17:54	10
Bromochloromethane	ND		10	5.2	ug/L			04/30/20 17:54	10
Bromodichloromethane	ND		10	5.0	ug/L			04/30/20 17:54	10
Bromoform	ND		50	7.1	ug/L			04/30/20 17:54	10
Bromomethane	ND		10	9.8	ug/L			04/30/20 17:54	10
2-Butanone (MEK)	ND		250	26	ug/L			04/30/20 17:54	10
Carbon disulfide	ND		10	5.0	ug/L			04/30/20 17:54	10
Carbon tetrachloride	ND		10	5.0	ug/L			04/30/20 17:54	10
Chlorobenzene	ND		10	5.0	ug/L			04/30/20 17:54	10
Dibromochloromethane	ND		10	5.0	ug/L			04/30/20 17:54	10
Chloroethane	ND		10	7.6	ug/L			04/30/20 17:54	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			04/30/20 17:54	10
Chloroform	ND		10	6.0	ug/L			04/30/20 17:54	10
1-Chlorohexane	ND		10	7.0	ug/L			04/30/20 17:54	10
Chloromethane	ND		10	8.3	ug/L			04/30/20 17:54	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:54	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			04/30/20 17:54	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			04/30/20 17:54	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			04/30/20 17:54	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			04/30/20 17:54	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			04/30/20 17:54	10
1,1-Dichloroethane	ND		10	5.0	ug/L			04/30/20 17:54	10
1,2-Dichloroethane	ND		10	5.0	ug/L			04/30/20 17:54	10
1,1-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:54	10
1,2-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:54	10
1,3-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:54	10
2,2-Dichloropropane	ND		10	5.0	ug/L			04/30/20 17:54	10
1,1-Dichloropropene	ND		10	5.0	ug/L			04/30/20 17:54	10
Ethylbenzene	**6.9**	**J**	10	5.0	ug/L			04/30/20 17:54	10
Ethyl methacrylate	ND		10	6.0	ug/L			04/30/20 17:54	10
Hexachlorobutadiene	ND		50	9.0	ug/L			04/30/20 17:54	10
2-Hexanone	ND		250	31	ug/L			04/30/20 17:54	10
Isopropylbenzene	**21**		10	5.3	ug/L			04/30/20 17:54	10
Methylene bromide	ND		50	5.9	ug/L			04/30/20 17:54	10
Methylene Chloride	ND		50	30	ug/L			04/30/20 17:54	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			04/30/20 17:54	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			04/30/20 17:54	10
m-Xylene & p-Xylene	ND		50	16	ug/L			04/30/20 17:54	10
Naphthalene	**77**		10	10	ug/L			04/30/20 17:54	10
n-Butylbenzene	ND		10	7.6	ug/L			04/30/20 17:54	10
N-Propylbenzene	**26**		10	6.9	ug/L			04/30/20 17:54	10
o-Chlorotoluene	ND		10	5.7	ug/L			04/30/20 17:54	10
o-Xylene	ND		50	6.0	ug/L			04/30/20 17:54	10
p-Chlorotoluene	ND		10	5.6	ug/L			04/30/20 17:54	10
p-Isopropyltoluene	ND		10	7.1	ug/L			04/30/20 17:54	10

Client Sample ID: P57-ROX-041720-DUP

Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			04/30/20 17:54	10
Styrene	ND		10	10	ug/L			04/30/20 17:54	10
tert-Butylbenzene	**8.0**	**J**	10	6.3	ug/L			04/30/20 17:54	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			04/30/20 17:54	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			04/30/20 17:54	10
Tetrachloroethene	ND		10	5.8	ug/L			04/30/20 17:54	10
Toluene	**8.6**	**J**	10	4.1	ug/L			04/30/20 17:54	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			04/30/20 17:54	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			04/30/20 17:54	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			04/30/20 17:54	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			04/30/20 17:54	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			04/30/20 17:54	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			04/30/20 17:54	10
Trichloroethene	ND		10	5.0	ug/L			04/30/20 17:54	10
Trichlorofluoromethane	ND		10	5.2	ug/L			04/30/20 17:54	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			04/30/20 17:54	10
1,2,4-Trimethylbenzene	ND		10	8.2	ug/L			04/30/20 17:54	10
1,3,5-Trimethylbenzene	ND		10	5.6	ug/L			04/30/20 17:54	10
Vinyl acetate	ND		250	20	ug/L			04/30/20 17:54	10
Vinyl chloride	ND		10	5.0	ug/L			04/30/20 17:54	10
Xylenes, Total	ND		100	16	ug/L			04/30/20 17:54	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/30/20 17:54*	*10*
Dibromofluoromethane	*91*		*81 - 121*		*04/30/20 17:54*	*10*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/30/20 17:54*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.37**		0.20	0.032	ug/L		04/23/20 13:48	04/24/20 21:51	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/23/20 13:48	04/24/20 21:51	1
Anthracene	ND		0.20	0.031	ug/L		04/23/20 13:48	04/24/20 21:51	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 21:51	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/23/20 13:48	04/24/20 21:51	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 21:51	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/23/20 13:48	04/24/20 21:51	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/23/20 13:48	04/24/20 21:51	1
Chrysene	ND		0.20	0.074	ug/L		04/23/20 13:48	04/24/20 21:51	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 21:51	1
Fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 21:51	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/23/20 13:48	04/24/20 21:51	1
Phenanthrene	**0.41**		0.20	0.036	ug/L		04/23/20 13:48	04/24/20 21:51	1
Pyrene	ND		0.20	0.040	ug/L		04/23/20 13:48	04/24/20 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*04/23/20 13:48*	*04/24/20 21:51*	*1*
2-Fluorobiphenyl	*66*		*15 - 122*	*04/23/20 13:48*	*04/24/20 21:51*	*1*
Nitrobenzene-d5	*77*		*13 - 130*	*04/23/20 13:48*	*04/24/20 21:51*	*1*

Client Sample ID: P57-ROX-041720-DUP

Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.60		0.40	0.22	ug/L		04/23/20 13:48	04/29/20 15:33	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	29		0.20	0.074	ug/L		04/23/20 13:48	04/27/20 17:19	1
2-Methylnaphthalene	36		0.20	0.060	ug/L		04/23/20 13:48	04/27/20 17:19	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		04/23/20 13:48	04/24/20 23:47	1
Benzenethiol	ND	**1 UJ	10	1.7	ug/L		04/23/20 13:48	04/24/20 23:47	1
Benzoic acid	ND		30	7.3	ug/L		04/23/20 13:48	04/24/20 23:47	1
Benzyl alcohol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/23/20 13:48	04/24/20 23:47	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/23/20 13:48	04/24/20 23:47	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/23/20 13:48	04/24/20 23:47	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/23/20 13:48	04/24/20 23:47	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Chloroaniline	ND		10	3.4	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/23/20 13:48	04/24/20 23:47	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/23/20 13:48	04/24/20 23:47	1
2-Chlorophenol	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Dibenzofuran	0.72	J	10	0.52	ug/L		04/23/20 13:48	04/24/20 23:47	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:47	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/24/20 23:47	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/24/20 23:47	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/24/20 23:47	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/23/20 13:48	04/24/20 23:47	1
1,4-Dioxane	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/23/20 13:48	04/24/20 23:47	1
Hexachlorocyclopentadiene	ND	UJ	20	2.6	ug/L		04/23/20 13:48	04/24/20 23:47	1
Hexachloroethane	ND		10	4.2	ug/L		04/23/20 13:48	04/24/20 23:47	1
Indene	ND		10	1.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
Isophorone	ND		10	0.57	ug/L		04/23/20 13:48	04/24/20 23:47	1
2-Methylphenol	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 23:47	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
2-Nitroaniline	ND		10	2.2	ug/L		04/23/20 13:48	04/24/20 23:47	1
3-Nitroaniline	ND		10	1.8	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Nitroaniline	ND		10	2.5	ug/L		04/23/20 13:48	04/24/20 23:47	1

Client Sample ID: P57-ROX-041720-DUP

Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186922-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		10	0.55	ug/L		04/23/20 13:48	04/24/20 23:47	1
2-Nitrophenol	ND		10	0.65	ug/L		04/23/20 13:48	04/24/20 23:47	1
4-Nitrophenol	ND		10	2.1	ug/L		04/23/20 13:48	04/24/20 23:47	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:47	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/23/20 13:48	04/24/20 23:47	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/23/20 13:48	04/24/20 23:47	1
Pentachlorophenol	ND		20	1.8	ug/L		04/23/20 13:48	04/24/20 23:47	1
Phenol	**67**		10	2.6	ug/L		04/23/20 13:48	04/24/20 23:47	1
Pyridine	ND		10	3.2	ug/L		04/23/20 13:48	04/24/20 23:47	1
Quinoline	ND	* UJ	10	6.0	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/23/20 13:48	04/24/20 23:47	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/23/20 13:48	04/24/20 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*34 - 120*	*04/23/20 13:48*	*04/24/20 23:47*	*1*
2-Fluorophenol	*46*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:47*	*1*
Nitrobenzene-d5	*71*		*27 - 120*	*04/23/20 13:48*	*04/24/20 23:47*	*1*
Phenol-d5	*63*		*10 - 120*	*04/23/20 13:48*	*04/24/20 23:47*	*1*
Terphenyl-d14	*86*		*53 - 125*	*04/23/20 13:48*	*04/24/20 23:47*	*1*
2,4,6-Tribromophenol	*114*		*15 - 135*	*04/23/20 13:48*	*04/24/20 23:47*	*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	0.0052	ug/L		04/28/20 11:02	04/28/20 18:54	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*04/28/20 11:02*	*04/28/20 18:54*	*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 or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
§	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186922-1

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	(78-118)	(81-121)	(80-120)
400-186922-1	TB-ROX-041720-8260	96	92	103
400-186922-3	P74-ROX-041720-EB	97	92	103
400-186922-4	P74-ROX-041720	95	92	102
400-186922-5	P57-ROX-041720	98	92	102
400-186922-6	P57-ROX-041720-DUP	96	91	102
LCS 400-487511/1002	Lab Control Sample	95	98	101
MB 400-487511/5	Method Blank	96	95	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186922-3	P74-ROX-041720-EB	87	39	73	61	118	104
400-186922-4	P74-ROX-041720	84	42	69	59	105	88
400-186922-5	P57-ROX-041720	83	45	72	59	75	116
400-186922-6	P57-ROX-041720-DUP	88	46	71	63	86	114
LCS 400-486835/2-A	Lab Control Sample	73	43	72	60	74	79
LCS 400-486835/4-A	Lab Control Sample	55	31	52	48	58	53
LCSD 400-486835/3-A	Lab Control Sample Dup	58	28	58	47	66	63
LCSD 400-486835/5-A	Lab Control Sample Dup	61	27	56	49	63	56
MB 400-486835/1-A	Method Blank	57	34	52	49	57	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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186922-3	P74-ROX-041720-EB	101	76	76
400-186922-4	P74-ROX-041720	74	64	70
400-186922-5	P57-ROX-041720	55	64	71
400-186922-6	P57-ROX-041720-DUP	68	66	77
LCS 400-486835/2-A	Lab Control Sample	84	69	87
LCSD 400-486835/3-A	Lab Control Sample Dup	87	75	109
MB 400-486835/1-A	Method Blank	90	73	71

Surrogate Legend

Surrogate Summary

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

Job ID: 400-186922-1

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB2
Lab Sample ID	**Client Sample ID**	**(51-149)**
400-186922-2	TB-ROX-041720-8011	96
400-186922-3	P74-ROX-041720-EB	96
400-186922-4	P74-ROX-041720	100
400-186922-5	P57-ROX-041720	96
400-186922-6	P57-ROX-041720-DUP	89
LCS 400-487253/2-A	Lab Control Sample	105
LCSD 400-487253/3-A	Lab Control Sample Dup	103
MB 400-487253/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186922-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-041720-8260

Lab Sample ID: 400-186922-1

Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

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	487511	04/30/20 15:52	AMB	TAL PEN

Client Sample ID: TB-ROX-041720-8011

Lab Sample ID: 400-186922-2

Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

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			34.9 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 17:15	DS	TAL PEN

Client Sample ID: P74-ROX-041720-EB

Lab Sample ID: 400-186922-3

Date Collected: 04/17/20 08:45
Date Received: 04/18/20 08:23

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	487511	04/30/20 16:12	AMB	TAL PEN
Total/NA	Prep	3520C			1002 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 22:43	VC1	TAL PEN
Total/NA	Prep	3520C			1002 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 20:59	DS	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 17:55	DS	TAL PEN

Client Sample ID: P74-ROX-041720

Lab Sample ID: 400-186922-4

Date Collected: 04/17/20 10:35
Date Received: 04/18/20 08:23

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	487511	04/30/20 16:32	AMB	TAL PEN
Total/NA	Prep	3520C			1026 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 23:04	VC1	TAL PEN
Total/NA	Prep	3520C			1026 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 21:16	DS	TAL PEN
Total/NA	Prep	8011			36.5 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 18:15	DS	TAL PEN

Client Sample ID: P57-ROX-041720

Lab Sample ID: 400-186922-5

Date Collected: 04/17/20 12:15
Date Received: 04/18/20 08:23

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		10	5 mL	5 mL	487511	04/30/20 17:33	AMB	TAL PEN
Total/NA	Prep	3520C			992 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 23:26	VC1	TAL PEN

Client Sample ID: P57-ROX-041720

Lab Sample ID: 400-186922-5

Date Collected: 04/17/20 12:15

Matrix: Water

Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C	DL		992 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D	DL	5			487181	04/27/20 17:34	S1B	TAL PEN
Total/NA	Prep	3520C			992 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 21:34	DS	TAL PEN
Total/NA	Prep	3520C	RA		992 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			487148	04/27/20 17:04	PP1	TAL PEN
Total/NA	Prep	3520C	DL		992 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL	DL	2			487387	04/29/20 15:18	TAJ	TAL PEN
Total/NA	Prep	8011			35.7 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 18:34	DS	TAL PEN

Client Sample ID: P57-ROX-041720-DUP

Lab Sample ID: 400-186922-6

Date Collected: 04/17/20 12:15

Matrix: Water

Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	487511	04/30/20 17:54	AMB	TAL PEN
Total/NA	Prep	3520C			1001.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486937	04/24/20 23:47	VC1	TAL PEN
Total/NA	Prep	3520C			1001.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 21:51	DS	TAL PEN
Total/NA	Prep	3520C	RA		1001.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL	RA	1			487148	04/27/20 17:19	PP1	TAL PEN
Total/NA	Prep	3520C	DL		1001.8 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL	DL	2			487387	04/29/20 15:33	TAJ	TAL PEN
Total/NA	Prep	8011			36.7 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 18:54	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486835/1-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 16:43	S1B	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			486926	04/24/20 20:06	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487253/1-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:16	DS	TAL PEN

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487511/5
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	487511	04/30/20 10:07	AMB	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486835/2-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 17:08	S1B	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 20:24	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486835/4-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:46	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487253/2-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:36	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487511/1002
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	487511	04/30/20 08:56	AMB	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486835/3-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 16:21	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			486926	04/24/20 20:41	DS	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486835/5-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			1000 mL	1 mL	486835	04/23/20 13:48	NTH	TAL PEN
Total/NA	Analysis	8270D		1			486944	04/24/20 17:12	VC1	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487253/3-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:56	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 487511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-1	TB-ROX-041720-8260	Total/NA	Water	8260B	
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	8260B	
400-186922-4	P74-ROX-041720	Total/NA	Water	8260B	
400-186922-5	P57-ROX-041720	Total/NA	Water	8260B	
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	8260B	
MB 400-487511/5	Method Blank	Total/NA	Water	8260B	
LCS 400-487511/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	3520C	
400-186922-4	P74-ROX-041720	Total/NA	Water	3520C	
400-186922-5	P57-ROX-041720	Total/NA	Water	3520C	
400-186922-5 - DL	P57-ROX-041720	Total/NA	Water	3520C	
400-186922-5 - RA	P57-ROX-041720	Total/NA	Water	3520C	
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	3520C	
400-186922-6 - RA	P57-ROX-041720-DUP	Total/NA	Water	3520C	
400-186922-6 - DL	P57-ROX-041720-DUP	Total/NA	Water	3520C	
MB 400-486835/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486835/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486835/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 486926

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	8270D LL	486835
400-186922-4	P74-ROX-041720	Total/NA	Water	8270D LL	486835
400-186922-5	P57-ROX-041720	Total/NA	Water	8270D LL	486835
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	8270D LL	486835
MB 400-486835/1-A	Method Blank	Total/NA	Water	8270D LL	486835
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486835
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486835

Analysis Batch: 486937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	8270D	486835
400-186922-4	P74-ROX-041720	Total/NA	Water	8270D	486835
400-186922-5	P57-ROX-041720	Total/NA	Water	8270D	486835
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	8270D	486835

Analysis Batch: 486944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-486835/4-A	Lab Control Sample	Total/NA	Water	8270D	486835
LCSD 400-486835/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835
LCSD 400-486835/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486835

GC/MS Semi VOA

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-5 - RA	P57-ROX-041720	Total/NA	Water	8270D LL	486835
400-186922-6 - RA	P57-ROX-041720-DUP	Total/NA	Water	8270D LL	486835

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-5 - DL	P57-ROX-041720	Total/NA	Water	8270D	486835
MB 400-486835/1-A	Method Blank	Total/NA	Water	8270D	486835
LCS 400-486835/2-A	Lab Control Sample	Total/NA	Water	8270D	486835

Analysis Batch: 487387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-5 - DL	P57-ROX-041720	Total/NA	Water	8270D LL	486835
400-186922-6 - DL	P57-ROX-041720-DUP	Total/NA	Water	8270D LL	486835

GC Semi VOA

Prep Batch: 487253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-2	TB-ROX-041720-8011	Total/NA	Water	8011	
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	8011	
400-186922-4	P74-ROX-041720	Total/NA	Water	8011	
400-186922-5	P57-ROX-041720	Total/NA	Water	8011	
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	8011	
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186922-2	TB-ROX-041720-8011	Total/NA	Water	8011	487253
400-186922-3	P74-ROX-041720-EB	Total/NA	Water	8011	487253
400-186922-4	P74-ROX-041720	Total/NA	Water	8011	487253
400-186922-5	P57-ROX-041720	Total/NA	Water	8011	487253
400-186922-6	P57-ROX-041720-DUP	Total/NA	Water	8011	487253
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	487253
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	487253
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487253

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

Lab Sample ID: MB 400-487511/5
Matrix: Water
Analysis Batch: 487511

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			04/30/20 10:07	1
Acrolein	ND		20	10	ug/L			04/30/20 10:07	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 10:07	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 10:07	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 10:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 10:07	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 10:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 10:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 10:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 10:07	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 10:07	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 10:07	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 10:07	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 10:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 10:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 10:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 10:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 10:07	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 10:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 10:07	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 10:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 10:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 10:07	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 10:07	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 10:07	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 10:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 10:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 10:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 10:07	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 10:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 10:07	1

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

Lab Sample ID: MB 400-487511/5
Matrix: Water
Analysis Batch: 487511

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			04/30/20 10:07	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/30/20 10:07	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 10:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 10:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 10:07	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 10:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 10:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 10:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 10:07	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 10:07	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 10:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 10:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 10:07	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 10:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 10:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/30/20 10:07*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/30/20 10:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/30/20 10:07*	*1*

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	214		ug/L		107	43 - 160
Acrolein	500	483		ug/L		97	38 - 160
Acrylonitrile	500	521		ug/L		104	64 - 142
Benzene	50.0	51.3		ug/L		103	70 - 130
Bromobenzene	50.0	50.9		ug/L		102	70 - 132
Bromochloromethane	50.0	47.7		ug/L		95	70 - 130
Bromodichloromethane	50.0	49.1		ug/L		98	67 - 133
Bromoform	50.0	43.0		ug/L		86	57 - 140
Bromomethane	50.0	40.4		ug/L		81	10 - 160
2-Butanone (MEK)	200	206		ug/L		103	61 - 145
Carbon disulfide	50.0	49.1		ug/L		98	61 - 137
Carbon tetrachloride	50.0	45.6		ug/L		91	61 - 137
Chlorobenzene	50.0	50.5		ug/L		101	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	51.3		ug/L		103	55 - 141

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

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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	38.9		ug/L		78	10 - 160
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	57.8		ug/L		116	69 - 130
Chloromethane	50.0	47.0		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	52.4		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	53.8		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	47.3		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	55.4		ug/L		111	63 - 134
1,2-Dichloropropane	50.0	52.3		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	53.0		ug/L		106	70 - 130
2,2-Dichloropropane	50.0	50.9		ug/L		102	52 - 135
1,1-Dichloropropene	50.0	52.0		ug/L		104	70 - 130
Ethylbenzene	50.0	52.6		ug/L		105	70 - 130
Ethyl methacrylate	50.0	55.3		ug/L		111	68 - 130
Hexachlorobutadiene	50.0	53.6		ug/L		107	53 - 140
2-Hexanone	200	225		ug/L		112	65 - 137
Isopropylbenzene	50.0	52.4		ug/L		105	70 - 130
Methylene bromide	50.0	50.9		ug/L		102	70 - 130
Methylene Chloride	50.0	54.2		ug/L		108	66 - 135
4-Methyl-2-pentanone (MIBK)	200	220		ug/L		110	69 - 138
Methyl tert-butyl ether	50.0	50.0		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.0		ug/L		104	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	50.3		ug/L		101	67 - 130
N-Propylbenzene	50.0	50.7		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.6		ug/L		99	70 - 130
o-Xylene	50.0	52.8		ug/L		106	70 - 130
p-Chlorotoluene	50.0	51.2		ug/L		102	70 - 130
p-Isopropyltoluene	50.0	51.1		ug/L		102	65 - 130
sec-Butylbenzene	50.0	50.7		ug/L		101	66 - 130
Styrene	50.0	52.3		ug/L		105	70 - 130
tert-Butylbenzene	50.0	49.6		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.3		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/L		102	70 - 131
Tetrachloroethene	50.0	49.4		ug/L		99	65 - 130
Toluene	50.0	50.8		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	50.4		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	56.6		ug/L		113	63 - 130
1,2,3-Trichlorobenzene	50.0	51.3		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	52.0		ug/L		104	60 - 140
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	53.1		ug/L		106	70 - 130
Trichloroethene	50.0	52.6		ug/L		105	70 - 130
Trichlorofluoromethane	50.0	42.5		ug/L		85	65 - 138

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

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.7		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	51.3		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	51.0		ug/L		102	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	43.3		ug/L		87	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzenethiol	ND		10	1.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzoic acid	ND		30	7.3	ug/L		04/23/20 13:48	04/27/20 16:43	1
Benzyl alcohol	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/23/20 13:48	04/27/20 16:43	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/23/20 13:48	04/27/20 16:43	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/23/20 13:48	04/27/20 16:43	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chloroaniline	ND		10	3.4	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Chlorophenol	ND		10	2.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dibenzofuran	ND		10	0.52	ug/L		04/23/20 13:48	04/27/20 16:43	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Diethyl phthalate	ND		10	0.70	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/23/20 13:48	04/27/20 16:43	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/23/20 13:48	04/27/20 16:43	1
1,4-Dioxane	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
Hexachloroethane	ND		10	4.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
Indene	ND		10	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
Isophorone	ND		10	0.57	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Methylphenol	ND		10	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Nitroaniline	ND		10	2.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
3-Nitroaniline	ND		10	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Nitroaniline	ND		10	2.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
Nitrobenzene	ND		10	0.55	ug/L		04/23/20 13:48	04/27/20 16:43	1
2-Nitrophenol	ND		10	0.65	ug/L		04/23/20 13:48	04/27/20 16:43	1
4-Nitrophenol	ND		10	2.1	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/23/20 13:48	04/27/20 16:43	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/23/20 13:48	04/27/20 16:43	1
Pentachlorophenol	ND		20	1.8	ug/L		04/23/20 13:48	04/27/20 16:43	1
Phenol	ND		10	2.6	ug/L		04/23/20 13:48	04/27/20 16:43	1
Pyridine	ND		10	3.2	ug/L		04/23/20 13:48	04/27/20 16:43	1
Quinoline	ND		10	6.0	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/23/20 13:48	04/27/20 16:43	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/23/20 13:48	04/27/20 16:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*57*		*34 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2-Fluorophenol	*34*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Nitrobenzene-d5	*52*		*27 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Phenol-d5	*49*		*10 - 120*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
Terphenyl-d14	*57*		*53 - 125*	*04/23/20 13:48*	*04/27/20 16:43*	*1*
2,4,6-Tribromophenol	*58*		*15 - 135*	*04/23/20 13:48*	*04/27/20 16:43*	*1*

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	24.2		ug/L		81	29 - 120
Benzoic acid	116	76.9		ug/L		66	10 - 150
Benzyl alcohol	30.0	23.2		ug/L		77	19 - 125
Bis(2-chloroethoxy)methane	30.0	21.8		ug/L		73	45 - 120
Bis(2-chloroethyl)ether	30.0	19.6		ug/L		65	48 - 120
bis (2-chloroisopropyl) ether	30.0	20.0		ug/L		67	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	26.3		ug/L		88	48 - 150
4-Bromophenyl phenyl ether	30.0	23.7		ug/L		79	55 - 122
Butyl benzyl phthalate	30.0	25.1		ug/L		84	46 - 145
4-Chloroaniline	30.0	21.0		ug/L		70	30 - 120
4-Chloro-3-methylphenol	30.0	24.1		ug/L		80	39 - 140

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

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	23.1		ug/L		77	52 - 120
2-Chlorophenol	30.0	19.9		ug/L		66	34 - 120
4-Chlorophenyl phenyl ether	30.0	24.0		ug/L		80	58 - 124
Dibenz[a,h]acridine	29.6	20.5		ug/L		69	46 - 149
Dibenzofuran	30.0	23.8		ug/L		79	58 - 123
3,3'-Dichlorobenzidine	40.0	38.0		ug/L		95	39 - 135
2,4-Dichlorophenol	30.0	23.0		ug/L		77	39 - 128
Diethyl phthalate	30.0	25.2		ug/L		84	44 - 146
2,4-Dimethylphenol	30.0	24.3		ug/L		81	44 - 120
Dimethyl phthalate	30.0	23.8		ug/L		79	50 - 131
Di-n-butyl phthalate	30.0	27.1		ug/L		90	55 - 131
4,6-Dinitro-ortho-cresol	60.0	52.9		ug/L		88	10 - 150
2,4-Dinitrophenol	60.0	64.3		ug/L		107	10 - 150
2,4-Dinitrotoluene	30.0	25.8		ug/L		86	58 - 140
2,6-Dinitrotoluene	30.0	24.9		ug/L		83	57 - 130
Di-n-octyl phthalate	30.0	28.4		ug/L		95	50 - 150
1,4-Dioxane	30.0	15.2		ug/L		51	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	21.8		ug/L		73	47 - 123
Hexachlorobenzene	30.0	23.1		ug/L		77	52 - 131
Hexachlorocyclopentadiene	30.0	13.4	J	ug/L		45	10 - 129
Hexachloroethane	30.0	16.9		ug/L		56	20 - 120
Indene	30.0	20.5		ug/L		68	47 - 120
Isophorone	30.0	22.3		ug/L		74	49 - 120
2-Methylphenol	30.0	22.0		ug/L		73	39 - 123
3 & 4 Methylphenol	30.0	21.9		ug/L		73	38 - 121
2-Nitroaniline	30.0	23.8		ug/L		79	47 - 150
3-Nitroaniline	30.0	19.9		ug/L		66	34 - 132
4-Nitroaniline	30.0	24.7		ug/L		82	41 - 135
Nitrobenzene	30.0	21.6		ug/L		72	47 - 120
2-Nitrophenol	30.0	24.2		ug/L		81	28 - 136
4-Nitrophenol	60.0	52.2		ug/L		87	10 - 150
N-Nitrosodimethylamine	30.0	20.4		ug/L		68	22 - 148
N-Nitrosodi-n-propylamine	30.0	22.9		ug/L		76	44 - 120
N-Nitrosodiphenylamine	29.8	23.1		ug/L		78	56 - 120
Pentachlorophenol	60.0	52.7		ug/L		88	15 - 141
Phenol	30.0	19.1		ug/L		64	33 - 120
Pyridine	60.0	33.4		ug/L		56	26 - 120
Quinoline	29.6	13.7	*	ug/L		46	51 - 129
2,4,5-Trichlorophenol	30.0	25.5		ug/L		85	38 - 147
2,4,6-Trichlorophenol	30.0	25.8		ug/L		86	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*73*		*34 - 120*
2-Fluorophenol	*43*		*10 - 120*
Nitrobenzene-d5	*72*		*27 - 120*
Phenol-d5	*60*		*10 - 120*
Terphenyl-d14	*74*		*53 - 125*

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

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	*79*		*15 - 135*

Lab Sample ID: LCS 400-486835/4-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	5.66	J	ug/L		19	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*48*		*10 - 120*
Terphenyl-d14	*58*		*53 - 125*
2,4,6-Tribromophenol	*53*		*15 - 135*

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	20.0		ug/L		67	29 - 120	NaN	30
Benzoic acid	116	65.7		ug/L		56	10 - 150	NaN	30
Benzyl alcohol	30.0	18.8		ug/L		63	19 - 125	NaN	30
Bis(2-chloroethoxy)methane	30.0	17.7		ug/L		59	45 - 120	NaN	30
Bis(2-chloroethyl)ether	30.0	22.1		ug/L		74	48 - 120	NaN	30
bis (2-chloroisopropyl) ether	30.0	16.5		ug/L		55	30 - 125	NaN	30
Bis(2-ethylhexyl) phthalate	30.0	19.1		ug/L		64	48 - 150	NaN	30
4-Bromophenyl phenyl ether	30.0	18.0		ug/L		60	55 - 122	NaN	30
Butyl benzyl phthalate	30.0	19.7		ug/L		66	46 - 145	NaN	30
4-Chloroaniline	30.0	15.8		ug/L		53	30 - 120	NaN	30
4-Chloro-3-methylphenol	30.0	19.3		ug/L		64	39 - 140	NaN	30
2-Chloronaphthalene	30.0	18.5		ug/L		62	52 - 120	NaN	30
2-Chlorophenol	30.0	14.8		ug/L		49	34 - 120	NaN	30
4-Chlorophenyl phenyl ether	30.0	18.8		ug/L		63	58 - 124	NaN	30
Dibenz[a,h]acridine	29.6	16.6		ug/L		56	46 - 149	NaN	30
Dibenzofuran	30.0	18.7		ug/L		62	58 - 123	NaN	30
3,3'-Dichlorobenzidine	40.0	29.4		ug/L		74	39 - 135	NaN	30
2,4-Dichlorophenol	30.0	18.0		ug/L		60	39 - 128	NaN	30
Diethyl phthalate	30.0	20.2		ug/L		67	44 - 146	NaN	30
2,4-Dimethylphenol	30.0	19.2		ug/L		64	44 - 120	NaN	30
Dimethyl phthalate	30.0	18.9		ug/L		63	50 - 131	NaN	30
Di-n-butyl phthalate	30.0	20.2		ug/L		67	55 - 131	NaN	30
4,6-Dinitro-ortho-cresol	60.0	40.7		ug/L		68	10 - 150	NaN	30
2,4-Dinitrophenol	60.0	47.8		ug/L		80	10 - 150	NaN	30
2,4-Dinitrotoluene	30.0	20.7		ug/L		69	58 - 140	NaN	30
2,6-Dinitrotoluene	30.0	19.6		ug/L		65	57 - 130	NaN	30

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

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	19.4		ug/L		65	50 - 150	NaN	30
1,4-Dioxane	30.0	12.9		ug/L		43	25 - 120	NaN	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	17.2		ug/L		57	47 - 123	NaN	30
Hexachlorobenzene	30.0	18.2		ug/L		61	52 - 131	NaN	30
Hexachlorocyclopentadiene	30.0	12.4	J	ug/L		41	10 - 129	NaN	30
Hexachloroethane	30.0	14.2		ug/L		47	20 - 120	NaN	30
Indene	30.0	16.8		ug/L		56	47 - 120	NaN	30
Isophorone	30.0	18.2		ug/L		61	49 - 120	NaN	30
2-Methylphenol	30.0	17.3		ug/L		58	39 - 123	NaN	30
3 & 4 Methylphenol	30.0	17.4	J	ug/L		58	38 - 121	NaN	30
2-Nitroaniline	30.0	18.7		ug/L		62	47 - 150	NaN	30
3-Nitroaniline	30.0	14.9		ug/L		50	34 - 132	NaN	30
4-Nitroaniline	30.0	18.5		ug/L		62	41 - 135	NaN	30
Nitrobenzene	30.0	17.3		ug/L		58	47 - 120	NaN	30
2-Nitrophenol	30.0	19.1		ug/L		64	28 - 136	NaN	30
4-Nitrophenol	60.0	38.1		ug/L		63	10 - 150	NaN	30
N-Nitrosodimethylamine	30.0	16.3		ug/L		54	22 - 148	NaN	30
N-Nitrosodi-n-propylamine	30.0	18.6		ug/L		62	44 - 120	NaN	30
N-Nitrosodiphenylamine	29.8	17.7		ug/L		60	56 - 120	NaN	30
Pentachlorophenol	60.0	41.6		ug/L		69	15 - 141	NaN	30
Phenol	30.0	14.9		ug/L		50	33 - 120	NaN	30
Pyridine	60.0	27.5		ug/L		46	26 - 120	NaN	30
Quinoline	29.6	15.6		ug/L		53	51 - 129	NaN	30
2,4,5-Trichlorophenol	30.0	20.0		ug/L		67	38 - 147	NaN	30
2,4,6-Trichlorophenol	30.0	20.1		ug/L		67	36 - 139	NaN	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*28*		*10 - 120*
Nitrobenzene-d5	*58*		*27 - 120*
Phenol-d5	*47*		*10 - 120*
Terphenyl-d14	*66*		*53 - 125*
2,4,6-Tribromophenol	*63*		*15 - 135*

Lab Sample ID: LCSD 400-486835/5-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	* *1	ug/L		2	10 - 120	162	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*61*		*34 - 120*
2-Fluorophenol	*27*		*10 - 120*
Nitrobenzene-d5	*56*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*63*		*53 - 125*

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

Lab Sample ID: LCSD 400-486835/5-A
Matrix: Water
Analysis Batch: 486944

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*56*		*15 - 135*

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

Lab Sample ID: MB 400-486835/1-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486835

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/23/20 13:48	04/24/20 20:06	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/23/20 13:48	04/24/20 20:06	1
Anthracene	ND		0.20	0.031	ug/L		04/23/20 13:48	04/24/20 20:06	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 20:06	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/23/20 13:48	04/24/20 20:06	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 20:06	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/23/20 13:48	04/24/20 20:06	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/23/20 13:48	04/24/20 20:06	1
Chrysene	ND		0.20	0.074	ug/L		04/23/20 13:48	04/24/20 20:06	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/23/20 13:48	04/24/20 20:06	1
Fluoranthene	ND		0.20	0.068	ug/L		04/23/20 13:48	04/24/20 20:06	1
Fluorene	ND		0.20	0.11	ug/L		04/23/20 13:48	04/24/20 20:06	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/23/20 13:48	04/24/20 20:06	1
Phenanthrene	ND		0.20	0.036	ug/L		04/23/20 13:48	04/24/20 20:06	1
Pyrene	ND		0.20	0.040	ug/L		04/23/20 13:48	04/24/20 20:06	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/23/20 13:48	04/24/20 20:06	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/23/20 13:48	04/24/20 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*90*		*33 - 138*	*04/23/20 13:48*	*04/24/20 20:06*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*04/23/20 13:48*	*04/24/20 20:06*	*1*
Nitrobenzene-d5	*71*		*19 - 130*	*04/23/20 13:48*	*04/24/20 20:06*	*1*

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	24.2		ug/L		81	41 - 120
Acenaphthylene	30.0	23.0		ug/L		77	44 - 120
Anthracene	30.0	27.2		ug/L		91	49 - 120
Benzo[a]anthracene	30.0	26.8		ug/L		89	61 - 135
Benzo[a]pyrene	30.0	27.9		ug/L		93	52 - 120
Benzo[b]fluoranthene	30.0	29.8		ug/L		99	53 - 134
Benzo[g,h,i]perylene	30.0	18.1		ug/L		60	47 - 133
Benzo[k]fluoranthene	30.0	32.4		ug/L		108	57 - 134
Chrysene	30.0	25.9		ug/L		86	55 - 122
Dibenz(a,h)anthracene	30.0	19.6		ug/L		65	48 - 146
Fluoranthene	30.0	25.9		ug/L		86	54 - 128

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

Lab Sample ID: LCS 400-486835/2-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	25.2		ug/L		84	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	19.0		ug/L		63	43 - 142
Phenanthrene	30.0	23.3		ug/L		78	48 - 120
Pyrene	30.0	25.8		ug/L		86	48 - 132
1-Methylnaphthalene	30.0	22.0		ug/L		73	41 - 120
2-Methylnaphthalene	30.0	23.2		ug/L		77	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*84*		*33 - 138*
2-Fluorobiphenyl	*69*		*15 - 122*
Nitrobenzene-d5	*87*		*19 - 130*

Lab Sample ID: LCSD 400-486835/3-A
Matrix: Water
Analysis Batch: 486926

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486835

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.2		ug/L		91	41 - 120	11	56
Acenaphthylene	30.0	25.3		ug/L		84	44 - 120	10	56
Anthracene	30.0	29.2		ug/L		97	49 - 120	7	51
Benzo[a]anthracene	30.0	27.8		ug/L		93	61 - 135	4	49
Benzo[a]pyrene	30.0	27.3		ug/L		91	52 - 120	2	50
Benzo[b]fluoranthene	30.0	28.3		ug/L		94	53 - 134	5	54
Benzo[g,h,i]perylene	30.0	18.8		ug/L		63	47 - 133	4	50
Benzo[k]fluoranthene	30.0	29.7		ug/L		99	57 - 134	9	52
Chrysene	30.0	25.9		ug/L		86	55 - 122	0	50
Dibenz(a,h)anthracene	30.0	21.7		ug/L		72	48 - 146	10	50
Fluoranthene	30.0	29.5		ug/L		98	54 - 128	13	52
Fluorene	30.0	27.8		ug/L		93	45 - 125	10	56
Indeno[1,2,3-cd]pyrene	30.0	19.6		ug/L		65	43 - 142	3	51
Phenanthrene	30.0	27.5		ug/L		92	48 - 120	16	56
Pyrene	30.0	25.2		ug/L		84	48 - 132	2	52
1-Methylnaphthalene	30.0	25.4		ug/L		85	41 - 120	15	55
2-Methylnaphthalene	30.0	27.0		ug/L		90	32 - 124	15	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*87*		*33 - 138*
2-Fluorobiphenyl	*75*		*15 - 122*
Nitrobenzene-d5	*109*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/28/20 11:02	04/28/20 14:16	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*04/28/20 11:02*	*04/28/20 14:16*	*1*

Lab Sample ID: LCS 400-487253/2-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0915		ug/L		91	60 - 140
1,2-Dibromoethane	0.101	0.118		ug/L		117	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487253/3-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0980		ug/L		98	60 - 140	7	30
1,2-Dibromoethane	0.101	0.117		ug/L		116	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

AECOM

CHECK IF NO INCIDENT # APPLIES

DATE: 9/17/20

PAGE: 1 of 1

Project / Task Number:
oxana Quarterly GW
02 60619901 - 1.03.0022

AECOM Other ID

LAB USE ONLY

FIELD NOTES:

TEMPERATURE ON RECEIPT C°
0.5°C, 0.2°C

JR 7

Container PID Readings or Laboratory Notes

Time
1600

Time
823

Time

Version 14Dec15

5/1/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186922-1

Login Number: 186922
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1099506,1099507,1099512,1099513
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	0.5 C, 0.2 C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-186922-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186933-1-Rev. 1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/20/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-041720-8011-SS	TB-ROX-041720-8260-SS
T12-ROX-041720	P93A-ROX-041720

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 acenaphthene was detected in the method blank. Several SVOC LCS/LCSD recoveries and SVOC LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample T12-ROX-041720 and the method blank. Several samples were diluted to bring VOCs into calibration range of the instrument. 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; however, the laboratory report was revised to correct sample IDs T12-ROX-041720 and P93A-ROX-041720. Data was correctly reported; no qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

Yes

Blank ID	Parameter	Analyte	Concentration/ Amount
MB 400-486957/1-A	PAHs	Acenaphthene	0.0375 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 400-486957/2-A/3-A	SVOCs	4-Bromophenyl phenyl ether	**133/125**	7	55-122/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**165/154**	7	39-128/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	Hexachlorobenzene	**133**/127	5	52-131/30
LCS/LCSD 400-486957/4-A/5-A	SVOCs	Benzenethiol	**2/2**	15	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 in LCS/LCSD 400-486957/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
T12-ROX-041720	SVOCs	Benzenethiol	**UJ**
P93A-ROX-041720	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
T12-ROX-041720	SVOCs	Terphenyl-d_{14}	**51**	53-125
MB 400-486957/1-A	SVOCs	Terphenyl-d_{14}	**44**	53-125

Qualifications due to surrogate recoveries were not required if only one of three base/neutral SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Method blanks are quality control samples and do not require qualification.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

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

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186933-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/8/2020 10:39:16 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
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Reviewed 5/20/2020 MR

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186933-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186933-1

Comments
Revised Report
Report revised to correct the sample IDs, T12-ROX-041720 (400-186933-3) and P93A-ROX-041720 (400-186933-4).
Supersedes report dated 5-7-2020.

Receipt
The samples were received on 4/18/2020 8:23 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.5° C.

GC/MS VOA
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-041720-8260-SS (400-186933-2), T12-ROX-041720 (400-186933-3) and P93A-ROX-041720 (400-186933-4). The requested target analyte list includes 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: T12-ROX-041720-SS (400-186933-3) and P93A-ROX-041720-SS (400-186933-4). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 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: T12-ROX-041720 (400-186933-3) and (MB 400-486957/1-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 400-486957 and analytical batch 400-487181 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. These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-486957 and analytical batch 400-487260 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, Hexachlorobenzene and 4-Bromophenyl phenyl ether. These analytes were biased high in the LCS and LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487181 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-487616 and analytical batch 400-487902 recovered outside control limits for the following analytes: 1,4-Dioxane, Benzenethiol.

Method 8270D: The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for preparation batch 400-487616 and analytical batch 400-487902 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: Internal standard (ISTD) response for Phenanthrene-d10 for the following sample was outside acceptance criteria: (LCSD 400-487616/5-A). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-487148 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been

Job ID: 400-186933-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

reported. The associated sample is impacted: (CCVIS 400-487148/3).

Method 8270D LL: The method blank for preparation batch 400-486957 and analytical batch 400-487148 contained Acenaphthene 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 400-487261 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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: 400-186933-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186933-1	TB-ROX-041720-8011-SS	Water	04/17/20 00:00	04/18/20 08:23	
400-186933-2	TB-ROX-041720-8260-SS	Water	04/17/20 00:00	04/18/20 08:23	
400-186933-3	T12-ROX-041720	Water	04/17/20 09:45	04/18/20 08:23	
400-186933-4	P93A-ROX-041720	Water	04/17/20 10:55	04/18/20 08:23	

Detection Summary

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

Job ID: 400-186933-1

Client Sample ID: TB-ROX-041720-8011-SS

Lab Sample ID: 400-186933-1

No Detections.

Client Sample ID: TB-ROX-041720-8260-SS

Lab Sample ID: 400-186933-2

No Detections.

Client Sample ID: T12-ROX-041720

Lab Sample ID: 400-186933-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	140	J	250	100	ug/L	10		8260B	Total/NA
Benzene	1600		10	3.8	ug/L	10		8260B	Total/NA
Carbon disulfide	5.8	J	10	5.0	ug/L	10		8260B	Total/NA
Ethylbenzene	22		10	5.0	ug/L	10		8260B	Total/NA
Isopropylbenzene	5.6	J	10	5.3	ug/L	10		8260B	Total/NA
m-Xylene & p-Xylene	77		50	16	ug/L	10		8260B	Total/NA
Naphthalene	37		10	10	ug/L	10		8260B	Total/NA
N-Propylbenzene	7.8	J	10	6.9	ug/L	10		8260B	Total/NA
Toluene	39		10	4.1	ug/L	10		8260B	Total/NA
1,2,4-Trimethylbenzene	14		10	8.2	ug/L	10		8260B	Total/NA
1,3,5-Trimethylbenzene	6.0	J	10	5.6	ug/L	10		8260B	Total/NA
Xylenes, Total	81	J	100	16	ug/L	10		8260B	Total/NA
Acenaphthene	0.24	B	0.20	0.031	ug/L	1		8270D LL	Total/NA
Fluorene	0.32		0.20	0.11	ug/L	1		8270D LL	Total/NA
Phenanthrene	0.34		0.20	0.035	ug/L	1		8270D LL	Total/NA
Pyrene	0.081	J	0.20	0.039	ug/L	1		8270D LL	Total/NA
1-Methylnaphthalene	16		0.20	0.072	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	17		0.20	0.059	ug/L	1		8270D LL	Total/NA
Phenol	70		9.8	2.5	ug/L	1		8270D	Total/NA

Client Sample ID: P93A-ROX-041720

Lab Sample ID: 400-186933-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	58000		250	95	ug/L	250		8260B	Total/NA
1-Methylnaphthalene	1.1		0.20	0.073	ug/L	1		8270D LL	Total/NA
2-Methylnaphthalene	0.068	J	0.20	0.059	ug/L	1		8270D LL	Total/NA
Phenol	22		9.9	2.6	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: 400-186933-1

Client Sample ID: TB-ROX-041720-8011-SS
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-1
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		0.029	0.0052	ug/L		04/28/20 11:02	04/28/20 19:14	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/28/20 11:02*	*04/28/20 19:14*	*1*

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

Job ID: 400-186933-1

Client Sample ID: TB-ROX-041720-8260-SS
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-2
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			04/30/20 15:31	1
Acrolein	ND		20	10	ug/L			04/30/20 15:31	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 15:31	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 15:31	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 15:31	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 15:31	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 15:31	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 15:31	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 15:31	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 15:31	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 15:31	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 15:31	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 15:31	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 15:31	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 15:31	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 15:31	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 15:31	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 15:31	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 15:31	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 15:31	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 15:31	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 15:31	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 15:31	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 15:31	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 15:31	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 15:31	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 15:31	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 15:31	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 15:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 15:31	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 15:31	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 15:31	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 15:31	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			04/30/20 15:31	1

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

Job ID: 400-186933-1

Client Sample ID: TB-ROX-041720-8260-SS
Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-2
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			04/30/20 15:31	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 15:31	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 15:31	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 15:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 15:31	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 15:31	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 15:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 15:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 15:31	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 15:31	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 15:31	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 15:31	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 15:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 15:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 15:31	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 15:31	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 15:31	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 15:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/30/20 15:31*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*04/30/20 15:31*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/30/20 15:31*	*1*

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

Job ID: 400-186933-1

Client Sample ID: T12-ROX-041720
Date Collected: 04/17/20 09:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**140**	**J**	250	100	ug/L			05/01/20 12:28	10
Acrolein	ND		200	100	ug/L			05/01/20 12:28	10
Acrylonitrile	ND		100	28	ug/L			05/01/20 12:28	10
Benzene	**1600**		10	3.8	ug/L			05/01/20 12:28	10
Bromobenzene	ND		10	5.4	ug/L			05/01/20 12:28	10
Bromochloromethane	ND		10	5.2	ug/L			05/01/20 12:28	10
Bromodichloromethane	ND		10	5.0	ug/L			05/01/20 12:28	10
Bromoform	ND		50	7.1	ug/L			05/01/20 12:28	10
Bromomethane	ND		10	9.8	ug/L			05/01/20 12:28	10
2-Butanone (MEK)	ND		250	26	ug/L			05/01/20 12:28	10
Carbon disulfide	**5.8**	**J**	10	5.0	ug/L			05/01/20 12:28	10
Carbon tetrachloride	ND		10	5.0	ug/L			05/01/20 12:28	10
Chlorobenzene	ND		10	5.0	ug/L			05/01/20 12:28	10
Dibromochloromethane	ND		10	5.0	ug/L			05/01/20 12:28	10
Chloroethane	ND		10	7.6	ug/L			05/01/20 12:28	10
2-Chloroethyl vinyl ether	ND		50	20	ug/L			05/01/20 12:28	10
Chloroform	ND		10	6.0	ug/L			05/01/20 12:28	10
1-Chlorohexane	ND		10	7.0	ug/L			05/01/20 12:28	10
Chloromethane	ND		10	8.3	ug/L			05/01/20 12:28	10
cis-1,2-Dichloroethene	ND		10	5.0	ug/L			05/01/20 12:28	10
cis-1,3-Dichloropropene	ND		50	5.0	ug/L			05/01/20 12:28	10
1,2-Dichlorobenzene	ND		10	5.0	ug/L			05/01/20 12:28	10
1,3-Dichlorobenzene	ND		10	5.4	ug/L			05/01/20 12:28	10
1,4-Dichlorobenzene	ND		10	6.4	ug/L			05/01/20 12:28	10
Dichlorodifluoromethane	ND		10	8.5	ug/L			05/01/20 12:28	10
1,1-Dichloroethane	ND		10	5.0	ug/L			05/01/20 12:28	10
1,2-Dichloroethane	ND		10	5.0	ug/L			05/01/20 12:28	10
1,1-Dichloroethene	ND		10	5.0	ug/L			05/01/20 12:28	10
1,2-Dichloropropane	ND		10	5.0	ug/L			05/01/20 12:28	10
1,3-Dichloropropane	ND		10	5.0	ug/L			05/01/20 12:28	10
2,2-Dichloropropane	ND		10	5.0	ug/L			05/01/20 12:28	10
1,1-Dichloropropene	ND		10	5.0	ug/L			05/01/20 12:28	10
Ethylbenzene	**22**		10	5.0	ug/L			05/01/20 12:28	10
Ethyl methacrylate	ND		10	6.0	ug/L			05/01/20 12:28	10
Hexachlorobutadiene	ND		50	9.0	ug/L			05/01/20 12:28	10
2-Hexanone	ND		250	31	ug/L			05/01/20 12:28	10
Isopropylbenzene	**5.6**	**J**	10	5.3	ug/L			05/01/20 12:28	10
Methylene bromide	ND		50	5.9	ug/L			05/01/20 12:28	10
Methylene Chloride	ND		50	30	ug/L			05/01/20 12:28	10
4-Methyl-2-pentanone (MIBK)	ND		250	18	ug/L			05/01/20 12:28	10
Methyl tert-butyl ether	ND		10	7.4	ug/L			05/01/20 12:28	10
m-Xylene & p-Xylene	**77**		50	16	ug/L			05/01/20 12:28	10
Naphthalene	**37**		10	10	ug/L			05/01/20 12:28	10
n-Butylbenzene	ND		10	7.6	ug/L			05/01/20 12:28	10
N-Propylbenzene	**7.8**	**J**	10	6.9	ug/L			05/01/20 12:28	10
o-Chlorotoluene	ND		10	5.7	ug/L			05/01/20 12:28	10
o-Xylene	ND		50	6.0	ug/L			05/01/20 12:28	10
p-Chlorotoluene	ND		10	5.6	ug/L			05/01/20 12:28	10
p-Isopropyltoluene	ND		10	7.1	ug/L			05/01/20 12:28	10

Client Sample ID: T12-ROX-041720

Date Collected: 04/17/20 09:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		10	7.0	ug/L			05/01/20 12:28	10
Styrene	ND		10	10	ug/L			05/01/20 12:28	10
tert-Butylbenzene	ND		10	6.3	ug/L			05/01/20 12:28	10
1,1,1,2-Tetrachloroethane	ND		10	5.2	ug/L			05/01/20 12:28	10
1,1,2,2-Tetrachloroethane	ND		10	5.0	ug/L			05/01/20 12:28	10
Tetrachloroethene	ND		10	5.8	ug/L			05/01/20 12:28	10
Toluene	**39**		10	4.1	ug/L			05/01/20 12:28	10
trans-1,2-Dichloroethene	ND		10	5.0	ug/L			05/01/20 12:28	10
trans-1,3-Dichloropropene	ND		50	5.0	ug/L			05/01/20 12:28	10
1,2,3-Trichlorobenzene	ND		10	7.0	ug/L			05/01/20 12:28	10
1,2,4-Trichlorobenzene	ND		10	8.2	ug/L			05/01/20 12:28	10
1,1,1-Trichloroethane	ND		10	5.0	ug/L			05/01/20 12:28	10
1,1,2-Trichloroethane	ND		50	5.0	ug/L			05/01/20 12:28	10
Trichloroethene	ND		10	5.0	ug/L			05/01/20 12:28	10
Trichlorofluoromethane	ND		10	5.2	ug/L			05/01/20 12:28	10
1,2,3-Trichloropropane	ND		50	8.4	ug/L			05/01/20 12:28	10
1,2,4-Trimethylbenzene	**14**		10	8.2	ug/L			05/01/20 12:28	10
1,3,5-Trimethylbenzene	**6.0**	**J**	10	5.6	ug/L			05/01/20 12:28	10
Vinyl acetate	ND		250	20	ug/L			05/01/20 12:28	10
Vinyl chloride	ND		10	5.0	ug/L			05/01/20 12:28	10
Xylenes, Total	**81**	**J**	100	16	ug/L			05/01/20 12:28	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*05/01/20 12:28*	*10*
Dibromofluoromethane	*96*		*81 - 121*		*05/01/20 12:28*	*10*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/01/20 12:28*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.24**	**B**	0.20	0.031	ug/L		04/24/20 14:04	04/27/20 22:46	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/24/20 14:04	04/27/20 22:46	1
Anthracene	ND		0.20	0.030	ug/L		04/24/20 14:04	04/27/20 22:46	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 22:46	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/24/20 14:04	04/27/20 22:46	1
Benzo[b]fluoranthene	ND		0.20	0.066	ug/L		04/24/20 14:04	04/27/20 22:46	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/27/20 22:46	1
Benzo[k]fluoranthene	ND		0.20	0.098	ug/L		04/24/20 14:04	04/27/20 22:46	1
Chrysene	ND		0.20	0.072	ug/L		04/24/20 14:04	04/27/20 22:46	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 22:46	1
Fluoranthene	ND		0.20	0.066	ug/L		04/24/20 14:04	04/27/20 22:46	1
Fluorene	**0.32**		0.20	0.11	ug/L		04/24/20 14:04	04/27/20 22:46	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/27/20 22:46	1
Phenanthrene	**0.34**		0.20	0.035	ug/L		04/24/20 14:04	04/27/20 22:46	1
Pyrene	**0.081**	**J**	0.20	0.039	ug/L		04/24/20 14:04	04/27/20 22:46	1
1-Methylnaphthalene	**16**		0.20	0.072	ug/L		04/24/20 14:04	04/27/20 22:46	1
2-Methylnaphthalene	**17**		0.20	0.059	ug/L		04/24/20 14:04	04/27/20 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*108*		*33 - 138*	*04/24/20 14:04*	*04/27/20 22:46*	*1*
2-Fluorobiphenyl	*76*		*15 - 122*	*04/24/20 14:04*	*04/27/20 22:46*	*1*

Client Sample ID: T12-ROX-041720
Date Collected: 04/17/20 09:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-3
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	62		19 - 130	04/24/20 14:04	04/27/20 22:46	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		04/24/20 14:04	04/27/20 20:08	1
Benzenethiol	ND	*	9.8	1.7	ug/L		04/24/20 14:04	04/27/20 20:08	1
Benzoic acid	ND		29	7.1	ug/L		04/24/20 14:04	04/27/20 20:08	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 20:08	1
Bis(2-chloroethoxy)methane	ND		9.8	0.67	ug/L		04/24/20 14:04	04/27/20 20:08	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		04/24/20 14:04	04/27/20 20:08	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		04/24/20 14:04	04/27/20 20:08	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Bromophenyl phenyl ether	ND	*	9.8	0.31	ug/L		04/24/20 14:04	04/27/20 20:08	1
Butyl benzyl phthalate	ND		9.8	0.67	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Chloroaniline	ND		9.8	3.3	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/24/20 14:04	04/27/20 20:08	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/24/20 14:04	04/27/20 20:08	1
2-Chlorophenol	ND		9.8	2.1	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 20:08	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/24/20 14:04	04/27/20 20:08	1
3,3'-Dichlorobenzidine	ND	*	9.8	2.5	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
Diethyl phthalate	ND		9.8	0.68	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4-Dimethylphenol	ND		9.8	3.4	ug/L		04/24/20 14:04	04/27/20 20:08	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/24/20 14:04	04/27/20 20:08	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		04/24/20 14:04	04/27/20 20:08	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/24/20 14:04	04/27/20 20:08	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/24/20 14:04	04/27/20 20:08	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/24/20 14:04	04/27/20 20:08	1
Hexachlorobenzene	ND	*	9.8	0.24	ug/L		04/24/20 14:04	04/27/20 20:08	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		04/24/20 14:04	04/27/20 20:08	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/24/20 14:04	04/27/20 20:08	1
Indene	ND		9.8	0.98	ug/L		04/24/20 14:04	04/27/20 20:08	1
Isophorone	ND		9.8	0.56	ug/L		04/24/20 14:04	04/27/20 20:08	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/24/20 14:04	04/27/20 20:08	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 20:08	1
2-Nitroaniline	ND		9.8	2.1	ug/L		04/24/20 14:04	04/27/20 20:08	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/24/20 14:04	04/27/20 20:08	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/24/20 14:04	04/27/20 20:08	1
2-Nitrophenol	ND		9.8	0.63	ug/L		04/24/20 14:04	04/27/20 20:08	1
4-Nitrophenol	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 20:08	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/24/20 14:04	04/27/20 20:08	1

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

Job ID: 400-186933-1

Client Sample ID: T12-ROX-041720
Date Collected: 04/17/20 09:45
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-3
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		9.8	3.2	ug/L		04/24/20 14:04	04/27/20 20:08	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/24/20 14:04	04/27/20 20:08	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 20:08	1
Phenol	**70**		9.8	2.5	ug/L		04/24/20 14:04	04/27/20 20:08	1
Pyridine	ND		9.8	3.1	ug/L		04/24/20 14:04	04/27/20 20:08	1
Quinoline	ND		9.8	5.9	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/24/20 14:04	04/27/20 20:08	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/24/20 14:04	04/27/20 20:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*55*		*34 - 120*	*04/24/20 14:04*	*04/27/20 20:08*	*1*
2-Fluorophenol	*17*		*10 - 120*	*04/24/20 14:04*	*04/27/20 20:08*	*1*
Nitrobenzene-d5	*56*		*27 - 120*	*04/24/20 14:04*	*04/27/20 20:08*	*1*
Phenol-d5	*41*		*10 - 120*	*04/24/20 14:04*	*04/27/20 20:08*	*1*
Terphenyl-d14	*51*	*X*	*53 - 125*	*04/24/20 14:04*	*04/27/20 20:08*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*04/24/20 14:04*	*04/27/20 20:08*	*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	0.0053	ug/L		04/28/20 11:02	04/28/20 19:34	1
1,2-Dibromoethane	ND		0.019	0.0048	ug/L		04/28/20 11:02	04/28/20 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*106*		*51 - 149*	*04/28/20 11:02*	*04/28/20 19:34*	*1*

Client Sample ID: P93A-ROX-041720
Date Collected: 04/17/20 10:55
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		6300	2500	ug/L			04/30/20 18:14	250
Acrolein	ND		5000	2500	ug/L			04/30/20 18:14	250
Acrylonitrile	ND		2500	700	ug/L			04/30/20 18:14	250
Benzene	**58000**		250	95	ug/L			04/30/20 18:14	250
Bromobenzene	ND		250	140	ug/L			04/30/20 18:14	250
Bromochloromethane	ND		250	130	ug/L			04/30/20 18:14	250
Bromodichloromethane	ND		250	130	ug/L			04/30/20 18:14	250
Bromoform	ND		1300	180	ug/L			04/30/20 18:14	250
Bromomethane	ND		250	250	ug/L			04/30/20 18:14	250
2-Butanone (MEK)	ND		6300	650	ug/L			04/30/20 18:14	250
Carbon disulfide	ND		250	130	ug/L			04/30/20 18:14	250
Carbon tetrachloride	ND		250	130	ug/L			04/30/20 18:14	250
Chlorobenzene	ND		250	130	ug/L			04/30/20 18:14	250
Dibromochloromethane	ND		250	130	ug/L			04/30/20 18:14	250
Chloroethane	ND		250	190	ug/L			04/30/20 18:14	250
2-Chloroethyl vinyl ether	ND		1300	500	ug/L			04/30/20 18:14	250
Chloroform	ND		250	150	ug/L			04/30/20 18:14	250
1-Chlorohexane	ND		250	180	ug/L			04/30/20 18:14	250
Chloromethane	ND		250	210	ug/L			04/30/20 18:14	250
cis-1,2-Dichloroethene	ND		250	130	ug/L			04/30/20 18:14	250
cis-1,3-Dichloropropene	ND		1300	130	ug/L			04/30/20 18:14	250
1,2-Dichlorobenzene	ND		250	130	ug/L			04/30/20 18:14	250
1,3-Dichlorobenzene	ND		250	140	ug/L			04/30/20 18:14	250
1,4-Dichlorobenzene	ND		250	160	ug/L			04/30/20 18:14	250
Dichlorodifluoromethane	ND		250	210	ug/L			04/30/20 18:14	250
1,1-Dichloroethane	ND		250	130	ug/L			04/30/20 18:14	250
1,2-Dichloroethane	ND		250	130	ug/L			04/30/20 18:14	250
1,1-Dichloroethene	ND		250	130	ug/L			04/30/20 18:14	250
1,2-Dichloropropane	ND		250	130	ug/L			04/30/20 18:14	250
1,3-Dichloropropane	ND		250	130	ug/L			04/30/20 18:14	250
2,2-Dichloropropane	ND		250	130	ug/L			04/30/20 18:14	250
1,1-Dichloropropene	ND		250	130	ug/L			04/30/20 18:14	250
Ethylbenzene	ND		250	130	ug/L			04/30/20 18:14	250
Ethyl methacrylate	ND		250	150	ug/L			04/30/20 18:14	250
Hexachlorobutadiene	ND		1300	230	ug/L			04/30/20 18:14	250
2-Hexanone	ND		6300	780	ug/L			04/30/20 18:14	250
Isopropylbenzene	ND		250	130	ug/L			04/30/20 18:14	250
Methylene bromide	ND		1300	150	ug/L			04/30/20 18:14	250
Methylene Chloride	ND		1300	750	ug/L			04/30/20 18:14	250
4-Methyl-2-pentanone (MIBK)	ND		6300	450	ug/L			04/30/20 18:14	250
Methyl tert-butyl ether	ND		250	190	ug/L			04/30/20 18:14	250
m-Xylene & p-Xylene	ND		1300	400	ug/L			04/30/20 18:14	250
Naphthalene	ND		250	250	ug/L			04/30/20 18:14	250
n-Butylbenzene	ND		250	190	ug/L			04/30/20 18:14	250
N-Propylbenzene	ND		250	170	ug/L			04/30/20 18:14	250
o-Chlorotoluene	ND		250	140	ug/L			04/30/20 18:14	250
o-Xylene	ND		1300	150	ug/L			04/30/20 18:14	250
p-Chlorotoluene	ND		250	140	ug/L			04/30/20 18:14	250
p-Isopropyltoluene	ND		250	180	ug/L			04/30/20 18:14	250

Client Sample ID: P93A-ROX-041720
Date Collected: 04/17/20 10:55
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		250	180	ug/L			04/30/20 18:14	250
Styrene	ND		250	250	ug/L			04/30/20 18:14	250
tert-Butylbenzene	ND		250	160	ug/L			04/30/20 18:14	250
1,1,1,2-Tetrachloroethane	ND		250	130	ug/L			04/30/20 18:14	250
1,1,2,2-Tetrachloroethane	ND		250	130	ug/L			04/30/20 18:14	250
Tetrachloroethene	ND		250	150	ug/L			04/30/20 18:14	250
Toluene	ND		250	100	ug/L			04/30/20 18:14	250
trans-1,2-Dichloroethene	ND		250	130	ug/L			04/30/20 18:14	250
trans-1,3-Dichloropropene	ND		1300	130	ug/L			04/30/20 18:14	250
1,2,3-Trichlorobenzene	ND		250	180	ug/L			04/30/20 18:14	250
1,2,4-Trichlorobenzene	ND		250	210	ug/L			04/30/20 18:14	250
1,1,1-Trichloroethane	ND		250	130	ug/L			04/30/20 18:14	250
1,1,2-Trichloroethane	ND		1300	130	ug/L			04/30/20 18:14	250
Trichloroethene	ND		250	130	ug/L			04/30/20 18:14	250
Trichlorofluoromethane	ND		250	130	ug/L			04/30/20 18:14	250
1,2,3-Trichloropropane	ND		1300	210	ug/L			04/30/20 18:14	250
1,2,4-Trimethylbenzene	ND		250	210	ug/L			04/30/20 18:14	250
1,3,5-Trimethylbenzene	ND		250	140	ug/L			04/30/20 18:14	250
Vinyl acetate	ND		6300	500	ug/L			04/30/20 18:14	250
Vinyl chloride	ND		250	130	ug/L			04/30/20 18:14	250
Xylenes, Total	ND		2500	400	ug/L			04/30/20 18:14	250

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*04/30/20 18:14*	*250*
Dibromofluoromethane	*92*		*81 - 121*		*04/30/20 18:14*	*250*
Toluene-d8 (Surr)	*102*		*80 - 120*		*04/30/20 18:14*	*250*

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		04/24/20 14:04	04/27/20 23:01	1
Acenaphthylene	ND		0.20	0.044	ug/L		04/24/20 14:04	04/27/20 23:01	1
Anthracene	ND		0.20	0.031	ug/L		04/24/20 14:04	04/27/20 23:01	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 23:01	1
Benzo[a]pyrene	ND		0.20	0.041	ug/L		04/24/20 14:04	04/27/20 23:01	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/24/20 14:04	04/27/20 23:01	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/27/20 23:01	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/24/20 14:04	04/27/20 23:01	1
Chrysene	ND		0.20	0.073	ug/L		04/24/20 14:04	04/27/20 23:01	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 23:01	1
Fluoranthene	ND		0.20	0.067	ug/L		04/24/20 14:04	04/27/20 23:01	1
Fluorene	ND		0.20	0.11	ug/L		04/24/20 14:04	04/27/20 23:01	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/27/20 23:01	1
Phenanthrene	ND		0.20	0.036	ug/L		04/24/20 14:04	04/27/20 23:01	1
Pyrene	ND		0.20	0.040	ug/L		04/24/20 14:04	04/27/20 23:01	1
1-Methylnaphthalene	**1.1**		0.20	0.073	ug/L		04/24/20 14:04	04/27/20 23:01	1
2-Methylnaphthalene	**0.068**	J	0.20	0.059	ug/L		04/24/20 14:04	04/27/20 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*102*		*33 - 138*	*04/24/20 14:04*	*04/27/20 23:01*	*1*
Terphenyl-d14	*86*		*33 - 138*	*04/30/20 15:41*	*05/04/20 16:33*	*1*

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

Job ID: 400-186933-1

Client Sample ID: P93A-ROX-041720
Date Collected: 04/17/20 10:55
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		15 - 122	04/24/20 14:04	04/27/20 23:01	1
2-Fluorobiphenyl	69		15 - 122	04/30/20 15:41	05/04/20 16:33	1
Nitrobenzene-d5	69		19 - 130	04/24/20 14:04	04/27/20 23:01	1
Nitrobenzene-d5	65		19 - 130	04/30/20 15:41	05/04/20 16:33	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		04/24/20 14:04	04/27/20 20:34	1
Benzenethiol	ND	* UJ	9.9	1.7	ug/L		04/24/20 14:04	04/27/20 20:34	1
Benzoic acid	ND		30	7.2	ug/L		04/24/20 14:04	04/27/20 20:34	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/24/20 14:04	04/27/20 20:34	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/24/20 14:04	04/27/20 20:34	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/24/20 14:04	04/27/20 20:34	1
Bis(2-ethylhexyl) phthalate	ND		9.9	4.9	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Bromophenyl phenyl ether	ND	*	9.9	0.32	ug/L		04/24/20 14:04	04/27/20 20:34	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/24/20 14:04	04/27/20 20:34	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/24/20 14:04	04/27/20 20:34	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/24/20 14:04	04/27/20 20:34	1
3,3'-Dichlorobenzidine	ND	*	9.9	2.6	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 20:34	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/24/20 14:04	04/27/20 20:34	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/24/20 14:04	04/27/20 20:34	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 20:34	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/24/20 14:04	04/27/20 20:34	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 20:34	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 20:34	1
Hexachlorobenzene	ND	*	9.9	0.25	ug/L		04/24/20 14:04	04/27/20 20:34	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 20:34	1
Hexachloroethane	ND		9.9	4.1	ug/L		04/24/20 14:04	04/27/20 20:34	1
Indene	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 20:34	1
Isophorone	ND		9.9	0.56	ug/L		04/24/20 14:04	04/27/20 20:34	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 20:34	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 20:34	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 20:34	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Nitroaniline	ND		9.9	2.4	ug/L		04/24/20 14:04	04/27/20 20:34	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/24/20 14:04	04/27/20 20:34	1

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

Job ID: 400-186933-1

Client Sample ID: P93A-ROX-041720
Date Collected: 04/17/20 10:55
Date Received: 04/18/20 08:23

Lab Sample ID: 400-186933-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		9.9	0.64	ug/L		04/24/20 14:04	04/27/20 20:34	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/24/20 14:04	04/27/20 20:34	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 20:34	1
N-Nitrosodi-n-propylamine	ND		9.9	3.3	ug/L		04/24/20 14:04	04/27/20 20:34	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/24/20 14:04	04/27/20 20:34	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 20:34	1
Phenol	**22**		9.9	2.6	ug/L		04/24/20 14:04	04/27/20 20:34	1
Pyridine	ND		9.9	3.2	ug/L		04/24/20 14:04	04/27/20 20:34	1
Quinoline	ND		9.9	5.9	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/24/20 14:04	04/27/20 20:34	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*63*		*34 - 120*	*04/24/20 14:04*	*04/27/20 20:34*	*1*
2-Fluorophenol	*32*		*10 - 120*	*04/24/20 14:04*	*04/27/20 20:34*	*1*
Nitrobenzene-d5	*59*		*27 - 120*	*04/24/20 14:04*	*04/27/20 20:34*	*1*
Phenol-d5	*51*		*10 - 120*	*04/24/20 14:04*	*04/27/20 20:34*	*1*
Terphenyl-d14	*56*		*53 - 125*	*04/24/20 14:04*	*04/27/20 20:34*	*1*
2,4,6-Tribromophenol	*69*		*15 - 135*	*04/24/20 14:04*	*04/27/20 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	0.0054	ug/L		04/28/20 11:02	04/28/20 19:54	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/28/20 11:02	04/28/20 19:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*89*		*51 - 149*	*04/28/20 11:02*	*04/28/20 19:54*	*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 or LCSD is outside acceptance 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.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186933-1

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	(78-118)	(81-121)	(80-120)
400-186933-2	TB-ROX-041720-8260-SS	96	93	102
400-186933-3	T12-ROX-041720	97	96	101
400-186933-4	P93A-ROX-041720	95	92	102
LCS 400-487511/1002	Lab Control Sample	95	98	101
LCS 400-487654/1002	Lab Control Sample	95	99	100
MB 400-487511/5	Method Blank	96	95	101
MB 400-487654/5	Method Blank	96	93	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186933-3	T12-ROX-041720	55	17	56	41	51 X	65
400-186933-4	P93A-ROX-041720	63	32	59	51	56	69
LCS 400-486957/2-A	Lab Control Sample	97	54	87	74	124	124
LCS 400-486957/4-A	Lab Control Sample	55	24	52	44	53	51
LCSD 400-486957/3-A	Lab Control Sample Dup	93	35	84	65	119	119
LCSD 400-486957/5-A	Lab Control Sample Dup	58	31	54	49	56	57
MB 400-486957/1-A	Method Blank	47	32	43	41	44 X	49

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186933-3	T12-ROX-041720	108	76	62
400-186933-4	P93A-ROX-041720	102	81	69
400-186933-4	P93A-ROX-041720	86	69	65
LCS 400-486957/2-A	Lab Control Sample	117	91	67
LCSD 400-486957/3-A	Lab Control Sample Dup	113	88	66
MB 400-486957/1-A	Method Blank	101	73	64

Surrogate Legend

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

Surrogate Summary

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

Job ID: 400-186933-1

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)**
400-186933-1	TB-ROX-041720-8011-SS	96
400-186933-3	T12-ROX-041720	106
400-186933-4	P93A-ROX-041720	89
LCS 400-487253/2-A	Lab Control Sample	105
LCSD 400-487253/3-A	Lab Control Sample Dup	103
MB 400-487253/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186933-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-041720-8011-SS

Lab Sample ID: 400-186933-1
Matrix: Water

Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			36.8 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 19:14	DS	TAL PEN

Client Sample ID: TB-ROX-041720-8260-SS

Lab Sample ID: 400-186933-2
Matrix: Water

Date Collected: 04/17/20 00:00
Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	487511	04/30/20 15:31	AMB	TAL PEN

Client Sample ID: T12-ROX-041720

Lab Sample ID: 400-186933-3
Matrix: Water

Date Collected: 04/17/20 09:45
Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	487654	05/01/20 12:28	AMB	TAL PEN
Total/NA	Prep	3520C			1025.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	487181	04/27/20 20:08	S1B	TAL PEN
Total/NA	Prep	3520C			1025.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 22:46	PP1	TAL PEN
Total/NA	Prep	8011			36.1 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 19:34	DS	TAL PEN

Client Sample ID: P93A-ROX-041720

Lab Sample ID: 400-186933-4
Matrix: Water

Date Collected: 04/17/20 10:55
Date Received: 04/18/20 08:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		250	5 mL	5 mL	487511	04/30/20 18:14	AMB	TAL PEN
Total/NA	Prep	3520C			1012.6 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	487181	04/27/20 20:34	S1B	TAL PEN
Total/NA	Prep	3520C			1012.6 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 23:01	PP1	TAL PEN
Total/NA	Prep	3520C			1011.4 mL	1 mL	487616	04/30/20 15:41	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487886	05/04/20 16:33	PP1	TAL PEN
Total/NA	Prep	8011			35.4 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 19:54	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486957/1-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 18:00	S1B	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486957/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 21:59	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487253/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:16	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487511/5

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	487511	04/30/20 10:07	AMB	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487654/5

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	487654	05/01/20 10:46	AMB	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-486957/2-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:24	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:15	PP1	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-486957/4-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:17	S1B	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-487253/2-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:36	DS	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-487511/1002**
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	487511	04/30/20 08:56	AMB	TAL PEN

Client Sample ID: Lab Control Sample — **Lab Sample ID: LCS 400-487654/1002**
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	487654	05/01/20 09:28	AMB	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486957/3-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:45	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:30	PP1	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-486957/5-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:42	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup — **Lab Sample ID: LCSD 400-487253/3-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:56	DS	TAL PEN

Laboratory References:
TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 487511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-2	TB-ROX-041720-8260-SS	Total/NA	Water	8260B	
400-186933-4	P93A-ROX-041720	Total/NA	Water	8260B	
MB 400-487511/5	Method Blank	Total/NA	Water	8260B	
LCS 400-487511/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 487654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-3	T12-ROX-041720	Total/NA	Water	8260B	
MB 400-487654/5	Method Blank	Total/NA	Water	8260B	
LCS 400-487654/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-3	T12-ROX-041720	Total/NA	Water	3520C	
400-186933-4	P93A-ROX-041720	Total/NA	Water	3520C	
MB 400-486957/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-3	T12-ROX-041720	Total/NA	Water	8270D LL	486957
400-186933-4	P93A-ROX-041720	Total/NA	Water	8270D LL	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D LL	486957
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486957

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-3	T12-ROX-041720	Total/NA	Water	8270D	486957
400-186933-4	P93A-ROX-041720	Total/NA	Water	8270D	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D	486957
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

Analysis Batch: 487260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

Prep Batch: 487616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-4	P93A-ROX-041720	Total/NA	Water	3520C	

Analysis Batch: 487886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-4	P93A-ROX-041720	Total/NA	Water	8270D LL	487616

QC Association Summary

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

Job ID: 400-186933-1

GC Semi VOA

Prep Batch: 487253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-1	TB-ROX-041720-8011-SS	Total/NA	Water	8011	
400-186933-3	T12-ROX-041720	Total/NA	Water	8011	
400-186933-4	P93A-ROX-041720	Total/NA	Water	8011	
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186933-1	TB-ROX-041720-8011-SS	Total/NA	Water	8011	487253
400-186933-3	T12-ROX-041720	Total/NA	Water	8011	487253
400-186933-4	P93A-ROX-041720	Total/NA	Water	8011	487253
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	487253
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	487253
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487253

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

Lab Sample ID: MB 400-487511/5
Matrix: Water
Analysis Batch: 487511

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			04/30/20 10:07	1
Acrolein	ND		20	10	ug/L			04/30/20 10:07	1
Acrylonitrile	ND		10	2.8	ug/L			04/30/20 10:07	1
Benzene	ND		1.0	0.38	ug/L			04/30/20 10:07	1
Bromobenzene	ND		1.0	0.54	ug/L			04/30/20 10:07	1
Bromochloromethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
Bromodichloromethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Bromoform	ND		5.0	0.71	ug/L			04/30/20 10:07	1
Bromomethane	ND		1.0	0.98	ug/L			04/30/20 10:07	1
2-Butanone (MEK)	ND		25	2.6	ug/L			04/30/20 10:07	1
Carbon disulfide	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Chlorobenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Dibromochloromethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Chloroethane	ND		1.0	0.76	ug/L			04/30/20 10:07	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			04/30/20 10:07	1
Chloroform	ND		1.0	0.60	ug/L			04/30/20 10:07	1
1-Chlorohexane	ND		1.0	0.70	ug/L			04/30/20 10:07	1
Chloromethane	ND		1.0	0.83	ug/L			04/30/20 10:07	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			04/30/20 10:07	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			04/30/20 10:07	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			04/30/20 10:07	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Ethylbenzene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			04/30/20 10:07	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			04/30/20 10:07	1
2-Hexanone	ND		25	3.1	ug/L			04/30/20 10:07	1
Isopropylbenzene	ND		1.0	0.53	ug/L			04/30/20 10:07	1
Methylene bromide	ND		5.0	0.59	ug/L			04/30/20 10:07	1
Methylene Chloride	ND		5.0	3.0	ug/L			04/30/20 10:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			04/30/20 10:07	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			04/30/20 10:07	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			04/30/20 10:07	1
Naphthalene	ND		1.0	1.0	ug/L			04/30/20 10:07	1
n-Butylbenzene	ND		1.0	0.76	ug/L			04/30/20 10:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			04/30/20 10:07	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			04/30/20 10:07	1
o-Xylene	ND		5.0	0.60	ug/L			04/30/20 10:07	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			04/30/20 10:07	1

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

Lab Sample ID: MB 400-487511/5
Matrix: Water
Analysis Batch: 487511

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			04/30/20 10:07	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			04/30/20 10:07	1
Styrene	ND		1.0	1.0	ug/L			04/30/20 10:07	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			04/30/20 10:07	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Tetrachloroethene	ND		1.0	0.58	ug/L			04/30/20 10:07	1
Toluene	ND		1.0	0.41	ug/L			04/30/20 10:07	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			04/30/20 10:07	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			04/30/20 10:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			04/30/20 10:07	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			04/30/20 10:07	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			04/30/20 10:07	1
Trichloroethene	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			04/30/20 10:07	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			04/30/20 10:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			04/30/20 10:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			04/30/20 10:07	1
Vinyl acetate	ND		25	2.0	ug/L			04/30/20 10:07	1
Vinyl chloride	ND		1.0	0.50	ug/L			04/30/20 10:07	1
Xylenes, Total	ND		10	1.6	ug/L			04/30/20 10:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*04/30/20 10:07*	*1*
Dibromofluoromethane	*95*		*81 - 121*		*04/30/20 10:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*04/30/20 10:07*	*1*

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	214		ug/L		107	43 - 160
Acrolein	500	483		ug/L		97	38 - 160
Acrylonitrile	500	521		ug/L		104	64 - 142
Benzene	50.0	51.3		ug/L		103	70 - 130
Bromobenzene	50.0	50.9		ug/L		102	70 - 132
Bromochloromethane	50.0	47.7		ug/L		95	70 - 130
Bromodichloromethane	50.0	49.1		ug/L		98	67 - 133
Bromoform	50.0	43.0		ug/L		86	57 - 140
Bromomethane	50.0	40.4		ug/L		81	10 - 160
2-Butanone (MEK)	200	206		ug/L		103	61 - 145
Carbon disulfide	50.0	49.1		ug/L		98	61 - 137
Carbon tetrachloride	50.0	45.6		ug/L		91	61 - 137
Chlorobenzene	50.0	50.5		ug/L		101	70 - 130
Dibromochloromethane	50.0	47.6		ug/L		95	67 - 135
Chloroethane	50.0	51.3		ug/L		103	55 - 141

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

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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	38.9		ug/L		78	10 - 160
Chloroform	50.0	51.4		ug/L		103	69 - 130
1-Chlorohexane	50.0	57.8		ug/L		116	69 - 130
Chloromethane	50.0	47.0		ug/L		94	58 - 137
cis-1,2-Dichloroethene	50.0	52.4		ug/L		105	68 - 130
cis-1,3-Dichloropropene	50.0	53.8		ug/L		108	69 - 132
1,2-Dichlorobenzene	50.0	50.1		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	50.3		ug/L		101	70 - 130
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dichlorodifluoromethane	50.0	47.3		ug/L		95	41 - 146
1,1-Dichloroethane	50.0	51.7		ug/L		103	70 - 130
1,2-Dichloroethane	50.0	53.5		ug/L		107	69 - 130
1,1-Dichloroethene	50.0	55.4		ug/L		111	63 - 134
1,2-Dichloropropane	50.0	52.3		ug/L		105	70 - 130
1,3-Dichloropropane	50.0	53.0		ug/L		106	70 - 130
2,2-Dichloropropane	50.0	50.9		ug/L		102	52 - 135
1,1-Dichloropropene	50.0	52.0		ug/L		104	70 - 130
Ethylbenzene	50.0	52.6		ug/L		105	70 - 130
Ethyl methacrylate	50.0	55.3		ug/L		111	68 - 130
Hexachlorobutadiene	50.0	53.6		ug/L		107	53 - 140
2-Hexanone	200	225		ug/L		112	65 - 137
Isopropylbenzene	50.0	52.4		ug/L		105	70 - 130
Methylene bromide	50.0	50.9		ug/L		102	70 - 130
Methylene Chloride	50.0	54.2		ug/L		108	66 - 135
4-Methyl-2-pentanone (MIBK)	200	220		ug/L		110	69 - 138
Methyl tert-butyl ether	50.0	50.0		ug/L		100	66 - 130
m-Xylene & p-Xylene	50.0	52.0		ug/L		104	70 - 130
Naphthalene	50.0	49.0		ug/L		98	47 - 149
n-Butylbenzene	50.0	50.3		ug/L		101	67 - 130
N-Propylbenzene	50.0	50.7		ug/L		101	70 - 130
o-Chlorotoluene	50.0	49.6		ug/L		99	70 - 130
o-Xylene	50.0	52.8		ug/L		106	70 - 130
p-Chlorotoluene	50.0	51.2		ug/L		102	70 - 130
p-Isopropyltoluene	50.0	51.1		ug/L		102	65 - 130
sec-Butylbenzene	50.0	50.7		ug/L		101	66 - 130
Styrene	50.0	52.3		ug/L		105	70 - 130
tert-Butylbenzene	50.0	49.6		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	51.3		ug/L		103	67 - 131
1,1,2,2-Tetrachloroethane	50.0	51.0		ug/L		102	70 - 131
Tetrachloroethene	50.0	49.4		ug/L		99	65 - 130
Toluene	50.0	50.8		ug/L		102	70 - 130
trans-1,2-Dichloroethene	50.0	50.4		ug/L		101	70 - 130
trans-1,3-Dichloropropene	50.0	56.6		ug/L		113	63 - 130
1,2,3-Trichlorobenzene	50.0	51.3		ug/L		103	60 - 138
1,2,4-Trichlorobenzene	50.0	52.0		ug/L		104	60 - 140
1,1,1-Trichloroethane	50.0	50.2		ug/L		100	68 - 130
1,1,2-Trichloroethane	50.0	53.1		ug/L		106	70 - 130
Trichloroethene	50.0	52.6		ug/L		105	70 - 130
Trichlorofluoromethane	50.0	42.5		ug/L		85	65 - 138

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

Lab Sample ID: LCS 400-487511/1002
Matrix: Water
Analysis Batch: 487511

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	50.7		ug/L		101	70 - 130
1,2,4-Trimethylbenzene	50.0	51.3		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	51.0		ug/L		102	69 - 130
Vinyl acetate	100	103		ug/L		103	26 - 160
Vinyl chloride	50.0	43.3		ug/L		87	59 - 136
Xylenes, Total	100	105		ug/L		105	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*98*		*81 - 121*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 400-487654/5
Matrix: Water
Analysis Batch: 487654

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			05/01/20 10:46	1
Acrolein	ND		20	10	ug/L			05/01/20 10:46	1
Acrylonitrile	ND		10	2.8	ug/L			05/01/20 10:46	1
Benzene	ND		1.0	0.38	ug/L			05/01/20 10:46	1
Bromobenzene	ND		1.0	0.54	ug/L			05/01/20 10:46	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/01/20 10:46	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Bromoform	ND		5.0	0.71	ug/L			05/01/20 10:46	1
Bromomethane	ND		1.0	0.98	ug/L			05/01/20 10:46	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/01/20 10:46	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Chloroethane	ND		1.0	0.76	ug/L			05/01/20 10:46	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/01/20 10:46	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 10:46	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/01/20 10:46	1
Chloromethane	ND		1.0	0.83	ug/L			05/01/20 10:46	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 10:46	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/01/20 10:46	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/01/20 10:46	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/01/20 10:46	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 10:46	1

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

Lab Sample ID: MB 400-487654/5
Matrix: Water
Analysis Batch: 487654

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/01/20 10:46	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/01/20 10:46	1
2-Hexanone	ND		25	3.1	ug/L			05/01/20 10:46	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/01/20 10:46	1
Methylene bromide	ND		5.0	0.59	ug/L			05/01/20 10:46	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/01/20 10:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/01/20 10:46	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/01/20 10:46	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/01/20 10:46	1
Naphthalene	ND		1.0	1.0	ug/L			05/01/20 10:46	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/01/20 10:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/01/20 10:46	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/01/20 10:46	1
o-Xylene	ND		5.0	0.60	ug/L			05/01/20 10:46	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/01/20 10:46	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			05/01/20 10:46	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			05/01/20 10:46	1
Styrene	ND		1.0	1.0	ug/L			05/01/20 10:46	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/01/20 10:46	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/01/20 10:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/01/20 10:46	1
Toluene	ND		1.0	0.41	ug/L			05/01/20 10:46	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 10:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/01/20 10:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/01/20 10:46	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/01/20 10:46	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/01/20 10:46	1
Trichloroethene	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/01/20 10:46	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/01/20 10:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/01/20 10:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/01/20 10:46	1
Vinyl acetate	ND		25	2.0	ug/L			05/01/20 10:46	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/01/20 10:46	1
Xylenes, Total	ND		10	1.6	ug/L			05/01/20 10:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*05/01/20 10:46*	*1*
Dibromofluoromethane	*93*		*81 - 121*		*05/01/20 10:46*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/01/20 10:46*	*1*

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

Lab Sample ID: LCS 400-487654/1002
Matrix: Water
Analysis Batch: 487654

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	221		ug/L		110	43 - 160
Acrolein	500	437		ug/L		87	38 - 160
Acrylonitrile	500	526		ug/L		105	64 - 142
Benzene	50.0	49.8		ug/L		100	70 - 130
Bromobenzene	50.0	48.5		ug/L		97	70 - 132
Bromochloromethane	50.0	48.0		ug/L		96	70 - 130
Bromodichloromethane	50.0	47.0		ug/L		94	67 - 133
Bromoform	50.0	43.1		ug/L		86	57 - 140
Bromomethane	50.0	36.3		ug/L		73	10 - 160
2-Butanone (MEK)	200	218		ug/L		109	61 - 145
Carbon disulfide	50.0	49.4		ug/L		99	61 - 137
Carbon tetrachloride	50.0	49.6		ug/L		99	61 - 137
Chlorobenzene	50.0	47.7		ug/L		95	70 - 130
Dibromochloromethane	50.0	45.8		ug/L		92	67 - 135
Chloroethane	50.0	46.3		ug/L		93	55 - 141
2-Chloroethyl vinyl ether	50.0	45.9		ug/L		92	10 - 160
Chloroform	50.0	49.0		ug/L		98	69 - 130
1-Chlorohexane	50.0	60.5		ug/L		121	69 - 130
Chloromethane	50.0	42.4		ug/L		85	58 - 137
cis-1,2-Dichloroethene	50.0	51.4		ug/L		103	68 - 130
cis-1,3-Dichloropropene	50.0	51.7		ug/L		103	69 - 132
1,2-Dichlorobenzene	50.0	48.5		ug/L		97	67 - 130
1,3-Dichlorobenzene	50.0	48.3		ug/L		97	70 - 130
1,4-Dichlorobenzene	50.0	46.9		ug/L		94	70 - 130
Dichlorodifluoromethane	50.0	43.1		ug/L		86	41 - 146
1,1-Dichloroethane	50.0	51.8		ug/L		104	70 - 130
1,2-Dichloroethane	50.0	50.4		ug/L		101	69 - 130
1,1-Dichloroethene	50.0	54.1		ug/L		108	63 - 134
1,2-Dichloropropane	50.0	50.2		ug/L		100	70 - 130
1,3-Dichloropropane	50.0	50.1		ug/L		100	70 - 130
2,2-Dichloropropane	50.0	54.4		ug/L		109	52 - 135
1,1-Dichloropropene	50.0	53.1		ug/L		106	70 - 130
Ethylbenzene	50.0	51.2		ug/L		102	70 - 130
Ethyl methacrylate	50.0	53.5		ug/L		107	68 - 130
Hexachlorobutadiene	50.0	57.3		ug/L		115	53 - 140
2-Hexanone	200	231		ug/L		115	65 - 137
Isopropylbenzene	50.0	52.0		ug/L		104	70 - 130
Methylene bromide	50.0	48.4		ug/L		97	70 - 130
Methylene Chloride	50.0	49.5		ug/L		99	66 - 135
4-Methyl-2-pentanone (MIBK)	200	225		ug/L		112	69 - 138
Methyl tert-butyl ether	50.0	48.6		ug/L		97	66 - 130
m-Xylene & p-Xylene	50.0	50.1		ug/L		100	70 - 130
Naphthalene	50.0	50.2		ug/L		100	47 - 149
n-Butylbenzene	50.0	52.1		ug/L		104	67 - 130
N-Propylbenzene	50.0	50.6		ug/L		101	70 - 130
o-Chlorotoluene	50.0	47.8		ug/L		96	70 - 130
o-Xylene	50.0	50.2		ug/L		100	70 - 130
p-Chlorotoluene	50.0	49.1		ug/L		98	70 - 130

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

Lab Sample ID: LCS 400-487654/1002
Matrix: Water
Analysis Batch: 487654

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
p-Isopropyltoluene	50.0	51.3		ug/L		103	65 - 130
sec-Butylbenzene	50.0	51.5		ug/L		103	66 - 130
Styrene	50.0	49.5		ug/L		99	70 - 130
tert-Butylbenzene	50.0	49.7		ug/L		99	64 - 139
1,1,1,2-Tetrachloroethane	50.0	49.2		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L		101	70 - 131
Tetrachloroethene	50.0	49.0		ug/L		98	65 - 130
Toluene	50.0	48.9		ug/L		98	70 - 130
trans-1,2-Dichloroethene	50.0	49.7		ug/L		99	70 - 130
trans-1,3-Dichloropropene	50.0	54.0		ug/L		108	63 - 130
1,2,3-Trichlorobenzene	50.0	50.8		ug/L		102	60 - 138
1,2,4-Trichlorobenzene	50.0	51.5		ug/L		103	60 - 140
1,1,1-Trichloroethane	50.0	50.9		ug/L		102	68 - 130
1,1,2-Trichloroethane	50.0	50.1		ug/L		100	70 - 130
Trichloroethene	50.0	50.2		ug/L		100	70 - 130
Trichlorofluoromethane	50.0	38.7		ug/L		77	65 - 138
1,2,3-Trichloropropane	50.0	49.9		ug/L		100	70 - 130
1,2,4-Trimethylbenzene	50.0	49.3		ug/L		99	70 - 130
1,3,5-Trimethylbenzene	50.0	50.5		ug/L		101	69 - 130
Vinyl acetate	100	95.4		ug/L		95	26 - 160
Vinyl chloride	50.0	41.7		ug/L		83	59 - 136
Xylenes, Total	100	100		ug/L		100	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*95*		*78 - 118*
Dibromofluoromethane	*99*		*81 - 121*
Toluene-d8 (Surr)	*100*		*80 - 120*

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzenethiol	ND		10	1.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzoic acid	ND		30	7.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzyl alcohol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/24/20 14:04	04/27/20 18:00	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/24/20 14:04	04/27/20 18:00	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloroaniline	ND		10	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chlorophenol	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dibenzofuran	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Diethyl phthalate	ND		10	0.70	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/24/20 14:04	04/27/20 18:00	1
1,4-Dioxane	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachloroethane	ND		10	4.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Indene	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Isophorone	ND		10	0.57	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Methylphenol	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitroaniline	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
3-Nitroaniline	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitroaniline	ND		10	2.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Nitrobenzene	ND		10	0.55	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitrophenol	ND		10	0.65	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitrophenol	ND		10	2.1	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Phenol	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pyridine	ND		10	3.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Quinoline	ND		10	6.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*34 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2-Fluorophenol	*32*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Phenol-d5	*41*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2,4,6-Tribromophenol	*49*		*15 - 135*	*04/24/20 14:04*	*04/27/20 18:00*	*1*

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	23.5		ug/L		78	29 - 120
Benzoic acid	116	35.3		ug/L		30	10 - 150
Benzyl alcohol	30.0	25.0		ug/L		83	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.9		ug/L		80	45 - 120
Bis(2-chloroethyl)ether	30.0	21.6		ug/L		72	48 - 120
bis (2-chloroisopropyl) ether	30.0	18.1		ug/L		60	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	30.4		ug/L		101	48 - 150
4-Bromophenyl phenyl ether	30.0	40.0	*	ug/L		133	55 - 122
Butyl benzyl phthalate	30.0	29.7		ug/L		99	46 - 145
4-Chloroaniline	30.0	25.8		ug/L		86	30 - 120
4-Chloro-3-methylphenol	30.0	31.6		ug/L		105	39 - 140
2-Chloronaphthalene	30.0	29.9		ug/L		100	52 - 120
2-Chlorophenol	30.0	26.1		ug/L		87	34 - 120
4-Chlorophenyl phenyl ether	30.0	34.6		ug/L		115	58 - 124
Dibenz[a,h]acridine	29.6	27.1		ug/L		91	46 - 149
Dibenzofuran	30.0	31.4		ug/L		105	58 - 123
3,3'-Dichlorobenzidine	40.0	66.0	*	ug/L		165	39 - 135
2,4-Dichlorophenol	30.0	31.9		ug/L		106	39 - 128
Diethyl phthalate	30.0	30.9		ug/L		103	44 - 146
2,4-Dimethylphenol	30.0	30.2		ug/L		101	44 - 120
Dimethyl phthalate	30.0	32.1		ug/L		107	50 - 131
Di-n-butyl phthalate	30.0	29.1		ug/L		97	55 - 131
4,6-Dinitro-ortho-cresol	60.0	59.5		ug/L		99	10 - 150
2,4-Dinitrophenol	60.0	63.0		ug/L		105	10 - 150
2,4-Dinitrotoluene	30.0	33.2		ug/L		111	58 - 140
2,6-Dinitrotoluene	30.0	34.3		ug/L		114	57 - 130
Di-n-octyl phthalate	30.0	32.1		ug/L		107	50 - 150
1,4-Dioxane	30.0	17.0		ug/L		57	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.0		ug/L		83	47 - 123
Hexachlorobenzene	30.0	39.8	*	ug/L		133	52 - 131
Hexachlorocyclopentadiene	30.0	14.0	J	ug/L		47	10 - 129
Hexachloroethane	30.0	20.5		ug/L		68	20 - 120
Indene	30.0	25.1		ug/L		84	47 - 120
Isophorone	30.0	25.0		ug/L		83	49 - 120
2-Methylphenol	30.0	26.6		ug/L		89	39 - 123
3 & 4 Methylphenol	30.0	25.4		ug/L		85	38 - 121
2-Nitroaniline	30.0	26.3		ug/L		88	47 - 150
3-Nitroaniline	30.0	24.5		ug/L		82	34 - 132
4-Nitroaniline	30.0	24.6		ug/L		82	41 - 135
Nitrobenzene	30.0	24.6		ug/L		82	47 - 120
2-Nitrophenol	30.0	27.4		ug/L		91	28 - 136
4-Nitrophenol	60.0	57.1		ug/L		95	10 - 150
N-Nitrosodimethylamine	30.0	24.1		ug/L		80	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.1		ug/L		80	44 - 120
N-Nitrosodiphenylamine	29.8	32.8		ug/L		110	56 - 120
Pentachlorophenol	60.0	57.2		ug/L		95	15 - 141
Phenol	30.0	21.5		ug/L		72	33 - 120
Pyridine	60.0	35.1		ug/L		58	26 - 120

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	25.8		ug/L		87	51 - 129
2,4,5-Trichlorophenol	30.0	33.8		ug/L		113	38 - 147
2,4,6-Trichlorophenol	30.0	32.0		ug/L		107	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*97*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*74*		*10 - 120*
Terphenyl-d14	*124*		*53 - 125*
2,4,6-Tribromophenol	*124*		*15 - 135*

Lab Sample ID: LCS 400-486957/4-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*24*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*53*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	21.1		ug/L		70	29 - 120	11	30
Benzoic acid	116	47.6		ug/L		41	10 - 150	30	30
Benzyl alcohol	30.0	22.6		ug/L		75	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	22.9		ug/L		76	45 - 120	4	30
Bis(2-chloroethyl)ether	30.0	22.0		ug/L		73	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	18.0		ug/L		60	30 - 125	1	30
Bis(2-ethylhexyl) phthalate	30.0	30.2		ug/L		101	48 - 150	1	30
4-Bromophenyl phenyl ether	30.0	37.5	*	ug/L		125	55 - 122	7	30
Butyl benzyl phthalate	30.0	29.0		ug/L		97	46 - 145	2	30
4-Chloroaniline	30.0	22.8		ug/L		76	30 - 120	12	30
4-Chloro-3-methylphenol	30.0	29.0		ug/L		97	39 - 140	9	30
2-Chloronaphthalene	30.0	28.6		ug/L		95	52 - 120	4	30
2-Chlorophenol	30.0	22.3		ug/L		74	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	33.2		ug/L		111	58 - 124	4	30
Dibenz[a,h]acridine	29.6	25.6		ug/L		86	46 - 149	6	30
Dibenzofuran	30.0	30.3		ug/L		101	58 - 123	4	30

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

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	61.5	*	ug/L		154	39 - 135	7	30
2,4-Dichlorophenol	30.0	29.8		ug/L		99	39 - 128	7	30
Diethyl phthalate	30.0	30.2		ug/L		101	44 - 146	2	30
2,4-Dimethylphenol	30.0	28.8		ug/L		96	44 - 120	5	30
Dimethyl phthalate	30.0	31.2		ug/L		104	50 - 131	3	30
Di-n-butyl phthalate	30.0	28.6		ug/L		95	55 - 131	2	30
4,6-Dinitro-ortho-cresol	60.0	54.5		ug/L		91	10 - 150	9	30
2,4-Dinitrophenol	60.0	58.2		ug/L		97	10 - 150	8	30
2,4-Dinitrotoluene	30.0	31.6		ug/L		105	58 - 140	5	30
2,6-Dinitrotoluene	30.0	32.6		ug/L		109	57 - 130	5	30
Di-n-octyl phthalate	30.0	31.9		ug/L		106	50 - 150	1	30
1,4-Dioxane	30.0	16.4		ug/L		55	25 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.8		ug/L		79	47 - 123	5	30
Hexachlorobenzene	30.0	38.1		ug/L		127	52 - 131	5	30
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129	18	30
Hexachloroethane	30.0	20.4		ug/L		68	20 - 120	1	30
Indene	30.0	24.4		ug/L		81	47 - 120	3	30
Isophorone	30.0	24.0		ug/L		80	49 - 120	4	30
2-Methylphenol	30.0	25.9		ug/L		86	39 - 123	3	30
3 & 4 Methylphenol	30.0	24.1		ug/L		80	38 - 121	5	30
2-Nitroaniline	30.0	24.8		ug/L		83	47 - 150	6	30
3-Nitroaniline	30.0	23.1		ug/L		77	34 - 132	6	30
4-Nitroaniline	30.0	22.1		ug/L		74	41 - 135	11	30
Nitrobenzene	30.0	23.7		ug/L		79	47 - 120	4	30
2-Nitrophenol	30.0	25.8		ug/L		86	28 - 136	6	30
4-Nitrophenol	60.0	53.2		ug/L		89	10 - 150	7	30
N-Nitrosodimethylamine	30.0	22.4		ug/L		75	22 - 148	7	30
N-Nitrosodi-n-propylamine	30.0	23.1		ug/L		77	44 - 120	4	30
N-Nitrosodiphenylamine	29.8	31.1		ug/L		105	56 - 120	5	30
Pentachlorophenol	60.0	53.2		ug/L		89	15 - 141	7	30
Phenol	30.0	22.5		ug/L		75	33 - 120	4	30
Pyridine	60.0	34.3		ug/L		57	26 - 120	2	30
Quinoline	29.6	24.0		ug/L		81	51 - 129	7	30
2,4,5-Trichlorophenol	30.0	32.5		ug/L		108	38 - 147	4	30
2,4,6-Trichlorophenol	30.0	30.6		ug/L		102	36 - 139	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*84*		*27 - 120*
Phenol-d5	*65*		*10 - 120*
Terphenyl-d14	*119*		*53 - 125*
2,4,6-Tribromophenol	*119*		*15 - 135*

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

Lab Sample ID: LCSD 400-486957/5-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*54*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*56*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0375	J	0.20	0.032	ug/L		04/24/20 14:04	04/27/20 21:59	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 21:59	1
Anthracene	ND		0.20	0.031	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/24/20 14:04	04/27/20 21:59	1
Chrysene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/27/20 21:59	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/27/20 21:59	1
Fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/27/20 21:59	1
Fluorene	ND		0.20	0.11	ug/L		04/24/20 14:04	04/27/20 21:59	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/27/20 21:59	1
Phenanthrene	ND		0.20	0.036	ug/L		04/24/20 14:04	04/27/20 21:59	1
Pyrene	ND		0.20	0.040	ug/L		04/24/20 14:04	04/27/20 21:59	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/27/20 21:59	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/24/20 14:04	04/27/20 21:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*33 - 138*	*04/24/20 14:04*	*04/27/20 21:59*	*1*
2-Fluorobiphenyl	*73*		*15 - 122*	*04/24/20 14:04*	*04/27/20 21:59*	*1*
Nitrobenzene-d5	*64*		*19 - 130*	*04/24/20 14:04*	*04/27/20 21:59*	*1*

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.4		ug/L		95	41 - 120
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120
Anthracene	30.0	31.2		ug/L		104	49 - 120

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	30.0	28.7		ug/L		96	61 - 135
Benzo[a]pyrene	30.0	26.5		ug/L		88	52 - 120
Benzo[b]fluoranthene	30.0	27.5		ug/L		92	53 - 134
Benzo[g,h,i]perylene	30.0	27.5		ug/L		92	47 - 133
Benzo[k]fluoranthene	30.0	28.5		ug/L		95	57 - 134
Chrysene	30.0	29.2		ug/L		97	55 - 122
Dibenz(a,h)anthracene	30.0	29.0		ug/L		97	48 - 146
Fluoranthene	30.0	26.9		ug/L		90	54 - 128
Fluorene	30.0	30.6		ug/L		102	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142
Phenanthrene	30.0	29.6		ug/L		99	48 - 120
Pyrene	30.0	31.5		ug/L		105	48 - 132
1-Methylnaphthalene	30.0	23.6		ug/L		79	41 - 120
2-Methylnaphthalene	30.0	24.1		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*117*		*33 - 138*
2-Fluorobiphenyl	*91*		*15 - 122*
Nitrobenzene-d5	*67*		*19 - 130*

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.3		ug/L		91	41 - 120	4	56
Acenaphthylene	30.0	28.1		ug/L		94	44 - 120	4	56
Anthracene	30.0	30.3		ug/L		101	49 - 120	3	51
Benzo[a]anthracene	30.0	27.7		ug/L		92	61 - 135	4	49
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120	1	50
Benzo[b]fluoranthene	30.0	27.9		ug/L		93	53 - 134	1	54
Benzo[g,h,i]perylene	30.0	27.0		ug/L		90	47 - 133	2	50
Benzo[k]fluoranthene	30.0	27.8		ug/L		93	57 - 134	2	52
Chrysene	30.0	28.1		ug/L		94	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	29.1		ug/L		97	48 - 146	0	50
Fluoranthene	30.0	26.7		ug/L		89	54 - 128	1	52
Fluorene	30.0	29.6		ug/L		99	45 - 125	3	56
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142	0	51
Phenanthrene	30.0	28.8		ug/L		96	48 - 120	3	56
Pyrene	30.0	30.4		ug/L		101	48 - 132	3	52
1-Methylnaphthalene	30.0	23.5		ug/L		78	41 - 120	0	55
2-Methylnaphthalene	30.0	23.8		ug/L		79	32 - 124	1	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*113*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*66*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/28/20 11:02	04/28/20 14:16	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*04/28/20 11:02*	*04/28/20 14:16*	*1*

Lab Sample ID: LCS 400-487253/2-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0915		ug/L		91	60 - 140
1,2-Dibromoethane	0.101	0.118		ug/L		117	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487253/3-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0980		ug/L		98	60 - 140	7	30
1,2-Dibromoethane	0.101	0.117		ug/L		116	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

☐ ACCUTEST (_____)

☐ CALSCIENCE (_____)

☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))

☐ Other (Lab Vendor # 1364589 (TestAmerica))

Please Check Appropriate Box:		
☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES_____	

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	**GSAP Project ID**
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES

DATE: 4/17/20

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 — 60619901 - 1.03.002 / 60619901 - 1.03.0022

ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel; AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID:

PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Wendy Pennington

TELEPHONE: 314-429-0100

FAX: 314-429-0462

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; wendy.pennington@aecom.com; melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): Tony Jones, Joe Mayer

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
- Dissolved metals are field filtered

split Report

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

UNIT COST 60619901 - 1.03.002: VOC 8011; SVOC 8270

NON-UNIT COST 60619901 - 1.03.0022: VOC 8260; PAH 8270LL

400-186933 COC

FIELD NOTES:

TEMPERATURE ON RECEIPT C°: 0.5°C IR-1

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 8011	SVOC 8270	VOC 8260	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-041720-8260-SS	4/17	0000	Water	X					2			2		SPLIT Sample
	TB-ROX-041720-8011-SS	↓	0000	↓	X					2	2				
	T12-ROX-041720-SS		0945		X			X		8	3	1	3	1	
	P93A-ROX-041720-SS	↓	1055	↓	X			X		8	3	1	3	1	

JM 4/17/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
Joe Mayer	Fedex: 1680 3500 9089	4/17/20	1600
	TA PEN	4/18/20	823

Version 14Dec15

Custody Seal: 1099508/1099509

Page 41 of 45

5/6/2020 (Rev. 1)

Klingensmith, Leah

From: Kunkel, Elizabeth <elizabeth.kunkel@aecom.com>
Sent: Friday, April 17, 2020 4:12 PM
To: Klingensmith, Leah; Evans, Lauren; Avery, Kathy; Kennedy, Amelia
Cc: Remiger, Melissa; Pennington, Wendy
Subject: #60619901-1.03.002/1.03.0022 Roxana (2Q20) Quarterly Groundwater and # 60619901-2.02.002 /2.0022 - SPLIT REPORT samples arriving tomorrow (Saturday) morning in Pensacola
Attachments: 2Q20 WRR GW COC 041720_split.pdf; 2Q20 ROX GW COC 041720_split.pdf

Leah,

In addition to the samples I e-mailed you about earlier this afternoon arriving tomorrow morning, please note that Pensacola will also receive split report samples (COCs attached to this e-mail) tomorrow (Saturday) morning as well.

Please note that the attached COCs have the correct naming convention and are a correction for the corresponding ones sent with these coolers.

Also, please let me know of any procedural questions, but basically as according to the project lists, samples are run once with corresponding results reported in separate SDGs under both the Roxana Groundwater and Refinery Semiannual projects with methods 8260/8011/8270/8270LL billed under Roxana Groundwater, and the inorganics billed under Refinery.

Please let me know of any questions or concerns.

Thank you,
Elizabeth

elizabeth.kunkel@aecom.com

☐ CHEMICALS ☐ CONSULTANT ☐ FUELS

☐ TRANSPORTATION ☑ OTHER _ENV. SERVICES_____

PC #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

GSAP Project ID: USPC/00114/R/02

PAGE: 1 of 1

LOG CODE:

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA

State: IL

AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.002 | 60619901 - 1.03.0022

ISA

EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman

PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122

E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com

AECOM Other ID

2

Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

SAMPLER NAME(S) (Print): Tony Jones, Joe Mayer

LAB USE ONLY

☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

REQUESTED ANALYSIS

LEVEL 3 ☐ LEVEL 4 ☑ OTHER (SPECIFY) _EDD_____

Cooler #2 | Cooler #3

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

Report

SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60619901 - 1.03.002: VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0022: VOC 8011	PAH 8270LL	FIELD NOTES / Container PID Readings or Laboratory Notes
4/17/20	0000	Water	2					2			X		Split sample
	2000		2					2	X				
	0945		6			2		8	X	X	X	X	
	1055		6			2		8	X	X	X	Y	

TEMPERATURE ON RECEIPT C°

FIELD NOTES:

Received by: (Signature): Fedex: | Date: 4/17/20 | Time: 1600

Received by: (Signature) | Date | Time

Received by: (Signature) | Date: | Time:

Version: 14Dec15

5/8/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186933-1

Login Number: 186933
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1099508,1099509
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	0.5°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc. Job ID: 400-186933-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-186982-1-Rev. 1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/22/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-042020-8011-SS	P93D-ROX-042020
TB-ROX-042020-8260-SS	P93B-ROX-042020
P93B-ROX-042020-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 LCS/LCSD recoveries and SVOC LCS/LCSD RPDs were outside evaluation criteria. The SVOC/PAH surrogate recovery for terphenyl-d_{14} was outside criteria in the method blanks. In field duplicate pair P93B-ROX-042020/P93B-ROX-042020-Dup, benzene was qualified due to field duplicate RPD above evaluation criteria; therefore, results were qualified as estimated (**J**). Field duplicate pair P93B-ROX-042020/P93B-ROX-042020-Dup was diluted to bring VOCs and phenol into calibration range of the instrument. PAHs in field duplicate pair P93B-ROX-042020/P93B-ROX-042020-Dup were diluted due to the nature of the sample matrix. 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; however, the laboratory report was revised to correct sample ID P93D-ROX-042020. Data was correctly reported; no qualification of data was required.

3.0 Holding Times

Were samples extracted/analyzed within applicable limits?

Yes

4.0 Blank Contamination

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

No

5.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No

LCS/LCSD ID	Parameter	Analyte	LCS/LCSD Recovery	RPD	LCS/LCSD /RPD Criteria
LCS 400-487773/1002	VOCs	trans-1,2-Dichloroethene	**137**	NA	70-130
LCS/LCSD 400-486957/2-A/3-A	SVOCs	4-Bromophenyl phenyl ether	**133/125**	7	55-122/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**165/154**	7	39-128/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	Hexachlorobenzene	**133**/127	5	52-131/30
LCS/LCSD 400-486957/4-A/5-A	SVOCs	Benzenethiol	**2/2**	15	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 in LCS/LCSD 400-486957/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P93D-ROX-042020	SVOCs	Benzenethiol	**UJ**
P93B-ROX-042020	SVOCs	Benzenethiol	**UJ**
P93B-ROX-042020-Dup	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
MB 400-486957/1-A	SVOCs	Terphenyl-d_{14}	**44**	53-125
MB 400-486957/1-A	PAHs	Terphenyl-d_{14}	**141**	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?

Yes

Field ID	Field Duplicate ID
P93B-ROX-042020	P93B-ROX-042020-Dup

Were field duplicates within evaluation criteria?

No

Field ID	Field Duplicate ID	Parameter	Analyte	RPD	Qualification
P93B-ROX-042020	P93B-ROX-042020-Dup	VOCs	Benzene	**29**	**J/J**

11.0 Sample Dilutions

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

Not applicable; analytes were detected in samples that were diluted; with the exception of non-detect PAHs in field duplicate pair P93B-ROX-042020/P93B-ROX-042020-Dup, due to the nature of the sample matrix. PAHs were non-detect in sample P93B-ROX-042020 at a dilution factor of 2X, with raised reporting limits of 0.40 µg/L; PAHs were non-detect in sample P93B-ROX-042020-Dup at a dilution factor of 5X, with raised reporting limits of 0.99 µg/L. Due to historical detections, please see section 12.0 of the data review for additional qualifications.

12.0 Additional Qualifications

Were additional qualifications applied?

Yes, analytes in field duplicate pair P93B-ROX-042020/P93B-ROX-042020-Dup were qualified as estimated non-detect due to sample dilution and historical detections.

Sample ID	Parameter	Analyte	Qualification
P93B-ROX-042020	PAHs	All non-detects	**UJ**
P93B-ROX-042020-Dup	PAHs	All non-detects	**UJ**

eurofins | Environment Testing America



ANALYTICAL REPORT

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

Laboratory Job ID: 400-186982-1
Client Project/Site: ROXANA QUARTERLY GW
Revision: 1

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

Attn: Elizabeth Kunkel

Authorized for release by:
5/8/2020 9:58:01 AM

Leah Klingensmith, Senior Project Manager
(615)301-5038
leah.klingensmith@testamericainc.com

Reviewed 5/22/20 LR

LINKS

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The test results in this report meet all 2003 NELAC and 2009 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: 400-186982-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-186982-1

Comments
Revised Report
Report revised to correct the sample ID, P93D-ROX-042020 (400-186982-2).
Supersedes report dated 5-7-2020

Receipt
The samples were received on 4/21/2020 8:37 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.0° C and 1.6° C.

GC/MS VOA
Method 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: P93B-ROX-042020 (400-186982-4) and P93B-ROX-042020-DUP (400-186982-5). Elevated reporting limits (RLs) are provided.

Method 8260B: The continuing calibration verification (CCV) associated with batch 400-487664 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Methods 8260B: The laboratory control sample (LCS) for analytical batch 400-487773 recovered outside control limits for the following analyte: trans-1,2-Dichloroethene. This analyte was biased high in the LCS and were not detected in the associated sample; therefore, the data have been reported.

Methods 8260B: The continuing calibration verification (CCV) associated with batch 400-487773 recovered above the upper control limit for Vinyl chloride. The sample associated with this CCV were non-detect for the affected analyte; therefore, the data has been reported.

Method 8260B: The initial calibration verification (ICV) analyzed in batch 400-480262 was outside method criteria for the following analyte: Dichlorodifluoromethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

Method 8260B: The preservative used in the sample containers provided is not compatible with one of the Method 8260 analytes requested. The following samples were received preserved with hydrochloric acid: P93D-ROX-042020 (400-186982-2), TB-ROX-042020-8260-SS (400-186982-3), P93B-ROX-042020 (400-186982-4) and P93B-ROX-042020-DUP (400-186982-5). The requested target analyte list includes 2-Chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrades in an acidic medium.

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

GC/MS Semi VOA
Method 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: P93B-ROX-042020 (400-186982-4) and (MB 400-486957/1-A). These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-486957 and analytical batch 400-487260 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, Hexachlorobenzene and 4-Bromophenyl phenyl ether. These analytes were biased high in the LCS and LCSD that were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: Sample P93D-ROX-042020 (400-186982-2) is reported with a detection of the common lab contaminant Bis(2-ethylhexyl)phthalate (11 µg/L). Re-extraction of the sample was performed to confirm the detection; however, the sample evaporated to dryness in the boiling flask during the base phase of the liquid-liquid extraction. Insufficient sample is available to perform another extraction; therefore, the original data have been reported. The associated method blank is non-detect for Bis(2-ethylhexyl)phthalate.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: P93B-ROX-042020 (400-186982-4), P93B-ROX-042020-DUP (400-186982-5). Elevated reporting limits (RLs) are provided.

Job ID: 400-186982-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-487148 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-487273 recovered above the upper control limit for Anthracene, Pyrene, Fluorene and Acenaphthene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: P93B-ROX-042020 (400-186982-4). Elevated reporting limits (RLs) are provided.

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

GC Semi VOA

Method 8011: The continuing calibration verification (CCV) associated with batch 400-487261 recovered above the upper control limit for 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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: 400-186982-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-186982-1	TB-ROX-042020-8011-SS	Water	04/20/20 00:00	04/21/20 08:37	
400-186982-2	P93D-ROX-042020	Water	04/20/20 10:00	04/21/20 08:37	
400-186982-3	TB-ROX-042020-8260-SS	Water	04/20/20 00:00	04/21/20 08:37	
400-186982-4	P93B-ROX-042020	Water	04/20/20 11:45	04/21/20 08:37	
400-186982-5	P93B-ROX-042020-DUP	Water	04/20/20 11:45	04/21/20 08:37	

Detection Summary

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

Job ID: 400-186982-1

Client Sample ID: TB-ROX-042020-8011-SS — Lab Sample ID: 400-186982-1

No Detections.

Client Sample ID: P93D-ROX-042020 — Lab Sample ID: 400-186982-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.85	J	1.0	0.38	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.7		1.0	0.74	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	11		9.9	4.9	ug/L	1		8270D	Total/NA

Client Sample ID: TB-ROX-042020-8260-SS — Lab Sample ID: 400-186982-3

No Detections.

Client Sample ID: P93B-ROX-042020 — Lab Sample ID: 400-186982-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	160000	J	1000	380	ug/L	1000		8260B	Total/NA
Phenol - DL	130		50	13	ug/L	5		8270D	Total/NA

Client Sample ID: P93B-ROX-042020-DUP — Lab Sample ID: 400-186982-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	120000	J	1000	380	ug/L	1000		8260B	Total/NA
Phenol	85		50	13	ug/L	5		8270D	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: 400-186982-1

Client Sample ID: TB-ROX-042020-8011-SS
Date Collected: 04/20/20 00:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-1
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		0.029	0.0054	ug/L		04/28/20 11:02	04/28/20 20:14	1
1,2-Dibromoethane	ND		0.020	0.0049	ug/L		04/28/20 11:02	04/28/20 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*04/28/20 11:02*	*04/28/20 20:14*	*1*

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

Job ID: 400-186982-1

Client Sample ID: P93D-ROX-042020
Date Collected: 04/20/20 10:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-2
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			05/01/20 23:54	1
Acrolein	ND		20	10	ug/L			05/01/20 23:54	1
Acrylonitrile	ND		10	2.8	ug/L			05/01/20 23:54	1
Benzene	**0.85**	**J**	1.0	0.38	ug/L			05/01/20 23:54	1
Bromobenzene	ND		1.0	0.54	ug/L			05/01/20 23:54	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/01/20 23:54	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Bromoform	ND		5.0	0.71	ug/L			05/01/20 23:54	1
Bromomethane	ND		1.0	0.98	ug/L			05/01/20 23:54	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/01/20 23:54	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Chloroethane	ND		1.0	0.76	ug/L			05/01/20 23:54	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/01/20 23:54	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 23:54	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/01/20 23:54	1
Chloromethane	ND		1.0	0.83	ug/L			05/01/20 23:54	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 23:54	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/01/20 23:54	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/01/20 23:54	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/01/20 23:54	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/01/20 23:54	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/01/20 23:54	1
2-Hexanone	ND		25	3.1	ug/L			05/01/20 23:54	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/01/20 23:54	1
Methylene bromide	ND		5.0	0.59	ug/L			05/01/20 23:54	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/01/20 23:54	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/01/20 23:54	1
Methyl tert-butyl ether	**1.7**		1.0	0.74	ug/L			05/01/20 23:54	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/01/20 23:54	1
Naphthalene	ND		1.0	1.0	ug/L			05/01/20 23:54	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/01/20 23:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/01/20 23:54	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/01/20 23:54	1
o-Xylene	ND		5.0	0.60	ug/L			05/01/20 23:54	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/01/20 23:54	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			05/01/20 23:54	1

Client Sample ID: P93D-ROX-042020
Date Collected: 04/20/20 10:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-2
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			05/01/20 23:54	1
Styrene	ND		1.0	1.0	ug/L			05/01/20 23:54	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/01/20 23:54	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/01/20 23:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/01/20 23:54	1
Toluene	ND		1.0	0.41	ug/L			05/01/20 23:54	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 23:54	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/01/20 23:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/01/20 23:54	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/01/20 23:54	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/01/20 23:54	1
Trichloroethene	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/01/20 23:54	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/01/20 23:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/01/20 23:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/01/20 23:54	1
Vinyl acetate	ND		25	2.0	ug/L			05/01/20 23:54	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/01/20 23:54	1
Xylenes, Total	ND		10	1.6	ug/L			05/01/20 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*05/01/20 23:54*	*1*
Dibromofluoromethane	*108*		*81 - 121*		*05/01/20 23:54*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*05/01/20 23:54*	*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		04/24/20 14:04	04/27/20 23:32	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 23:32	1
Anthracene	ND		0.20	0.031	ug/L		04/24/20 14:04	04/27/20 23:32	1
Benzo[a]anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 23:32	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/24/20 14:04	04/27/20 23:32	1
Benzo[b]fluoranthene	ND		0.20	0.067	ug/L		04/24/20 14:04	04/27/20 23:32	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/27/20 23:32	1
Benzo[k]fluoranthene	ND		0.20	0.099	ug/L		04/24/20 14:04	04/27/20 23:32	1
Chrysene	ND		0.20	0.073	ug/L		04/24/20 14:04	04/27/20 23:32	1
Dibenz(a,h)anthracene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 23:32	1
Fluoranthene	ND		0.20	0.067	ug/L		04/24/20 14:04	04/27/20 23:32	1
Fluorene	ND		0.20	0.11	ug/L		04/24/20 14:04	04/27/20 23:32	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/27/20 23:32	1
Phenanthrene	ND		0.20	0.036	ug/L		04/24/20 14:04	04/27/20 23:32	1
Pyrene	ND		0.20	0.040	ug/L		04/24/20 14:04	04/27/20 23:32	1
1-Methylnaphthalene	ND		0.20	0.073	ug/L		04/24/20 14:04	04/27/20 23:32	1
2-Methylnaphthalene	ND		0.20	0.059	ug/L		04/24/20 14:04	04/27/20 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*98*		*33 - 138*	*04/24/20 14:04*	*04/27/20 23:32*	*1*
2-Fluorobiphenyl	*77*		*15 - 122*	*04/24/20 14:04*	*04/27/20 23:32*	*1*

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

Job ID: 400-186982-1

Client Sample ID: P93D-ROX-042020
Date Collected: 04/20/20 10:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-2
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	65		19 - 130	04/24/20 14:04	04/27/20 23:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		9.9	3.7	ug/L		04/24/20 14:04	04/27/20 21:25	1
Benzenethiol	ND	* UJ	9.9	1.7	ug/L		04/24/20 14:04	04/27/20 21:25	1
Benzoic acid	ND		30	7.2	ug/L		04/24/20 14:04	04/27/20 21:25	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
Bis(2-chloroethoxy)methane	ND		9.9	0.68	ug/L		04/24/20 14:04	04/27/20 21:25	1
Bis(2-chloroethyl)ether	ND		9.9	0.73	ug/L		04/24/20 14:04	04/27/20 21:25	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/24/20 14:04	04/27/20 21:25	1
Bis(2-ethylhexyl) phthalate	**11**		9.9	4.9	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Bromophenyl phenyl ether	ND	*	9.9	0.32	ug/L		04/24/20 14:04	04/27/20 21:25	1
Butyl benzyl phthalate	ND		9.9	0.68	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Chloro-3-methylphenol	ND		9.9	3.7	ug/L		04/24/20 14:04	04/27/20 21:25	1
2-Chloronaphthalene	ND		9.9	0.51	ug/L		04/24/20 14:04	04/27/20 21:25	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
Dibenzofuran	ND		9.9	0.51	ug/L		04/24/20 14:04	04/27/20 21:25	1
3,3'-Dichlorobenzidine	ND	*	9.9	2.6	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
Diethyl phthalate	ND		9.9	0.69	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:25	1
Dimethyl phthalate	ND		9.9	0.59	ug/L		04/24/20 14:04	04/27/20 21:25	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/24/20 14:04	04/27/20 21:25	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 21:25	1
Di-n-octyl phthalate	ND		9.9	0.43	ug/L		04/24/20 14:04	04/27/20 21:25	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:25	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:25	1
Hexachlorobenzene	ND	*	9.9	0.25	ug/L		04/24/20 14:04	04/27/20 21:25	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 21:25	1
Hexachloroethane	ND		9.9	4.1	ug/L		04/24/20 14:04	04/27/20 21:25	1
Indene	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:25	1
Isophorone	ND		9.9	0.56	ug/L		04/24/20 14:04	04/27/20 21:25	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 21:25	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 21:25	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 21:25	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Nitroaniline	ND		9.9	2.4	ug/L		04/24/20 14:04	04/27/20 21:25	1
Nitrobenzene	ND		9.9	0.54	ug/L		04/24/20 14:04	04/27/20 21:25	1
2-Nitrophenol	ND		9.9	0.64	ug/L		04/24/20 14:04	04/27/20 21:25	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/24/20 14:04	04/27/20 21:25	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:25	1

Client Sample ID: P93D-ROX-042020
Date Collected: 04/20/20 10:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-2
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		04/24/20 14:04	04/27/20 21:25	1
N-Nitrosodiphenylamine	ND		9.9	0.46	ug/L		04/24/20 14:04	04/27/20 21:25	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 21:25	1
Phenol	ND		9.9	2.6	ug/L		04/24/20 14:04	04/27/20 21:25	1
Pyridine	ND		9.9	3.2	ug/L		04/24/20 14:04	04/27/20 21:25	1
Quinoline	ND		9.9	5.9	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4,5-Trichlorophenol	ND		9.9	3.6	ug/L		04/24/20 14:04	04/27/20 21:25	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*34 - 120*	*04/24/20 14:04*	*04/27/20 21:25*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:25*	*1*
Nitrobenzene-d5	*68*		*27 - 120*	*04/24/20 14:04*	*04/27/20 21:25*	*1*
Phenol-d5	*52*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:25*	*1*
Terphenyl-d14	*75*		*53 - 125*	*04/24/20 14:04*	*04/27/20 21:25*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*04/24/20 14:04*	*04/27/20 21:25*	*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		0.034	0.0063	ug/L		04/28/20 11:02	04/28/20 20:53	1
1,2-Dibromoethane	ND		0.023	0.0057	ug/L		04/28/20 11:02	04/28/20 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*51 - 149*	*04/28/20 11:02*	*04/28/20 20:53*	*1*

Client Sample ID: TB-ROX-042020-8260-SS
Date Collected: 04/20/20 00:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		1.0	1.0	ug/L			05/01/20 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*78 - 118*		*05/01/20 20:09*	*1*
Dibromofluoromethane	*92*		*81 - 121*		*05/01/20 20:09*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*05/01/20 20:09*	*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			05/02/20 18:45	1
Acrolein	ND		20	10	ug/L			05/02/20 18:45	1
Acrylonitrile	ND		10	2.8	ug/L			05/02/20 18:45	1
Benzene	ND		1.0	0.38	ug/L			05/02/20 18:45	1
Bromobenzene	ND		1.0	0.54	ug/L			05/02/20 18:45	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/02/20 18:45	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Bromoform	ND		5.0	0.71	ug/L			05/02/20 18:45	1
Bromomethane	ND		1.0	0.98	ug/L			05/02/20 18:45	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/02/20 18:45	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Chloroethane	ND		1.0	0.76	ug/L			05/02/20 18:45	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/02/20 18:45	1
Chloroform	ND		1.0	0.60	ug/L			05/02/20 18:45	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/02/20 18:45	1
Chloromethane	ND		1.0	0.83	ug/L			05/02/20 18:45	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/02/20 18:45	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/02/20 18:45	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/02/20 18:45	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/02/20 18:45	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/02/20 18:45	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/02/20 18:45	1
2-Hexanone	ND		25	3.1	ug/L			05/02/20 18:45	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/02/20 18:45	1
Methylene bromide	ND		5.0	0.59	ug/L			05/02/20 18:45	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/02/20 18:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/02/20 18:45	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/02/20 18:45	1

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

Job ID: 400-186982-1

Client Sample ID: TB-ROX-042020-8260-SS
Date Collected: 04/20/20 00:00
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/02/20 18:45	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/02/20 18:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/02/20 18:45	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/02/20 18:45	1
o-Xylene	ND		5.0	0.60	ug/L			05/02/20 18:45	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/02/20 18:45	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			05/02/20 18:45	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			05/02/20 18:45	1
Styrene	ND		1.0	1.0	ug/L			05/02/20 18:45	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/02/20 18:45	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/02/20 18:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/02/20 18:45	1
Toluene	ND		1.0	0.41	ug/L			05/02/20 18:45	1
trans-1,2-Dichloroethene	ND	*	1.0	0.50	ug/L			05/02/20 18:45	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/02/20 18:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/02/20 18:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/02/20 18:45	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/02/20 18:45	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/02/20 18:45	1
Trichloroethene	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/02/20 18:45	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/02/20 18:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/02/20 18:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/02/20 18:45	1
Vinyl acetate	ND		25	2.0	ug/L			05/02/20 18:45	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/02/20 18:45	1
Xylenes, Total	ND		10	1.6	ug/L			05/02/20 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*99*		*78 - 118*		*05/02/20 18:45*	*1*
Dibromofluoromethane	*107*		*81 - 121*		*05/02/20 18:45*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*05/02/20 18:45*	*1*

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

Job ID: 400-186982-1

Client Sample ID: P93B-ROX-042020
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-4
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			05/02/20 01:08	1000
Acrolein	ND		20000	10000	ug/L			05/02/20 01:08	1000
Acrylonitrile	ND		10000	2800	ug/L			05/02/20 01:08	1000
Benzene	160000	J	1000	380	ug/L			05/02/20 01:08	1000
Bromobenzene	ND		1000	540	ug/L			05/02/20 01:08	1000
Bromochloromethane	ND		1000	520	ug/L			05/02/20 01:08	1000
Bromodichloromethane	ND		1000	500	ug/L			05/02/20 01:08	1000
Bromoform	ND		5000	710	ug/L			05/02/20 01:08	1000
Bromomethane	ND		1000	980	ug/L			05/02/20 01:08	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			05/02/20 01:08	1000
Carbon disulfide	ND		1000	500	ug/L			05/02/20 01:08	1000
Carbon tetrachloride	ND		1000	500	ug/L			05/02/20 01:08	1000
Chlorobenzene	ND		1000	500	ug/L			05/02/20 01:08	1000
Dibromochloromethane	ND		1000	500	ug/L			05/02/20 01:08	1000
Chloroethane	ND		1000	760	ug/L			05/02/20 01:08	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			05/02/20 01:08	1000
Chloroform	ND		1000	600	ug/L			05/02/20 01:08	1000
1-Chlorohexane	ND		1000	700	ug/L			05/02/20 01:08	1000
Chloromethane	ND		1000	830	ug/L			05/02/20 01:08	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:08	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			05/02/20 01:08	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			05/02/20 01:08	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			05/02/20 01:08	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			05/02/20 01:08	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			05/02/20 01:08	1000
1,1-Dichloroethane	ND		1000	500	ug/L			05/02/20 01:08	1000
1,2-Dichloroethane	ND		1000	500	ug/L			05/02/20 01:08	1000
1,1-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:08	1000
1,2-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:08	1000
1,3-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:08	1000
2,2-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:08	1000
1,1-Dichloropropene	ND		1000	500	ug/L			05/02/20 01:08	1000
Ethylbenzene	ND		1000	500	ug/L			05/02/20 01:08	1000
Ethyl methacrylate	ND		1000	600	ug/L			05/02/20 01:08	1000
Hexachlorobutadiene	ND		5000	900	ug/L			05/02/20 01:08	1000
2-Hexanone	ND		25000	3100	ug/L			05/02/20 01:08	1000
Isopropylbenzene	ND		1000	530	ug/L			05/02/20 01:08	1000
Methylene bromide	ND		5000	590	ug/L			05/02/20 01:08	1000
Methylene Chloride	ND		5000	3000	ug/L			05/02/20 01:08	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			05/02/20 01:08	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			05/02/20 01:08	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			05/02/20 01:08	1000
Naphthalene	ND		1000	1000	ug/L			05/02/20 01:08	1000
n-Butylbenzene	ND		1000	760	ug/L			05/02/20 01:08	1000
N-Propylbenzene	ND		1000	690	ug/L			05/02/20 01:08	1000
o-Chlorotoluene	ND		1000	570	ug/L			05/02/20 01:08	1000
o-Xylene	ND		5000	600	ug/L			05/02/20 01:08	1000
p-Chlorotoluene	ND		1000	560	ug/L			05/02/20 01:08	1000
p-Isopropyltoluene	ND		1000	710	ug/L			05/02/20 01:08	1000

Client Sample ID: P93B-ROX-042020
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			05/02/20 01:08	1000
Styrene	ND		1000	1000	ug/L			05/02/20 01:08	1000
tert-Butylbenzene	ND		1000	630	ug/L			05/02/20 01:08	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			05/02/20 01:08	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			05/02/20 01:08	1000
Tetrachloroethene	ND		1000	580	ug/L			05/02/20 01:08	1000
Toluene	ND		1000	410	ug/L			05/02/20 01:08	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:08	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			05/02/20 01:08	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			05/02/20 01:08	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			05/02/20 01:08	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			05/02/20 01:08	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			05/02/20 01:08	1000
Trichloroethene	ND		1000	500	ug/L			05/02/20 01:08	1000
Trichlorofluoromethane	ND		1000	520	ug/L			05/02/20 01:08	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			05/02/20 01:08	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			05/02/20 01:08	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			05/02/20 01:08	1000
Vinyl acetate	ND		25000	2000	ug/L			05/02/20 01:08	1000
Vinyl chloride	ND		1000	500	ug/L			05/02/20 01:08	1000
Xylenes, Total	ND		10000	1600	ug/L			05/02/20 01:08	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*05/02/20 01:08*	*1000*
Dibromofluoromethane	*108*		*81 - 121*		*05/02/20 01:08*	*1000*
Toluene-d8 (Surr)	*86*		*80 - 120*		*05/02/20 01:08*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	UJ	0.40	0.064	ug/L		04/24/20 14:04	04/28/20 16:28	2
Acenaphthylene	ND		0.40	0.089	ug/L		04/24/20 14:04	04/28/20 16:28	2
Anthracene	ND		0.40	0.062	ug/L		04/24/20 14:04	04/28/20 16:28	2
Benzo[a]anthracene	ND		0.40	0.091	ug/L		04/24/20 14:04	04/28/20 16:28	2
Benzo[a]pyrene	ND		0.40	0.083	ug/L		04/24/20 14:04	04/28/20 16:28	2
Benzo[b]fluoranthene	ND		0.40	0.14	ug/L		04/24/20 14:04	04/28/20 16:28	2
Benzo[g,h,i]perylene	ND		0.40	0.26	ug/L		04/24/20 14:04	04/28/20 16:28	2
Benzo[k]fluoranthene	ND		0.40	0.20	ug/L		04/24/20 14:04	04/28/20 16:28	2
Chrysene	ND		0.40	0.15	ug/L		04/24/20 14:04	04/28/20 16:28	2
Dibenz(a,h)anthracene	ND		0.40	0.091	ug/L		04/24/20 14:04	04/28/20 16:28	2
Fluoranthene	ND		0.40	0.14	ug/L		04/24/20 14:04	04/28/20 16:28	2
Fluorene	ND		0.40	0.22	ug/L		04/24/20 14:04	04/28/20 16:28	2
Indeno[1,2,3-cd]pyrene	ND		0.40	0.24	ug/L		04/24/20 14:04	04/28/20 16:28	2
Phenanthrene	ND		0.40	0.072	ug/L		04/24/20 14:04	04/28/20 16:28	2
Pyrene	ND		0.40	0.079	ug/L		04/24/20 14:04	04/28/20 16:28	2
1-Methylnaphthalene	ND		0.40	0.15	ug/L		04/24/20 14:04	04/28/20 16:28	2
2-Methylnaphthalene	ND		0.40	0.12	ug/L		04/24/20 14:04	04/28/20 16:28	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*88*		*33 - 138*	*04/24/20 14:04*	*04/28/20 16:28*	*2*
2-Fluorobiphenyl	*90*		*15 - 122*	*04/24/20 14:04*	*04/28/20 16:28*	*2*

Client Sample ID: P93B-ROX-042020
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-4
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	45		19 - 130	04/24/20 14:04	04/28/20 16:28	2

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		04/24/20 14:04	04/27/20 21:00	1
Benzenethiol	ND	* UJ	9.9	1.7	ug/L		04/24/20 14:04	04/27/20 21:00	1
Benzoic acid	ND		30	7.3	ug/L		04/24/20 14:04	04/27/20 21:00	1
Benzyl alcohol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
Bis(2-chloroethoxy)methane	ND		9.9	0.69	ug/L		04/24/20 14:04	04/27/20 21:00	1
Bis(2-chloroethyl)ether	ND		9.9	0.74	ug/L		04/24/20 14:04	04/27/20 21:00	1
bis (2-chloroisopropyl) ether	ND		9.9	0.80	ug/L		04/24/20 14:04	04/27/20 21:00	1
Bis(2-ethylhexyl) phthalate	ND		9.9	5.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Bromophenyl phenyl ether	ND	*	9.9	0.32	ug/L		04/24/20 14:04	04/27/20 21:00	1
Butyl benzyl phthalate	ND		9.9	0.69	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Chloroaniline	ND		9.9	3.4	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Chloro-3-methylphenol	ND		9.9	3.8	ug/L		04/24/20 14:04	04/27/20 21:00	1
2-Chloronaphthalene	ND		9.9	0.52	ug/L		04/24/20 14:04	04/27/20 21:00	1
2-Chlorophenol	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Chlorophenyl phenyl ether	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
Dibenz[a,h]acridine	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
Dibenzofuran	ND		9.9	0.52	ug/L		04/24/20 14:04	04/27/20 21:00	1
3,3'-Dichlorobenzidine	ND	*	9.9	2.6	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4-Dichlorophenol	ND		9.9	3.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
Diethyl phthalate	ND		9.9	0.70	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4-Dimethylphenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:00	1
Dimethyl phthalate	ND		9.9	0.60	ug/L		04/24/20 14:04	04/27/20 21:00	1
Di-n-butyl phthalate	ND		9.9	2.7	ug/L		04/24/20 14:04	04/27/20 21:00	1
4,6-Dinitro-ortho-cresol	ND		9.9	2.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,6-Dinitrotoluene	ND		9.9	1.9	ug/L		04/24/20 14:04	04/27/20 21:00	1
Di-n-octyl phthalate	ND		9.9	0.44	ug/L		04/24/20 14:04	04/27/20 21:00	1
1,4-Dioxane	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:00	1
Hexachlorobenzene	ND	*	9.9	0.25	ug/L		04/24/20 14:04	04/27/20 21:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 21:00	1
Hexachloroethane	ND		9.9	4.2	ug/L		04/24/20 14:04	04/27/20 21:00	1
Indene	ND		9.9	0.99	ug/L		04/24/20 14:04	04/27/20 21:00	1
Isophorone	ND		9.9	0.57	ug/L		04/24/20 14:04	04/27/20 21:00	1
2-Methylphenol	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 21:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
2-Nitroaniline	ND		9.9	2.2	ug/L		04/24/20 14:04	04/27/20 21:00	1
3-Nitroaniline	ND		9.9	1.8	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Nitroaniline	ND		9.9	2.5	ug/L		04/24/20 14:04	04/27/20 21:00	1
Nitrobenzene	ND		9.9	0.55	ug/L		04/24/20 14:04	04/27/20 21:00	1
2-Nitrophenol	ND		9.9	0.65	ug/L		04/24/20 14:04	04/27/20 21:00	1
4-Nitrophenol	ND		9.9	2.1	ug/L		04/24/20 14:04	04/27/20 21:00	1
N-Nitrosodimethylamine	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:00	1

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

Job ID: 400-186982-1

Client Sample ID: P93B-ROX-042020
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-4
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		9.9	3.3	ug/L		04/24/20 14:04	04/27/20 21:00	1
N-Nitrosodiphenylamine	ND		9.9	0.47	ug/L		04/24/20 14:04	04/27/20 21:00	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 21:00	1
Pyridine	ND		9.9	3.2	ug/L		04/24/20 14:04	04/27/20 21:00	1
Quinoline	ND		9.9	6.0	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4,5-Trichlorophenol	ND		9.9	3.7	ug/L		04/24/20 14:04	04/27/20 21:00	1
2,4,6-Trichlorophenol	ND		9.9	3.5	ug/L		04/24/20 14:04	04/27/20 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*82*		*34 - 120*	*04/24/20 14:04*	*04/27/20 21:00*	*1*
2-Fluorophenol	*47*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:00*	*1*
Nitrobenzene-d5	*67*		*27 - 120*	*04/24/20 14:04*	*04/27/20 21:00*	*1*
Phenol-d5	*59*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:00*	*1*
Terphenyl-d14	*68*		*53 - 125*	*04/24/20 14:04*	*04/27/20 21:00*	*1*
2,4,6-Tribromophenol	*84*		*15 - 135*	*04/24/20 14:04*	*04/27/20 21:00*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	130		50	13	ug/L		04/24/20 14:04	04/28/20 21:14	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		0.032	0.0058	ug/L		04/28/20 11:02	04/28/20 20:33	1
1,2-Dibromoethane	ND		0.021	0.0053	ug/L		04/28/20 11:02	04/28/20 20:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*86*		*51 - 149*	*04/28/20 11:02*	*04/28/20 20:33*	*1*

Client Sample ID: P93B-ROX-042020-DUP
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-5
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			05/02/20 01:58	1000
Acrolein	ND		20000	10000	ug/L			05/02/20 01:58	1000
Acrylonitrile	ND		10000	2800	ug/L			05/02/20 01:58	1000
Benzene	**120000**	J	1000	380	ug/L			05/02/20 01:58	1000
Bromobenzene	ND		1000	540	ug/L			05/02/20 01:58	1000
Bromochloromethane	ND		1000	520	ug/L			05/02/20 01:58	1000
Bromodichloromethane	ND		1000	500	ug/L			05/02/20 01:58	1000
Bromoform	ND		5000	710	ug/L			05/02/20 01:58	1000
Bromomethane	ND		1000	980	ug/L			05/02/20 01:58	1000
2-Butanone (MEK)	ND		25000	2600	ug/L			05/02/20 01:58	1000
Carbon disulfide	ND		1000	500	ug/L			05/02/20 01:58	1000
Carbon tetrachloride	ND		1000	500	ug/L			05/02/20 01:58	1000
Chlorobenzene	ND		1000	500	ug/L			05/02/20 01:58	1000
Dibromochloromethane	ND		1000	500	ug/L			05/02/20 01:58	1000
Chloroethane	ND		1000	760	ug/L			05/02/20 01:58	1000
2-Chloroethyl vinyl ether	ND		5000	2000	ug/L			05/02/20 01:58	1000
Chloroform	ND		1000	600	ug/L			05/02/20 01:58	1000
1-Chlorohexane	ND		1000	700	ug/L			05/02/20 01:58	1000
Chloromethane	ND		1000	830	ug/L			05/02/20 01:58	1000
cis-1,2-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:58	1000
cis-1,3-Dichloropropene	ND		5000	500	ug/L			05/02/20 01:58	1000
1,2-Dichlorobenzene	ND		1000	500	ug/L			05/02/20 01:58	1000
1,3-Dichlorobenzene	ND		1000	540	ug/L			05/02/20 01:58	1000
1,4-Dichlorobenzene	ND		1000	640	ug/L			05/02/20 01:58	1000
Dichlorodifluoromethane	ND		1000	850	ug/L			05/02/20 01:58	1000
1,1-Dichloroethane	ND		1000	500	ug/L			05/02/20 01:58	1000
1,2-Dichloroethane	ND		1000	500	ug/L			05/02/20 01:58	1000
1,1-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:58	1000
1,2-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:58	1000
1,3-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:58	1000
2,2-Dichloropropane	ND		1000	500	ug/L			05/02/20 01:58	1000
1,1-Dichloropropene	ND		1000	500	ug/L			05/02/20 01:58	1000
Ethylbenzene	ND		1000	500	ug/L			05/02/20 01:58	1000
Ethyl methacrylate	ND		1000	600	ug/L			05/02/20 01:58	1000
Hexachlorobutadiene	ND		5000	900	ug/L			05/02/20 01:58	1000
2-Hexanone	ND		25000	3100	ug/L			05/02/20 01:58	1000
Isopropylbenzene	ND		1000	530	ug/L			05/02/20 01:58	1000
Methylene bromide	ND		5000	590	ug/L			05/02/20 01:58	1000
Methylene Chloride	ND		5000	3000	ug/L			05/02/20 01:58	1000
4-Methyl-2-pentanone (MIBK)	ND		25000	1800	ug/L			05/02/20 01:58	1000
Methyl tert-butyl ether	ND		1000	740	ug/L			05/02/20 01:58	1000
m-Xylene & p-Xylene	ND		5000	1600	ug/L			05/02/20 01:58	1000
Naphthalene	ND		1000	1000	ug/L			05/02/20 01:58	1000
n-Butylbenzene	ND		1000	760	ug/L			05/02/20 01:58	1000
N-Propylbenzene	ND		1000	690	ug/L			05/02/20 01:58	1000
o-Chlorotoluene	ND		1000	570	ug/L			05/02/20 01:58	1000
o-Xylene	ND		5000	600	ug/L			05/02/20 01:58	1000
p-Chlorotoluene	ND		1000	560	ug/L			05/02/20 01:58	1000
p-Isopropyltoluene	ND		1000	710	ug/L			05/02/20 01:58	1000

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

Job ID: 400-186982-1

Client Sample ID: P93B-ROX-042020-DUP
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		1000	700	ug/L			05/02/20 01:58	1000
Styrene	ND		1000	1000	ug/L			05/02/20 01:58	1000
tert-Butylbenzene	ND		1000	630	ug/L			05/02/20 01:58	1000
1,1,1,2-Tetrachloroethane	ND		1000	520	ug/L			05/02/20 01:58	1000
1,1,2,2-Tetrachloroethane	ND		1000	500	ug/L			05/02/20 01:58	1000
Tetrachloroethene	ND		1000	580	ug/L			05/02/20 01:58	1000
Toluene	ND		1000	410	ug/L			05/02/20 01:58	1000
trans-1,2-Dichloroethene	ND		1000	500	ug/L			05/02/20 01:58	1000
trans-1,3-Dichloropropene	ND		5000	500	ug/L			05/02/20 01:58	1000
1,2,3-Trichlorobenzene	ND		1000	700	ug/L			05/02/20 01:58	1000
1,2,4-Trichlorobenzene	ND		1000	820	ug/L			05/02/20 01:58	1000
1,1,1-Trichloroethane	ND		1000	500	ug/L			05/02/20 01:58	1000
1,1,2-Trichloroethane	ND		5000	500	ug/L			05/02/20 01:58	1000
Trichloroethene	ND		1000	500	ug/L			05/02/20 01:58	1000
Trichlorofluoromethane	ND		1000	520	ug/L			05/02/20 01:58	1000
1,2,3-Trichloropropane	ND		5000	840	ug/L			05/02/20 01:58	1000
1,2,4-Trimethylbenzene	ND		1000	820	ug/L			05/02/20 01:58	1000
1,3,5-Trimethylbenzene	ND		1000	560	ug/L			05/02/20 01:58	1000
Vinyl acetate	ND		25000	2000	ug/L			05/02/20 01:58	1000
Vinyl chloride	ND		1000	500	ug/L			05/02/20 01:58	1000
Xylenes, Total	ND		10000	1600	ug/L			05/02/20 01:58	1000

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*98*		*78 - 118*		*05/02/20 01:58*	*1000*
Dibromofluoromethane	*112*		*81 - 121*		*05/02/20 01:58*	*1000*
Toluene-d8 (Surr)	*87*		*80 - 120*		*05/02/20 01:58*	*1000*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	U5	0.99	0.16	ug/L		04/24/20 14:04	04/27/20 23:48	5
Acenaphthylene	ND		0.99	0.22	ug/L		04/24/20 14:04	04/27/20 23:48	5
Anthracene	ND		0.99	0.15	ug/L		04/24/20 14:04	04/27/20 23:48	5
Benzo[a]anthracene	ND		0.99	0.23	ug/L		04/24/20 14:04	04/27/20 23:48	5
Benzo[a]pyrene	ND		0.99	0.21	ug/L		04/24/20 14:04	04/27/20 23:48	5
Benzo[b]fluoranthene	ND		0.99	0.34	ug/L		04/24/20 14:04	04/27/20 23:48	5
Benzo[g,h,i]perylene	ND		0.99	0.64	ug/L		04/24/20 14:04	04/27/20 23:48	5
Benzo[k]fluoranthene	ND		0.99	0.50	ug/L		04/24/20 14:04	04/27/20 23:48	5
Chrysene	ND		0.99	0.37	ug/L		04/24/20 14:04	04/27/20 23:48	5
Dibenz(a,h)anthracene	ND		0.99	0.23	ug/L		04/24/20 14:04	04/27/20 23:48	5
Fluoranthene	ND		0.99	0.34	ug/L		04/24/20 14:04	04/27/20 23:48	5
Fluorene	ND		0.99	0.54	ug/L		04/24/20 14:04	04/27/20 23:48	5
Indeno[1,2,3-cd]pyrene	ND		0.99	0.59	ug/L		04/24/20 14:04	04/27/20 23:48	5
Phenanthrene	ND		0.99	0.18	ug/L		04/24/20 14:04	04/27/20 23:48	5
Pyrene	ND		0.99	0.20	ug/L		04/24/20 14:04	04/27/20 23:48	5
1-Methylnaphthalene	ND		0.99	0.37	ug/L		04/24/20 14:04	04/27/20 23:48	5
2-Methylnaphthalene	ND		0.99	0.30	ug/L		04/24/20 14:04	04/27/20 23:48	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*101*		*33 - 138*	*04/24/20 14:04*	*04/27/20 23:48*	*5*
2-Fluorobiphenyl	*92*		*15 - 122*	*04/24/20 14:04*	*04/27/20 23:48*	*5*

Client Sample ID: P93B-ROX-042020-DUP
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-5
Matrix: Water

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	76		19 - 130	04/24/20 14:04	04/27/20 23:48	5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		50	19	ug/L		04/24/20 14:04	04/27/20 21:51	5
Benzenethiol	ND	* UJ	50	8.4	ug/L		04/24/20 14:04	04/27/20 21:51	5
Benzoic acid	ND		150	36	ug/L		04/24/20 14:04	04/27/20 21:51	5
Benzyl alcohol	ND		50	9.9	ug/L		04/24/20 14:04	04/27/20 21:51	5
Bis(2-chloroethoxy)methane	ND		50	3.4	ug/L		04/24/20 14:04	04/27/20 21:51	5
Bis(2-chloroethyl)ether	ND		50	3.7	ug/L		04/24/20 14:04	04/27/20 21:51	5
bis (2-chloroisopropyl) ether	ND		50	4.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
Bis(2-ethylhexyl) phthalate	ND		50	25	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Bromophenyl phenyl ether	ND	*	50	1.6	ug/L		04/24/20 14:04	04/27/20 21:51	5
Butyl benzyl phthalate	ND		50	3.4	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Chloroaniline	ND		50	17	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Chloro-3-methylphenol	ND		50	19	ug/L		04/24/20 14:04	04/27/20 21:51	5
2-Chloronaphthalene	ND		50	2.6	ug/L		04/24/20 14:04	04/27/20 21:51	5
2-Chlorophenol	ND		50	11	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Chlorophenyl phenyl ether	ND		50	9.9	ug/L		04/24/20 14:04	04/27/20 21:51	5
Dibenz[a,h]acridine	ND		50	15	ug/L		04/24/20 14:04	04/27/20 21:51	5
Dibenzofuran	ND		50	2.6	ug/L		04/24/20 14:04	04/27/20 21:51	5
3,3'-Dichlorobenzidine	ND	*	50	13	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4-Dichlorophenol	ND		50	15	ug/L		04/24/20 14:04	04/27/20 21:51	5
Diethyl phthalate	ND		50	3.5	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4-Dimethylphenol	ND		50	17	ug/L		04/24/20 14:04	04/27/20 21:51	5
Dimethyl phthalate	ND		50	3.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
Di-n-butyl phthalate	ND		50	13	ug/L		04/24/20 14:04	04/27/20 21:51	5
4,6-Dinitro-ortho-cresol	ND		50	9.9	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4-Dinitrophenol	ND		150	17	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4-Dinitrotoluene	ND		50	9.4	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,6-Dinitrotoluene	ND		50	9.4	ug/L		04/24/20 14:04	04/27/20 21:51	5
Di-n-octyl phthalate	ND		50	2.2	ug/L		04/24/20 14:04	04/27/20 21:51	5
1,4-Dioxane	ND		50	5.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
1,2-Diphenylhydrazine (as Azobenzene)	ND		50	5.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
Hexachlorobenzene	ND	*	50	1.2	ug/L		04/24/20 14:04	04/27/20 21:51	5
Hexachlorocyclopentadiene	ND		99	13	ug/L		04/24/20 14:04	04/27/20 21:51	5
Hexachloroethane	ND		50	21	ug/L		04/24/20 14:04	04/27/20 21:51	5
Indene	ND		50	5.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
Isophorone	ND		50	2.8	ug/L		04/24/20 14:04	04/27/20 21:51	5
2-Methylphenol	ND		50	8.9	ug/L		04/24/20 14:04	04/27/20 21:51	5
3 & 4 Methylphenol	ND		99	5.2	ug/L		04/24/20 14:04	04/27/20 21:51	5
2-Nitroaniline	ND		50	11	ug/L		04/24/20 14:04	04/27/20 21:51	5
3-Nitroaniline	ND		50	8.9	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Nitroaniline	ND		50	12	ug/L		04/24/20 14:04	04/27/20 21:51	5
Nitrobenzene	ND		50	2.7	ug/L		04/24/20 14:04	04/27/20 21:51	5
2-Nitrophenol	ND		50	3.2	ug/L		04/24/20 14:04	04/27/20 21:51	5
4-Nitrophenol	ND		50	10	ug/L		04/24/20 14:04	04/27/20 21:51	5
N-Nitrosodimethylamine	ND		50	17	ug/L		04/24/20 14:04	04/27/20 21:51	5

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

Job ID: 400-186982-1

Client Sample ID: P93B-ROX-042020-DUP
Date Collected: 04/20/20 11:45
Date Received: 04/21/20 08:37

Lab Sample ID: 400-186982-5
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		50	16	ug/L		04/24/20 14:04	04/27/20 21:51	5
N-Nitrosodiphenylamine	ND		50	2.3	ug/L		04/24/20 14:04	04/27/20 21:51	5
Pentachlorophenol	ND		99	9.0	ug/L		04/24/20 14:04	04/27/20 21:51	5
Phenol	85		50	13	ug/L		04/24/20 14:04	04/27/20 21:51	5
Pyridine	ND		50	16	ug/L		04/24/20 14:04	04/27/20 21:51	5
Quinoline	ND		50	30	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4,5-Trichlorophenol	ND		50	18	ug/L		04/24/20 14:04	04/27/20 21:51	5
2,4,6-Trichlorophenol	ND		50	17	ug/L		04/24/20 14:04	04/27/20 21:51	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*34 - 120*	*04/24/20 14:04*	*04/27/20 21:51*	*5*
2-Fluorophenol	*39*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:51*	*5*
Nitrobenzene-d5	*73*		*27 - 120*	*04/24/20 14:04*	*04/27/20 21:51*	*5*
Phenol-d5	*62*		*10 - 120*	*04/24/20 14:04*	*04/27/20 21:51*	*5*
Terphenyl-d14	*73*		*53 - 125*	*04/24/20 14:04*	*04/27/20 21:51*	*5*
2,4,6-Tribromophenol	*87*		*15 - 135*	*04/24/20 14:04*	*04/27/20 21:51*	*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	0.0055	ug/L		04/28/20 11:02	04/28/20 21:33	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*96*		*51 - 149*	*04/28/20 11:02*	*04/28/20 21:33*	*1*

Definitions/Glossary

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

Job ID: 400-186982-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance 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 or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate recovery exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

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

Job ID: 400-186982-1

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	(78-118)	(81-121)	(80-120)
400-186982-2	P93D-ROX-042020	95	108	87
400-186982-3	TB-ROX-042020-8260-SS	96	92	88
400-186982-3 - RA	TB-ROX-042020-8260-SS	99	107	86
400-186982-4	P93B-ROX-042020	97	108	86
400-186982-5	P93B-ROX-042020-DUP	98	112	87
LCS 400-487664/1002	Lab Control Sample	97	81	88
LCS 400-487773/1002	Lab Control Sample	96	88	88
MB 400-487664/5	Method Blank	97	109	87
MB 400-487773/4	Method Blank	93	90	87

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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-186982-2	P93D-ROX-042020	77	23	68	52	75	84
400-186982-4	P93B-ROX-042020	82	47	67	59	68	84
400-186982-5	P93B-ROX-042020-DUP	81	39	73	62	73	87
LCS 400-486957/2-A	Lab Control Sample	97	54	87	74	124	124
LCS 400-486957/4-A	Lab Control Sample	55	24	52	44	53	51
LCSD 400-486957/3-A	Lab Control Sample Dup	93	35	84	65	119	119
LCSD 400-486957/5-A	Lab Control Sample Dup	58	31	54	49	56	57
MB 400-486957/1-A	Method Blank	47	32	43	41	44 X	49

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-186982-2	P93D-ROX-042020	98	77	65
400-186982-4	P93B-ROX-042020	88	90	45
400-186982-5	P93B-ROX-042020-DUP	101	92	76
LCS 400-486957/2-A	Lab Control Sample	117	91	67
LCSD 400-486957/3-A	Lab Control Sample Dup	113	88	66
MB 400-486957/1-A	Method Blank	141 X	101	87

Surrogate Legend

Surrogate Summary

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

Job ID: 400-186982-1

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

Method: 8011 - EDB and DBCP in Water by Microextraction

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	**Client Sample ID**	**BFB2 (51-149)**
400-186982-1	TB-ROX-042020-8011-SS	101
400-186982-2	P93D-ROX-042020	92
400-186982-4	P93B-ROX-042020	86
400-186982-5	P93B-ROX-042020-DUP	96
LCS 400-487253/2-A	Lab Control Sample	105
LCSD 400-487253/3-A	Lab Control Sample Dup	103
MB 400-487253/1-A	Method Blank	91

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

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

Job ID: 400-186982-1

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 TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

Client Sample ID: TB-ROX-042020-8011-SS

Lab Sample ID: 400-186982-1

Date Collected: 04/20/20 00:00
Matrix: Water
Date Received: 04/21/20 08:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35.7 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 20:14	DS	TAL PEN

Client Sample ID: P93D-ROX-042020

Lab Sample ID: 400-186982-2

Date Collected: 04/20/20 10:00
Matrix: Water
Date Received: 04/21/20 08:37

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	487664	05/01/20 23:54	AMB	TAL PEN
Total/NA	Prep	3520C			1013.8 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 21:25	S1B	TAL PEN
Total/NA	Prep	3520C			1013.8 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 23:32	PP1	TAL PEN
Total/NA	Prep	8011			30.7 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 20:53	DS	TAL PEN

Client Sample ID: TB-ROX-042020-8260-SS

Lab Sample ID: 400-186982-3

Date Collected: 04/20/20 00:00
Matrix: Water
Date Received: 04/21/20 08:37

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	487664	05/01/20 20:09	AMB	TAL PEN
Total/NA	Analysis	8260B	RA	1	5 mL	5 mL	487773	05/02/20 18:45	RS	TAL PEN

Client Sample ID: P93B-ROX-042020

Lab Sample ID: 400-186982-4

Date Collected: 04/20/20 11:45
Matrix: Water
Date Received: 04/21/20 08:37

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	487664	05/02/20 01:08	AMB	TAL PEN
Total/NA	Prep	3520C	DL		1006.8 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D	DL	5			487260	04/28/20 21:14	VC1	TAL PEN
Total/NA	Prep	3520C			1006.8 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1	0.4 mL	1.0 mL	487181	04/27/20 21:00	S1B	TAL PEN
Total/NA	Prep	3520C			1006.8 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		2			487273	04/28/20 16:28	DS	TAL PEN
Total/NA	Prep	8011			33.1 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 20:33	DS	TAL PEN

Client Sample ID: P93B-ROX-042020-DUP

Lab Sample ID: 400-186982-5

Date Collected: 04/20/20 11:45
Matrix: Water
Date Received: 04/21/20 08:37

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	487664	05/02/20 01:58	AMB	TAL PEN

Client Sample ID: P93B-ROX-042020-DUP

Lab Sample ID: 400-186982-5

Date Collected: 04/20/20 11:45
Matrix: Water
Date Received: 04/21/20 08:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1009.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		5	0.4 mL	1.0 mL	487181	04/27/20 21:51	S1B	TAL PEN
Total/NA	Prep	3520C			1009.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 23:48	PP1	TAL PEN
Total/NA	Prep	8011			35.2 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 21:33	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486957/1-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 18:00	S1B	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487273	04/28/20 15:57	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487253/1-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:16	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487664/5

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	487664	05/01/20 17:39	AMB	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487773/4

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	487773	05/02/20 15:25	RS	TAL PEN

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 400-486957/2-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:24	VC1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486957/2-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:15	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486957/4-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:17	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487253/2-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	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:36	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487664/1002
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	487664	05/01/20 15:39	AMB	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487773/1002
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	487773	05/02/20 13:10	RS	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486957/3-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:45	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:30	PP1	TAL PEN

Lab Chronicle

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

Job ID: 400-186982-1

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486957/5-A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:42	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-487253/3-A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	487253	04/28/20 11:02	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487261	04/28/20 14:56	DS	TAL PEN

Laboratory References:

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

GC/MS VOA

Analysis Batch: 487664

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-2	P93D-ROX-042020	Total/NA	Water	8260B	
400-186982-3	TB-ROX-042020-8260-SS	Total/NA	Water	8260B	
400-186982-4	P93B-ROX-042020	Total/NA	Water	8260B	
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	8260B	
MB 400-487664/5	Method Blank	Total/NA	Water	8260B	
LCS 400-487664/1002	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 487773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-3 - RA	TB-ROX-042020-8260-SS	Total/NA	Water	8260B	
MB 400-487773/4	Method Blank	Total/NA	Water	8260B	
LCS 400-487773/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-2	P93D-ROX-042020	Total/NA	Water	3520C	
400-186982-4 - DL	P93B-ROX-042020	Total/NA	Water	3520C	
400-186982-4	P93B-ROX-042020	Total/NA	Water	3520C	
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	3520C	
MB 400-486957/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-2	P93D-ROX-042020	Total/NA	Water	8270D LL	486957
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	8270D LL	486957
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486957

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-2	P93D-ROX-042020	Total/NA	Water	8270D	486957
400-186982-4	P93B-ROX-042020	Total/NA	Water	8270D	486957
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	8270D	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D	486957
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

Analysis Batch: 487260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-4 - DL	P93B-ROX-042020	Total/NA	Water	8270D	486957
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

QC Association Summary

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

Job ID: 400-186982-1

GC/MS Semi VOA

Analysis Batch: 487273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-4	P93B-ROX-042020	Total/NA	Water	8270D LL	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D LL	486957

GC Semi VOA

Prep Batch: 487253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-1	TB-ROX-042020-8011-SS	Total/NA	Water	8011	
400-186982-2	P93D-ROX-042020	Total/NA	Water	8011	
400-186982-4	P93B-ROX-042020	Total/NA	Water	8011	
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	8011	
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-186982-1	TB-ROX-042020-8011-SS	Total/NA	Water	8011	487253
400-186982-2	P93D-ROX-042020	Total/NA	Water	8011	487253
400-186982-4	P93B-ROX-042020	Total/NA	Water	8011	487253
400-186982-5	P93B-ROX-042020-DUP	Total/NA	Water	8011	487253
MB 400-487253/1-A	Method Blank	Total/NA	Water	8011	487253
LCS 400-487253/2-A	Lab Control Sample	Total/NA	Water	8011	487253
LCSD 400-487253/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487253

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

Job ID: 400-186982-1

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

Lab Sample ID: MB 400-487664/5
Matrix: Water
Analysis Batch: 487664

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			05/01/20 17:39	1
Acrolein	ND		20	10	ug/L			05/01/20 17:39	1
Acrylonitrile	ND		10	2.8	ug/L			05/01/20 17:39	1
Benzene	ND		1.0	0.38	ug/L			05/01/20 17:39	1
Bromobenzene	ND		1.0	0.54	ug/L			05/01/20 17:39	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/01/20 17:39	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Bromoform	ND		5.0	0.71	ug/L			05/01/20 17:39	1
Bromomethane	ND		1.0	0.98	ug/L			05/01/20 17:39	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/01/20 17:39	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Chloroethane	ND		1.0	0.76	ug/L			05/01/20 17:39	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/01/20 17:39	1
Chloroform	ND		1.0	0.60	ug/L			05/01/20 17:39	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/01/20 17:39	1
Chloromethane	ND		1.0	0.83	ug/L			05/01/20 17:39	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 17:39	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/01/20 17:39	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/01/20 17:39	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/01/20 17:39	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/01/20 17:39	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/01/20 17:39	1
2-Hexanone	ND		25	3.1	ug/L			05/01/20 17:39	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/01/20 17:39	1
Methylene bromide	ND		5.0	0.59	ug/L			05/01/20 17:39	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/01/20 17:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/01/20 17:39	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/01/20 17:39	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/01/20 17:39	1
Naphthalene	ND		1.0	1.0	ug/L			05/01/20 17:39	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/01/20 17:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/01/20 17:39	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/01/20 17:39	1
o-Xylene	ND		5.0	0.60	ug/L			05/01/20 17:39	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/01/20 17:39	1

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

Lab Sample ID: MB 400-487664/5
Matrix: Water
Analysis Batch: 487664

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			05/01/20 17:39	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			05/01/20 17:39	1
Styrene	ND		1.0	1.0	ug/L			05/01/20 17:39	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/01/20 17:39	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/01/20 17:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/01/20 17:39	1
Toluene	ND		1.0	0.41	ug/L			05/01/20 17:39	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/01/20 17:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/01/20 17:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/01/20 17:39	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/01/20 17:39	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/01/20 17:39	1
Trichloroethene	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/01/20 17:39	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/01/20 17:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/01/20 17:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/01/20 17:39	1
Vinyl acetate	ND		25	2.0	ug/L			05/01/20 17:39	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/01/20 17:39	1
Xylenes, Total	ND		10	1.6	ug/L			05/01/20 17:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*78 - 118*		*05/01/20 17:39*	*1*
Dibromofluoromethane	*109*		*81 - 121*		*05/01/20 17:39*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*05/01/20 17:39*	*1*

Lab Sample ID: LCS 400-487664/1002
Matrix: Water
Analysis Batch: 487664

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	180		ug/L		90	43 - 160
Acrolein	500	488		ug/L		98	38 - 160
Acrylonitrile	500	487		ug/L		97	64 - 142
Benzene	50.0	52.0		ug/L		104	70 - 130
Bromobenzene	50.0	44.0		ug/L		88	70 - 132
Bromochloromethane	50.0	46.9		ug/L		94	70 - 130
Bromodichloromethane	50.0	50.4		ug/L		101	67 - 133
Bromoform	50.0	42.7		ug/L		85	57 - 140
Bromomethane	50.0	51.9		ug/L		104	10 - 160
2-Butanone (MEK)	200	182		ug/L		91	61 - 145
Carbon disulfide	50.0	50.8		ug/L		102	61 - 137
Carbon tetrachloride	50.0	52.2		ug/L		104	61 - 137
Chlorobenzene	50.0	48.3		ug/L		97	70 - 130
Dibromochloromethane	50.0	46.2		ug/L		92	67 - 135
Chloroethane	50.0	53.7		ug/L		107	55 - 141

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

Lab Sample ID: LCS 400-487664/1002
Matrix: Water
Analysis Batch: 487664

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	46.1		ug/L		92	10 - 160
Chloroform	50.0	49.2		ug/L		98	69 - 130
1-Chlorohexane	50.0	48.3		ug/L		97	69 - 130
Chloromethane	50.0	50.9		ug/L		102	58 - 137
cis-1,2-Dichloroethene	50.0	50.0		ug/L		100	68 - 130
cis-1,3-Dichloropropene	50.0	50.5		ug/L		101	69 - 132
1,2-Dichlorobenzene	50.0	46.3		ug/L		93	67 - 130
1,3-Dichlorobenzene	50.0	47.0		ug/L		94	70 - 130
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	70 - 130
Dichlorodifluoromethane	50.0	58.4		ug/L		117	41 - 146
1,1-Dichloroethane	50.0	50.8		ug/L		102	70 - 130
1,2-Dichloroethane	50.0	50.0		ug/L		100	69 - 130
1,1-Dichloroethene	50.0	53.3		ug/L		107	63 - 134
1,2-Dichloropropane	50.0	51.5		ug/L		103	70 - 130
1,3-Dichloropropane	50.0	46.3		ug/L		93	70 - 130
2,2-Dichloropropane	50.0	52.7		ug/L		105	52 - 135
1,1-Dichloropropene	50.0	53.5		ug/L		107	70 - 130
Ethylbenzene	50.0	46.9		ug/L		94	70 - 130
Ethyl methacrylate	50.0	44.9		ug/L		90	68 - 130
Hexachlorobutadiene	50.0	42.1		ug/L		84	53 - 140
2-Hexanone	200	184		ug/L		92	65 - 137
Isopropylbenzene	50.0	48.7		ug/L		97	70 - 130
Methylene bromide	50.0	49.1		ug/L		98	70 - 130
Methylene Chloride	50.0	51.0		ug/L		102	66 - 135
4-Methyl-2-pentanone (MIBK)	200	207		ug/L		103	69 - 138
Methyl tert-butyl ether	50.0	49.5		ug/L		99	66 - 130
m-Xylene & p-Xylene	50.0	45.9		ug/L		92	70 - 130
Naphthalene	50.0	48.0		ug/L		96	47 - 149
n-Butylbenzene	50.0	48.0		ug/L		96	67 - 130
N-Propylbenzene	50.0	47.7		ug/L		95	70 - 130
o-Chlorotoluene	50.0	44.3		ug/L		89	70 - 130
o-Xylene	50.0	45.3		ug/L		91	70 - 130
p-Chlorotoluene	50.0	45.7		ug/L		91	70 - 130
p-Isopropyltoluene	50.0	47.5		ug/L		95	65 - 130
sec-Butylbenzene	50.0	47.2		ug/L		94	66 - 130
Styrene	50.0	46.9		ug/L		94	70 - 130
tert-Butylbenzene	50.0	51.0		ug/L		102	64 - 139
1,1,1,2-Tetrachloroethane	50.0	48.8		ug/L		98	67 - 131
1,1,2,2-Tetrachloroethane	50.0	42.1		ug/L		84	70 - 131
Tetrachloroethene	50.0	47.2		ug/L		94	65 - 130
Toluene	50.0	45.2		ug/L		90	70 - 130
trans-1,2-Dichloroethene	50.0	55.9		ug/L		112	70 - 130
trans-1,3-Dichloropropene	50.0	43.9		ug/L		88	63 - 130
1,2,3-Trichlorobenzene	50.0	48.3		ug/L		97	60 - 138
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	60 - 140
1,1,1-Trichloroethane	50.0	56.5		ug/L		113	68 - 130
1,1,2-Trichloroethane	50.0	44.9		ug/L		90	70 - 130
Trichloroethene	50.0	54.6		ug/L		109	70 - 130
Trichlorofluoromethane	50.0	57.0		ug/L		114	65 - 138

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

Lab Sample ID: LCS 400-487664/1002
Matrix: Water
Analysis Batch: 487664

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichloropropane	50.0	43.3		ug/L		87	70 - 130
1,2,4-Trimethylbenzene	50.0	45.6		ug/L		91	70 - 130
1,3,5-Trimethylbenzene	50.0	45.5		ug/L		91	69 - 130
Vinyl acetate	100	119		ug/L		119	26 - 160
Vinyl chloride	50.0	61.5		ug/L		123	59 - 136
Xylenes, Total	100	91.1		ug/L		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*97*		*78 - 118*
Dibromofluoromethane	*81*		*81 - 121*
Toluene-d8 (Surr)	*88*		*80 - 120*

Lab Sample ID: MB 400-487773/4
Matrix: Water
Analysis Batch: 487773

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			05/02/20 15:25	1
Acrolein	ND		20	10	ug/L			05/02/20 15:25	1
Acrylonitrile	ND		10	2.8	ug/L			05/02/20 15:25	1
Benzene	ND		1.0	0.38	ug/L			05/02/20 15:25	1
Bromobenzene	ND		1.0	0.54	ug/L			05/02/20 15:25	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/02/20 15:25	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Bromoform	ND		5.0	0.71	ug/L			05/02/20 15:25	1
Bromomethane	ND		1.0	0.98	ug/L			05/02/20 15:25	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/02/20 15:25	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Chloroethane	ND		1.0	0.76	ug/L			05/02/20 15:25	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/02/20 15:25	1
Chloroform	ND		1.0	0.60	ug/L			05/02/20 15:25	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/02/20 15:25	1
Chloromethane	ND		1.0	0.83	ug/L			05/02/20 15:25	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/02/20 15:25	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/02/20 15:25	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/02/20 15:25	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/02/20 15:25	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/02/20 15:25	1

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

Lab Sample ID: MB 400-487773/4
Matrix: Water
Analysis Batch: 487773

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/02/20 15:25	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/02/20 15:25	1
2-Hexanone	ND		25	3.1	ug/L			05/02/20 15:25	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/02/20 15:25	1
Methylene bromide	ND		5.0	0.59	ug/L			05/02/20 15:25	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/02/20 15:25	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/02/20 15:25	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/02/20 15:25	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/02/20 15:25	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/02/20 15:25	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/02/20 15:25	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/02/20 15:25	1
o-Xylene	ND		5.0	0.60	ug/L			05/02/20 15:25	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/02/20 15:25	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			05/02/20 15:25	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			05/02/20 15:25	1
Styrene	ND		1.0	1.0	ug/L			05/02/20 15:25	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/02/20 15:25	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/02/20 15:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/02/20 15:25	1
Toluene	ND		1.0	0.41	ug/L			05/02/20 15:25	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/02/20 15:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/02/20 15:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/02/20 15:25	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/02/20 15:25	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/02/20 15:25	1
Trichloroethene	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/02/20 15:25	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/02/20 15:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/02/20 15:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/02/20 15:25	1
Vinyl acetate	ND		25	2.0	ug/L			05/02/20 15:25	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/02/20 15:25	1
Xylenes, Total	ND		10	1.6	ug/L			05/02/20 15:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*93*		*78 - 118*		*05/02/20 15:25*	*1*
Dibromofluoromethane	*90*		*81 - 121*		*05/02/20 15:25*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*05/02/20 15:25*	*1*

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

Lab Sample ID: LCS 400-487773/1002
Matrix: Water
Analysis Batch: 487773

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	210		ug/L		105	43 - 160
Acrolein	500	542		ug/L		108	38 - 160
Acrylonitrile	500	563		ug/L		113	64 - 142
Benzene	50.0	59.1		ug/L		118	70 - 130
Bromobenzene	50.0	49.5		ug/L		99	70 - 132
Bromochloromethane	50.0	57.0		ug/L		114	70 - 130
Bromodichloromethane	50.0	59.5		ug/L		119	67 - 133
Bromoform	50.0	48.5		ug/L		97	57 - 140
Bromomethane	50.0	53.6		ug/L		107	10 - 160
2-Butanone (MEK)	200	210		ug/L		105	61 - 145
Carbon disulfide	50.0	57.5		ug/L		115	61 - 137
Carbon tetrachloride	50.0	59.3		ug/L		119	61 - 137
Chlorobenzene	50.0	54.4		ug/L		109	70 - 130
Dibromochloromethane	50.0	56.2		ug/L		112	67 - 135
Chloroethane	50.0	53.0		ug/L		106	55 - 141
2-Chloroethyl vinyl ether	50.0	49.7		ug/L		99	10 - 160
Chloroform	50.0	59.6		ug/L		119	69 - 130
1-Chlorohexane	50.0	49.4		ug/L		99	69 - 130
Chloromethane	50.0	53.1		ug/L		106	58 - 137
cis-1,2-Dichloroethene	50.0	57.8		ug/L		116	68 - 130
cis-1,3-Dichloropropene	50.0	59.9		ug/L		120	69 - 132
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	67 - 130
1,3-Dichlorobenzene	50.0	50.1		ug/L		100	70 - 130
1,4-Dichlorobenzene	50.0	50.6		ug/L		101	70 - 130
Dichlorodifluoromethane	50.0	61.2		ug/L		122	41 - 146
1,1-Dichloroethane	50.0	56.6		ug/L		113	70 - 130
1,2-Dichloroethane	50.0	58.6		ug/L		117	69 - 130
1,1-Dichloroethene	50.0	59.0		ug/L		118	63 - 134
1,2-Dichloropropane	50.0	58.0		ug/L		116	70 - 130
1,3-Dichloropropane	50.0	54.1		ug/L		108	70 - 130
2,2-Dichloropropane	50.0	58.3		ug/L		117	52 - 135
1,1-Dichloropropene	50.0	59.6		ug/L		119	70 - 130
Ethylbenzene	50.0	50.9		ug/L		102	70 - 130
Ethyl methacrylate	50.0	52.5		ug/L		105	68 - 130
Hexachlorobutadiene	50.0	42.5		ug/L		85	53 - 140
2-Hexanone	200	217		ug/L		108	65 - 137
Isopropylbenzene	50.0	51.5		ug/L		103	70 - 130
Methylene bromide	50.0	59.4		ug/L		119	70 - 130
Methylene Chloride	50.0	60.4		ug/L		121	66 - 135
4-Methyl-2-pentanone (MIBK)	200	245		ug/L		123	69 - 138
Methyl tert-butyl ether	50.0	57.7		ug/L		115	66 - 130
m-Xylene & p-Xylene	50.0	49.1		ug/L		98	70 - 130
n-Butylbenzene	50.0	46.1		ug/L		92	67 - 130
N-Propylbenzene	50.0	49.1		ug/L		98	70 - 130
o-Chlorotoluene	50.0	45.9		ug/L		92	70 - 130
o-Xylene	50.0	49.5		ug/L		99	70 - 130
p-Chlorotoluene	50.0	48.3		ug/L		97	70 - 130
p-Isopropyltoluene	50.0	47.7		ug/L		95	65 - 130

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

Lab Sample ID: LCS 400-487773/1002
Matrix: Water
Analysis Batch: 487773

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
sec-Butylbenzene	50.0	48.1		ug/L		96	66 - 130
Styrene	50.0	51.5		ug/L		103	70 - 130
tert-Butylbenzene	50.0	52.0		ug/L		104	64 - 139
1,1,1,2-Tetrachloroethane	50.0	56.2		ug/L		112	67 - 131
1,1,2,2-Tetrachloroethane	50.0	48.2		ug/L		96	70 - 131
Tetrachloroethene	50.0	50.9		ug/L		102	65 - 130
Toluene	50.0	50.3		ug/L		101	70 - 130
trans-1,2-Dichloroethene	50.0	68.5	*	ug/L		137	70 - 130
trans-1,3-Dichloropropene	50.0	52.2		ug/L		104	63 - 130
1,2,3-Trichlorobenzene	50.0	52.5		ug/L		105	60 - 138
1,2,4-Trichlorobenzene	50.0	50.2		ug/L		100	60 - 140
1,1,1-Trichloroethane	50.0	62.5		ug/L		125	68 - 130
1,1,2-Trichloroethane	50.0	52.8		ug/L		106	70 - 130
Trichloroethene	50.0	62.1		ug/L		124	70 - 130
Trichlorofluoromethane	50.0	61.6		ug/L		123	65 - 138
1,2,3-Trichloropropane	50.0	49.4		ug/L		99	70 - 130
1,2,4-Trimethylbenzene	50.0	47.4		ug/L		95	70 - 130
1,3,5-Trimethylbenzene	50.0	47.5		ug/L		95	69 - 130
Vinyl acetate	100	132		ug/L		132	26 - 160
Vinyl chloride	50.0	65.8		ug/L		132	59 - 136
Xylenes, Total	100	98.6		ug/L		99	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*96*		*78 - 118*
Dibromofluoromethane	*88*		*81 - 121*
Toluene-d8 (Surr)	*88*		*80 - 120*

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzenethiol	ND		10	1.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzoic acid	ND		30	7.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzyl alcohol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/24/20 14:04	04/27/20 18:00	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/24/20 14:04	04/27/20 18:00	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloroaniline	ND		10	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chlorophenol	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dibenzofuran	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Diethyl phthalate	ND		10	0.70	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/24/20 14:04	04/27/20 18:00	1
1,4-Dioxane	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachloroethane	ND		10	4.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Indene	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Isophorone	ND		10	0.57	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Methylphenol	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitroaniline	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
3-Nitroaniline	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitroaniline	ND		10	2.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Nitrobenzene	ND		10	0.55	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitrophenol	ND		10	0.65	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitrophenol	ND		10	2.1	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Phenol	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pyridine	ND		10	3.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Quinoline	ND		10	6.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*34 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2-Fluorophenol	*32*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Phenol-d5	*41*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2,4,6-Tribromophenol	*49*		*15 - 135*	*04/24/20 14:04*	*04/27/20 18:00*	*1*

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	23.5		ug/L		78	29 - 120
Benzoic acid	116	35.3		ug/L		30	10 - 150
Benzyl alcohol	30.0	25.0		ug/L		83	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.9		ug/L		80	45 - 120
Bis(2-chloroethyl)ether	30.0	21.6		ug/L		72	48 - 120
bis (2-chloroisopropyl) ether	30.0	18.1		ug/L		60	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	30.4		ug/L		101	48 - 150
4-Bromophenyl phenyl ether	30.0	40.0	*	ug/L		133	55 - 122
Butyl benzyl phthalate	30.0	29.7		ug/L		99	46 - 145
4-Chloroaniline	30.0	25.8		ug/L		86	30 - 120
4-Chloro-3-methylphenol	30.0	31.6		ug/L		105	39 - 140
2-Chloronaphthalene	30.0	29.9		ug/L		100	52 - 120
2-Chlorophenol	30.0	26.1		ug/L		87	34 - 120
4-Chlorophenyl phenyl ether	30.0	34.6		ug/L		115	58 - 124
Dibenz[a,h]acridine	29.6	27.1		ug/L		91	46 - 149
Dibenzofuran	30.0	31.4		ug/L		105	58 - 123
3,3'-Dichlorobenzidine	40.0	66.0	*	ug/L		165	39 - 135
2,4-Dichlorophenol	30.0	31.9		ug/L		106	39 - 128
Diethyl phthalate	30.0	30.9		ug/L		103	44 - 146
2,4-Dimethylphenol	30.0	30.2		ug/L		101	44 - 120
Dimethyl phthalate	30.0	32.1		ug/L		107	50 - 131
Di-n-butyl phthalate	30.0	29.1		ug/L		97	55 - 131
4,6-Dinitro-ortho-cresol	60.0	59.5		ug/L		99	10 - 150
2,4-Dinitrophenol	60.0	63.0		ug/L		105	10 - 150
2,4-Dinitrotoluene	30.0	33.2		ug/L		111	58 - 140
2,6-Dinitrotoluene	30.0	34.3		ug/L		114	57 - 130
Di-n-octyl phthalate	30.0	32.1		ug/L		107	50 - 150
1,4-Dioxane	30.0	17.0		ug/L		57	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.0		ug/L		83	47 - 123
Hexachlorobenzene	30.0	39.8	*	ug/L		133	52 - 131
Hexachlorocyclopentadiene	30.0	14.0	J	ug/L		47	10 - 129
Hexachloroethane	30.0	20.5		ug/L		68	20 - 120
Indene	30.0	25.1		ug/L		84	47 - 120
Isophorone	30.0	25.0		ug/L		83	49 - 120
2-Methylphenol	30.0	26.6		ug/L		89	39 - 123
3 & 4 Methylphenol	30.0	25.4		ug/L		85	38 - 121
2-Nitroaniline	30.0	26.3		ug/L		88	47 - 150
3-Nitroaniline	30.0	24.5		ug/L		82	34 - 132
4-Nitroaniline	30.0	24.6		ug/L		82	41 - 135
Nitrobenzene	30.0	24.6		ug/L		82	47 - 120
2-Nitrophenol	30.0	27.4		ug/L		91	28 - 136
4-Nitrophenol	60.0	57.1		ug/L		95	10 - 150
N-Nitrosodimethylamine	30.0	24.1		ug/L		80	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.1		ug/L		80	44 - 120
N-Nitrosodiphenylamine	29.8	32.8		ug/L		110	56 - 120
Pentachlorophenol	60.0	57.2		ug/L		95	15 - 141
Phenol	30.0	21.5		ug/L		72	33 - 120
Pyridine	60.0	35.1		ug/L		58	26 - 120

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Quinoline	29.6	25.8		ug/L		87	51 - 129
2,4,5-Trichlorophenol	30.0	33.8		ug/L		113	38 - 147
2,4,6-Trichlorophenol	30.0	32.0		ug/L		107	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*97*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*74*		*10 - 120*
Terphenyl-d14	*124*		*53 - 125*
2,4,6-Tribromophenol	*124*		*15 - 135*

Lab Sample ID: LCS 400-486957/4-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*55*		*34 - 120*
2-Fluorophenol	*24*		*10 - 120*
Nitrobenzene-d5	*52*		*27 - 120*
Phenol-d5	*44*		*10 - 120*
Terphenyl-d14	*53*		*53 - 125*
2,4,6-Tribromophenol	*51*		*15 - 135*

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	21.1		ug/L		70	29 - 120	11	30
Benzoic acid	116	47.6		ug/L		41	10 - 150	30	30
Benzyl alcohol	30.0	22.6		ug/L		75	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	22.9		ug/L		76	45 - 120	4	30
Bis(2-chloroethyl)ether	30.0	22.0		ug/L		73	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	18.0		ug/L		60	30 - 125	1	30
Bis(2-ethylhexyl) phthalate	30.0	30.2		ug/L		101	48 - 150	1	30
4-Bromophenyl phenyl ether	30.0	37.5	*	ug/L		125	55 - 122	7	30
Butyl benzyl phthalate	30.0	29.0		ug/L		97	46 - 145	2	30
4-Chloroaniline	30.0	22.8		ug/L		76	30 - 120	12	30
4-Chloro-3-methylphenol	30.0	29.0		ug/L		97	39 - 140	9	30
2-Chloronaphthalene	30.0	28.6		ug/L		95	52 - 120	4	30
2-Chlorophenol	30.0	22.3		ug/L		74	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	33.2		ug/L		111	58 - 124	4	30
Dibenz[a,h]acridine	29.6	25.6		ug/L		86	46 - 149	6	30
Dibenzofuran	30.0	30.3		ug/L		101	58 - 123	4	30

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

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
3,3'-Dichlorobenzidine	40.0	61.5	*	ug/L		154	39 - 135	7	30
2,4-Dichlorophenol	30.0	29.8		ug/L		99	39 - 128	7	30
Diethyl phthalate	30.0	30.2		ug/L		101	44 - 146	2	30
2,4-Dimethylphenol	30.0	28.8		ug/L		96	44 - 120	5	30
Dimethyl phthalate	30.0	31.2		ug/L		104	50 - 131	3	30
Di-n-butyl phthalate	30.0	28.6		ug/L		95	55 - 131	2	30
4,6-Dinitro-ortho-cresol	60.0	54.5		ug/L		91	10 - 150	9	30
2,4-Dinitrophenol	60.0	58.2		ug/L		97	10 - 150	8	30
2,4-Dinitrotoluene	30.0	31.6		ug/L		105	58 - 140	5	30
2,6-Dinitrotoluene	30.0	32.6		ug/L		109	57 - 130	5	30
Di-n-octyl phthalate	30.0	31.9		ug/L		106	50 - 150	1	30
1,4-Dioxane	30.0	16.4		ug/L		55	25 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.8		ug/L		79	47 - 123	5	30
Hexachlorobenzene	30.0	38.1		ug/L		127	52 - 131	5	30
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129	18	30
Hexachloroethane	30.0	20.4		ug/L		68	20 - 120	1	30
Indene	30.0	24.4		ug/L		81	47 - 120	3	30
Isophorone	30.0	24.0		ug/L		80	49 - 120	4	30
2-Methylphenol	30.0	25.9		ug/L		86	39 - 123	3	30
3 & 4 Methylphenol	30.0	24.1		ug/L		80	38 - 121	5	30
2-Nitroaniline	30.0	24.8		ug/L		83	47 - 150	6	30
3-Nitroaniline	30.0	23.1		ug/L		77	34 - 132	6	30
4-Nitroaniline	30.0	22.1		ug/L		74	41 - 135	11	30
Nitrobenzene	30.0	23.7		ug/L		79	47 - 120	4	30
2-Nitrophenol	30.0	25.8		ug/L		86	28 - 136	6	30
4-Nitrophenol	60.0	53.2		ug/L		89	10 - 150	7	30
N-Nitrosodimethylamine	30.0	22.4		ug/L		75	22 - 148	7	30
N-Nitrosodi-n-propylamine	30.0	23.1		ug/L		77	44 - 120	4	30
N-Nitrosodiphenylamine	29.8	31.1		ug/L		105	56 - 120	5	30
Pentachlorophenol	60.0	53.2		ug/L		89	15 - 141	7	30
Phenol	30.0	22.5		ug/L		75	33 - 120	4	30
Pyridine	60.0	34.3		ug/L		57	26 - 120	2	30
Quinoline	29.6	24.0		ug/L		81	51 - 129	7	30
2,4,5-Trichlorophenol	30.0	32.5		ug/L		108	38 - 147	4	30
2,4,6-Trichlorophenol	30.0	30.6		ug/L		102	36 - 139	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*84*		*27 - 120*
Phenol-d5	*65*		*10 - 120*
Terphenyl-d14	*119*		*53 - 125*
2,4,6-Tribromophenol	*119*		*15 - 135*

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

Lab Sample ID: LCSD 400-486957/5-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*54*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*56*		*53 - 125*
2,4,6-Tribromophenol	*57*		*15 - 135*

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

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.20	0.032	ug/L		04/24/20 14:04	04/28/20 15:57	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/28/20 15:57	1
Anthracene	ND		0.20	0.031	ug/L		04/24/20 14:04	04/28/20 15:57	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/28/20 15:57	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/24/20 14:04	04/28/20 15:57	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/28/20 15:57	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/28/20 15:57	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/24/20 14:04	04/28/20 15:57	1
Chrysene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/28/20 15:57	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/28/20 15:57	1
Fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/28/20 15:57	1
Fluorene	ND		0.20	0.11	ug/L		04/24/20 14:04	04/28/20 15:57	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/28/20 15:57	1
Phenanthrene	ND		0.20	0.036	ug/L		04/24/20 14:04	04/28/20 15:57	1
Pyrene	ND		0.20	0.040	ug/L		04/24/20 14:04	04/28/20 15:57	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/28/20 15:57	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/24/20 14:04	04/28/20 15:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*141*	*X*	*33 - 138*	*04/24/20 14:04*	*04/28/20 15:57*	*1*
2-Fluorobiphenyl	*101*		*15 - 122*	*04/24/20 14:04*	*04/28/20 15:57*	*1*
Nitrobenzene-d5	*87*		*19 - 130*	*04/24/20 14:04*	*04/28/20 15:57*	*1*

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.4		ug/L		95	41 - 120
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120
Anthracene	30.0	31.2		ug/L		104	49 - 120

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

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[a]anthracene	30.0	28.7		ug/L		96	61 - 135
Benzo[a]pyrene	30.0	26.5		ug/L		88	52 - 120
Benzo[b]fluoranthene	30.0	27.5		ug/L		92	53 - 134
Benzo[g,h,i]perylene	30.0	27.5		ug/L		92	47 - 133
Benzo[k]fluoranthene	30.0	28.5		ug/L		95	57 - 134
Chrysene	30.0	29.2		ug/L		97	55 - 122
Dibenz(a,h)anthracene	30.0	29.0		ug/L		97	48 - 146
Fluoranthene	30.0	26.9		ug/L		90	54 - 128
Fluorene	30.0	30.6		ug/L		102	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142
Phenanthrene	30.0	29.6		ug/L		99	48 - 120
Pyrene	30.0	31.5		ug/L		105	48 - 132
1-Methylnaphthalene	30.0	23.6		ug/L		79	41 - 120
2-Methylnaphthalene	30.0	24.1		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*117*		*33 - 138*
2-Fluorobiphenyl	*91*		*15 - 122*
Nitrobenzene-d5	*67*		*19 - 130*

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.3		ug/L		91	41 - 120	4	56
Acenaphthylene	30.0	28.1		ug/L		94	44 - 120	4	56
Anthracene	30.0	30.3		ug/L		101	49 - 120	3	51
Benzo[a]anthracene	30.0	27.7		ug/L		92	61 - 135	4	49
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120	1	50
Benzo[b]fluoranthene	30.0	27.9		ug/L		93	53 - 134	1	54
Benzo[g,h,i]perylene	30.0	27.0		ug/L		90	47 - 133	2	50
Benzo[k]fluoranthene	30.0	27.8		ug/L		93	57 - 134	2	52
Chrysene	30.0	28.1		ug/L		94	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	29.1		ug/L		97	48 - 146	0	50
Fluoranthene	30.0	26.7		ug/L		89	54 - 128	1	52
Fluorene	30.0	29.6		ug/L		99	45 - 125	3	56
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142	0	51
Phenanthrene	30.0	28.8		ug/L		96	48 - 120	3	56
Pyrene	30.0	30.4		ug/L		101	48 - 132	3	52
1-Methylnaphthalene	30.0	23.5		ug/L		78	41 - 120	0	55
2-Methylnaphthalene	30.0	23.8		ug/L		79	32 - 124	1	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*113*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*66*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487253/1-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/28/20 11:02	04/28/20 14:16	1
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/28/20 11:02	04/28/20 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*91*		*51 - 149*	*04/28/20 11:02*	*04/28/20 14:16*	*1*

Lab Sample ID: LCS 400-487253/2-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.0915		ug/L		91	60 - 140
1,2-Dibromoethane	0.101	0.118		ug/L		117	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*105*		*51 - 149*

Lab Sample ID: LCSD 400-487253/3-A
Matrix: Water
Analysis Batch: 487261

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.0980		ug/L		98	60 - 140	7	30
1,2-Dibromoethane	0.101	0.117		ug/L		116	60 - 140	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*103*		*51 - 149*

Shell Oil Products US Chain Of Custody Record

AECOM

LAB (LOCATION)

- ☐ ACCUTEST (_____)
- ☐ CALSCIENCE (_____)
- ☒ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
- ☐ Other ~~Lab Vendor # 1304589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG ☐ PIPELINE ☐ RETAIL
☐ CHEMICALS ☐ CONSULTANT ☐ LUBES
☐ TRANSPORTATION ☒ OTHER _ENV. SERVICES_____

Print Bill To Contact Name:	PlaNet Site or Project ID
Bob Billman	25278
PO #	GSAP Project ID
60619901 - 1.03.002 / 60619901 - 1.03.0022	USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 4/20/20
PAGE: 1 of 1

SAMPLING COMPANY: AECOM
LOG CODE:
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

SITE ADDRESS: Street and City: 900 South Central Ave; ROXANA
State: IL
AECOM Project / Task Number: Roxana Quarterly GW 60619901 - 1.03.002 60619901 - 1.03.0022
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO.: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Other ID:
SAMPLER NAME(S) (Print): Tony Jones, Joe Mayer
LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): ☒ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

SPlit Report

☒ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☒ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	NON-UNIT COST 60619901 - 1.03.002 VOC 8260	SVOC 8270	UNIT COST 60619901 - 1.03.0022 VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-Rox-042020-8011-SS	4/20	0000	Water	X										Split Sample
	P93D-Rox-042020	4/20	1000	↓	X			X			3	1	3	1	Split Sample
	TB-Rox-042020-8260-SS	↓	0000	↓	X										↓
	P93B-Rox-042020	↓	1145	↓	X			X			3	1	3	1	Split Sample
	P93B-Rox-042020-Dup	↓	↓	↓	X			X			3	1	3	1	↓

400-186982 COC

JM 4/20/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
[signature]	Fedex: 148357905571, 148357905582	4/20/20	1500
	[signature] TA PGN	4/21/20	837

Custody Seals: 1276476, 1276477, 1276478, 1276479

Version 14Dec15

FIELD NOTES:
TEMPERATURE ON RECEIPT C°: 0.0°C, 1.6°C
JR8

5/8/2020 (Rev. 1)

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-186982-1

Login Number: 186982
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	1276476,1276477,1276478,1276479
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 1.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Job ID: 400-186982-1
Project/Site: ROXANA QUARTERLY GW

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Roxana Groundwater Quarterly – 2nd Quarter 2020 Data Review

Laboratory SDG: 400-187009-1

Data Reviewer: Melissa Remiger

Peer Reviewer: Elizabeth Kunkel

Date Reviewed: 5/22/2020

Guidance: USEPA National Functional Guidelines for Superfund Organic Methods Data Review 2017

Sample Identification	Sample Identification
TB-ROX-042120-8011-SS	TB-ROX-042120-8260-SS
P59-ROX-042120	

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 4-methyl-2-pentanone (MIBK) and acenaphthene were detected in the method blank. Several VOC, SVOC, and VOC by 8011 LCS/LCSD recoveries and VOC by 8011 LCS/LCSD RPDs were outside evaluation criteria. The SVOC surrogate recovery for terphenyl-d_{14} was outside criteria in sample P59-ROX-042120 and the method blank. Sample P59-ROX-042120 was diluted to bring VOCs into calibration range of the instrument, and PAHs were diluted due to the nature of the sample matrix. 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 400-487817/4	VOCs	4-Methyl-2-pentanone (MIBK)	2.14 µg/L
MB 400-486957/1-A	PAHs	Acenaphthene	0.0375 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 400-487817/1002	VOCs	Bromomethane	**166**	NA	10-160
LCS/LCSD 400-486957/2-A/3-A	SVOCs	4-Bromophenyl phenyl ether	**133/125**	7	55-122/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	3,3'-Dichlorobenzidine	**165/154**	7	39-128/30
LCS/LCSD 400-486957/2-A/3-A	SVOCs	Hexachlorobenzene	**133**/127	5	52-131/30
LCS/LCSD 400-486957/4-A/5-A	SVOCs	Benzenethiol	**2/2**	15	10-120/30
LCS/LCSD 400-487358/2-A/3-A	VOCs by 8011	1,2-Dibromo-3-Chloropropane	**161**/122	**40**	60-140/30
LCS/LCSD 400-487358/2-A/3-A	VOCs by 8011	1,2-Dibromoethane	**141**/122	**35**	60-140/30

Analytical data that required qualification based on LCS/LCSD data are included in the table below. Analytical data reported as non-detect and associated with LCS 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 400-486957/4-A/5-A; benzenethiol has been identified as a poor performing analyte under Method 8270.

Sample ID	Parameter	Analyte	Qualification
P59-ROX-042120	SVOCs	Benzenethiol	**UJ**

6.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

No

Sample ID	Parameter	Surrogate	Recovery (%)	Criteria (%)
P59-ROX-042120	SVOCs	Terphenyl-d_{14}	**38**	53-125
MB 400-486957/1-A	SVOCs	Terphenyl-d_{14}	**44**	53-125

Qualifications due to surrogate recoveries were not required if only one of three base/neutral SVOC surrogate recoveries were outside evaluation criteria in the associated samples. Method blanks are quality control samples and do not require qualification.

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples analyzed as part of this SDG?

No

8.0 Internal Standard (IS) Recoveries

Were internal standard area recoveries within evaluation criteria?

Yes

9.0 Laboratory Duplicate Results

Were laboratory duplicate samples analyzed as part of this SDG?

No

10.0 Field Duplicate Results

Were field duplicate samples collected as part of this SDG?

No

11.0 Sample Dilutions

For samples that were diluted and nondetect, were undiluted results also reported?

Not applicable; analytes were detected in samples that were diluted.

12.0 Additional Qualifications

Were additional qualifications applied?

No

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins TestAmerica, Pensacola
3355 McLemore Drive
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Laboratory Job ID: 400-187009-1
Client Project/Site: ROXANA QUARTERLY GW

For:
AECOM Technical Services Inc.
100 N. Broadway
20th Floor
St. Louis, Missouri 63102

Attn: Elizabeth Kunkel

Authorized for release by:
5/7/2020 1:22:41 PM

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Reviewed 5/22/20 LR

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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: 400-187009-1

Laboratory: Eurofins TestAmerica, Pensacola

Narrative

Job Narrative
400-187009-1

Comments
No additional comments.

Receipt
The samples were received on 4/22/2020 8:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

GC/MS VOA
Method 8260B: The continuing calibration verification (CCV) associated with batch 400-487817 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 laboratory control sample (LCS) for analytical batch 400-487817 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 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-042120-8260-SS (400-187009-2) and P59-ROX-042120 (400-187009-3). The requested target analyte list include 2-chloroethyl vinyl ether, Acrolein and Acrylonitrile, which are acid-labile compounds that degrade in an acidic medium.

Method 8260B: The method blank for analytical batch 400-487817 contained 4-Methyl-2-pentanone (MIBK) above the method detection limit (MDL) but below 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/MS Semi VOA
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: P59-ROX-042120 (400-187009-3) and (MB 400-486957/1-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 400-486957 and analytical batch 400-487181 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. These results have been reported and qualified.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 400-486957 and analytical batch 400-487260 recovered outside control limits for the following analytes: 3,3'-Dichlorobenzidine, Hexachlorobenzene and 4-Bromophenyl phenyl ether. These analytes were biased high in the LCS and LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 400-487181 recovered above the upper control limit for 4,6-Dinitro-ortho-cresol and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: P59-ROX-042120 (400-187009-3). Elevated reporting limits (RLs) are provided.

Method 8270D LL: The continuing calibration verification (CCV) associated with batch 400-487148 recovered above the upper control limit for Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCVIS 400-487148/3).

Job ID: 400-187009-1 (Continued)

Laboratory: Eurofins TestAmerica, Pensacola (Continued)

Method 8270D LL: The method blank for preparation batch 400-486957 and analytical batch 400-487148 contained Acenaphthene 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 400-487450 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 400-487358 and analytical batch 400-487450 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8011: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 400-487358 and analytical batch 400-487450 recovered outside control limits for the following analytes: 1,2-Dibromo-3-Chloropropane and 1,2-Dibromoethane.

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: 400-187009-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
400-187009-1	TB-ROX-042120-8011-SS	Water	04/21/20 00:00	04/22/20 08:40	
400-187009-2	TB-ROX-042120-8260-SS	Water	04/21/20 00:00	04/22/20 08:40	
400-187009-3	P59-ROX-042120	Water	04/21/20 12:10	04/22/20 08:40	

Detection Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: TB-ROX-042120-8011-SS

Lab Sample ID: 400-187009-1

No Detections.

Client Sample ID: TB-ROX-042120-8260-SS

Lab Sample ID: 400-187009-2

No Detections.

Client Sample ID: P59-ROX-042120

Lab Sample ID: 400-187009-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2300		20	7.6	ug/L	20		8260B	Total/NA
Ethylbenzene	1600		20	10	ug/L	20		8260B	Total/NA
Isopropylbenzene	74		20	11	ug/L	20		8260B	Total/NA
m-Xylene & p-Xylene	3500		100	32	ug/L	20		8260B	Total/NA
Naphthalene	150		20	20	ug/L	20		8260B	Total/NA
n-Butylbenzene	16	J	20	15	ug/L	20		8260B	Total/NA
N-Propylbenzene	130		20	14	ug/L	20		8260B	Total/NA
o-Xylene	140		100	12	ug/L	20		8260B	Total/NA
Toluene	560		20	8.2	ug/L	20		8260B	Total/NA
1,2,4-Trimethylbenzene	710		20	16	ug/L	20		8260B	Total/NA
1,3,5-Trimethylbenzene	170		20	11	ug/L	20		8260B	Total/NA
Xylenes, Total	3600		200	32	ug/L	20		8260B	Total/NA
Acenaphthene	0.50	J B	0.98	0.16	ug/L	5		8270D LL	Total/NA
Phenanthrene	0.49	J	0.98	0.18	ug/L	5		8270D LL	Total/NA
1-Methylnaphthalene	19		0.98	0.36	ug/L	5		8270D LL	Total/NA
2-Methylnaphthalene	30		0.98	0.29	ug/L	5		8270D LL	Total/NA
4-Chloroaniline	27		9.8	3.3	ug/L	1		8270D	Total/NA
2,4-Dimethylphenol	3.4	J	9.8	3.4	ug/L	1		8270D	Total/NA
Indene	9.0	J	9.8	0.98	ug/L	1		8270D	Total/NA
Phenol	7.3	J	9.8	2.5	ug/L	1		8270D	Total/NA
Pyridine	3.5	J	9.8	3.1	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: 400-187009-1

Client Sample ID: TB-ROX-042120-8011-SS
Date Collected: 04/21/20 00:00
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-1
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	*1	0.031	0.0058	ug/L		04/29/20 09:45	04/29/20 18:07	1
1,2-Dibromoethane	ND	*1	0.021	0.0052	ug/L		04/29/20 09:45	04/29/20 18:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*101*		*51 - 149*	*04/29/20 09:45*	*04/29/20 18:07*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: TB-ROX-042120-8260-SS
Date Collected: 04/21/20 00:00
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-2
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			05/03/20 09:19	1
Acrolein	ND		20	10	ug/L			05/03/20 09:19	1
Acrylonitrile	ND		10	2.8	ug/L			05/03/20 09:19	1
Benzene	ND		1.0	0.38	ug/L			05/03/20 09:19	1
Bromobenzene	ND		1.0	0.54	ug/L			05/03/20 09:19	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/03/20 09:19	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Bromoform	ND		5.0	0.71	ug/L			05/03/20 09:19	1
Bromomethane	ND	*	1.0	0.98	ug/L			05/03/20 09:19	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/03/20 09:19	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Chloroethane	ND		1.0	0.76	ug/L			05/03/20 09:19	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/03/20 09:19	1
Chloroform	ND		1.0	0.60	ug/L			05/03/20 09:19	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/03/20 09:19	1
Chloromethane	ND		1.0	0.83	ug/L			05/03/20 09:19	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/03/20 09:19	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/03/20 09:19	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/03/20 09:19	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/03/20 09:19	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/03/20 09:19	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/03/20 09:19	1
2-Hexanone	ND		25	3.1	ug/L			05/03/20 09:19	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/03/20 09:19	1
Methylene bromide	ND		5.0	0.59	ug/L			05/03/20 09:19	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/03/20 09:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.8	ug/L			05/03/20 09:19	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/03/20 09:19	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/03/20 09:19	1
Naphthalene	ND		1.0	1.0	ug/L			05/03/20 09:19	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/03/20 09:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/03/20 09:19	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/03/20 09:19	1
o-Xylene	ND		5.0	0.60	ug/L			05/03/20 09:19	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/03/20 09:19	1
p-Isopropyltoluene	ND		1.0	0.71	ug/L			05/03/20 09:19	1

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: TB-ROX-042120-8260-SS
Date Collected: 04/21/20 00:00
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-2
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			05/03/20 09:19	1
Styrene	ND		1.0	1.0	ug/L			05/03/20 09:19	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/03/20 09:19	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/03/20 09:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/03/20 09:19	1
Toluene	ND		1.0	0.41	ug/L			05/03/20 09:19	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/03/20 09:19	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/03/20 09:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/03/20 09:19	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/03/20 09:19	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/03/20 09:19	1
Trichloroethene	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/03/20 09:19	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/03/20 09:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/03/20 09:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/03/20 09:19	1
Vinyl acetate	ND		25	2.0	ug/L			05/03/20 09:19	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/03/20 09:19	1
Xylenes, Total	ND		10	1.6	ug/L			05/03/20 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*78 - 118*		*05/03/20 09:19*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*05/03/20 09:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/03/20 09:19*	*1*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: P59-ROX-042120
Date Collected: 04/21/20 12:10
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		500	200	ug/L			05/03/20 10:52	20
Acrolein	ND		400	200	ug/L			05/03/20 10:52	20
Acrylonitrile	ND		200	56	ug/L			05/03/20 10:52	20
Benzene	**2300**		20	7.6	ug/L			05/03/20 10:52	20
Bromobenzene	ND		20	11	ug/L			05/03/20 10:52	20
Bromochloromethane	ND		20	10	ug/L			05/03/20 10:52	20
Bromodichloromethane	ND		20	10	ug/L			05/03/20 10:52	20
Bromoform	ND		100	14	ug/L			05/03/20 10:52	20
Bromomethane	ND	*	20	20	ug/L			05/03/20 10:52	20
2-Butanone (MEK)	ND		500	52	ug/L			05/03/20 10:52	20
Carbon disulfide	ND		20	10	ug/L			05/03/20 10:52	20
Carbon tetrachloride	ND		20	10	ug/L			05/03/20 10:52	20
Chlorobenzene	ND		20	10	ug/L			05/03/20 10:52	20
Dibromochloromethane	ND		20	10	ug/L			05/03/20 10:52	20
Chloroethane	ND		20	15	ug/L			05/03/20 10:52	20
2-Chloroethyl vinyl ether	ND		100	40	ug/L			05/03/20 10:52	20
Chloroform	ND		20	12	ug/L			05/03/20 10:52	20
1-Chlorohexane	ND		20	14	ug/L			05/03/20 10:52	20
Chloromethane	ND		20	17	ug/L			05/03/20 10:52	20
cis-1,2-Dichloroethene	ND		20	10	ug/L			05/03/20 10:52	20
cis-1,3-Dichloropropene	ND		100	10	ug/L			05/03/20 10:52	20
1,2-Dichlorobenzene	ND		20	10	ug/L			05/03/20 10:52	20
1,3-Dichlorobenzene	ND		20	11	ug/L			05/03/20 10:52	20
1,4-Dichlorobenzene	ND		20	13	ug/L			05/03/20 10:52	20
Dichlorodifluoromethane	ND		20	17	ug/L			05/03/20 10:52	20
1,1-Dichloroethane	ND		20	10	ug/L			05/03/20 10:52	20
1,2-Dichloroethane	ND		20	10	ug/L			05/03/20 10:52	20
1,1-Dichloroethene	ND		20	10	ug/L			05/03/20 10:52	20
1,2-Dichloropropane	ND		20	10	ug/L			05/03/20 10:52	20
1,3-Dichloropropane	ND		20	10	ug/L			05/03/20 10:52	20
2,2-Dichloropropane	ND		20	10	ug/L			05/03/20 10:52	20
1,1-Dichloropropene	ND		20	10	ug/L			05/03/20 10:52	20
Ethylbenzene	**1600**		20	10	ug/L			05/03/20 10:52	20
Ethyl methacrylate	ND		20	12	ug/L			05/03/20 10:52	20
Hexachlorobutadiene	ND		100	18	ug/L			05/03/20 10:52	20
2-Hexanone	ND		500	62	ug/L			05/03/20 10:52	20
Isopropylbenzene	**74**		20	11	ug/L			05/03/20 10:52	20
Methylene bromide	ND		100	12	ug/L			05/03/20 10:52	20
Methylene Chloride	ND		100	60	ug/L			05/03/20 10:52	20
4-Methyl-2-pentanone (MIBK)	ND		500	36	ug/L			05/03/20 10:52	20
Methyl tert-butyl ether	ND		20	15	ug/L			05/03/20 10:52	20
m-Xylene & p-Xylene	**3500**		100	32	ug/L			05/03/20 10:52	20
Naphthalene	**150**		20	20	ug/L			05/03/20 10:52	20
n-Butylbenzene	**16**	J	20	15	ug/L			05/03/20 10:52	20
N-Propylbenzene	**130**		20	14	ug/L			05/03/20 10:52	20
o-Chlorotoluene	ND		20	11	ug/L			05/03/20 10:52	20
o-Xylene	**140**		100	12	ug/L			05/03/20 10:52	20
p-Chlorotoluene	ND		20	11	ug/L			05/03/20 10:52	20
p-Isopropyltoluene	ND		20	14	ug/L			05/03/20 10:52	20

Client Sample ID: P59-ROX-042120
Date Collected: 04/21/20 12:10
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-3
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
sec-Butylbenzene	ND		20	14	ug/L			05/03/20 10:52	20
Styrene	ND		20	20	ug/L			05/03/20 10:52	20
tert-Butylbenzene	ND		20	13	ug/L			05/03/20 10:52	20
1,1,1,2-Tetrachloroethane	ND		20	10	ug/L			05/03/20 10:52	20
1,1,2,2-Tetrachloroethane	ND		20	10	ug/L			05/03/20 10:52	20
Tetrachloroethene	ND		20	12	ug/L			05/03/20 10:52	20
Toluene	**560**		20	8.2	ug/L			05/03/20 10:52	20
trans-1,2-Dichloroethene	ND		20	10	ug/L			05/03/20 10:52	20
trans-1,3-Dichloropropene	ND		100	10	ug/L			05/03/20 10:52	20
1,2,3-Trichlorobenzene	ND		20	14	ug/L			05/03/20 10:52	20
1,2,4-Trichlorobenzene	ND		20	16	ug/L			05/03/20 10:52	20
1,1,1-Trichloroethane	ND		20	10	ug/L			05/03/20 10:52	20
1,1,2-Trichloroethane	ND		100	10	ug/L			05/03/20 10:52	20
Trichloroethene	ND		20	10	ug/L			05/03/20 10:52	20
Trichlorofluoromethane	ND		20	10	ug/L			05/03/20 10:52	20
1,2,3-Trichloropropane	ND		100	17	ug/L			05/03/20 10:52	20
1,2,4-Trimethylbenzene	**710**		20	16	ug/L			05/03/20 10:52	20
1,3,5-Trimethylbenzene	**170**		20	11	ug/L			05/03/20 10:52	20
Vinyl acetate	ND		500	40	ug/L			05/03/20 10:52	20
Vinyl chloride	ND		20	10	ug/L			05/03/20 10:52	20
Xylenes, Total	**3600**		200	32	ug/L			05/03/20 10:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*05/03/20 10:52*	*20*
Dibromofluoromethane	*94*		*81 - 121*		*05/03/20 10:52*	*20*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/03/20 10:52*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.50**	**J B**	0.98	0.16	ug/L		04/24/20 14:04	04/28/20 00:04	5
Acenaphthylene	ND		0.98	0.22	ug/L		04/24/20 14:04	04/28/20 00:04	5
Anthracene	ND		0.98	0.15	ug/L		04/24/20 14:04	04/28/20 00:04	5
Benzo[a]anthracene	ND		0.98	0.23	ug/L		04/24/20 14:04	04/28/20 00:04	5
Benzo[a]pyrene	ND		0.98	0.21	ug/L		04/24/20 14:04	04/28/20 00:04	5
Benzo[b]fluoranthene	ND		0.98	0.33	ug/L		04/24/20 14:04	04/28/20 00:04	5
Benzo[g,h,i]perylene	ND		0.98	0.64	ug/L		04/24/20 14:04	04/28/20 00:04	5
Benzo[k]fluoranthene	ND		0.98	0.49	ug/L		04/24/20 14:04	04/28/20 00:04	5
Chrysene	ND		0.98	0.36	ug/L		04/24/20 14:04	04/28/20 00:04	5
Dibenz(a,h)anthracene	ND		0.98	0.23	ug/L		04/24/20 14:04	04/28/20 00:04	5
Fluoranthene	ND		0.98	0.33	ug/L		04/24/20 14:04	04/28/20 00:04	5
Fluorene	ND		0.98	0.54	ug/L		04/24/20 14:04	04/28/20 00:04	5
Indeno[1,2,3-cd]pyrene	ND		0.98	0.59	ug/L		04/24/20 14:04	04/28/20 00:04	5
Phenanthrene	**0.49**	**J**	0.98	0.18	ug/L		04/24/20 14:04	04/28/20 00:04	5
Pyrene	ND		0.98	0.20	ug/L		04/24/20 14:04	04/28/20 00:04	5
1-Methylnaphthalene	**19**		0.98	0.36	ug/L		04/24/20 14:04	04/28/20 00:04	5
2-Methylnaphthalene	**30**		0.98	0.29	ug/L		04/24/20 14:04	04/28/20 00:04	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*68*		*33 - 138*	*04/24/20 14:04*	*04/28/20 00:04*	*5*
2-Fluorobiphenyl	*82*		*15 - 122*	*04/24/20 14:04*	*04/28/20 00:04*	*5*

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: P59-ROX-042120
Date Collected: 04/21/20 12:10
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-3
Matrix: Water

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*49*		*19 - 130*	*04/24/20 14:04*	*04/28/20 00:04*	*5*

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		04/24/20 14:04	04/27/20 22:17	1
Benzenethiol	ND	* UJ	9.8	1.7	ug/L		04/24/20 14:04	04/27/20 22:17	1
Benzoic acid	ND		29	7.1	ug/L		04/24/20 14:04	04/27/20 22:17	1
Benzyl alcohol	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 22:17	1
Bis(2-chloroethoxy)methane	ND		9.8	0.68	ug/L		04/24/20 14:04	04/27/20 22:17	1
Bis(2-chloroethyl)ether	ND		9.8	0.72	ug/L		04/24/20 14:04	04/27/20 22:17	1
bis (2-chloroisopropyl) ether	ND		9.8	0.79	ug/L		04/24/20 14:04	04/27/20 22:17	1
Bis(2-ethylhexyl) phthalate	ND		9.8	4.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Bromophenyl phenyl ether	ND	*	9.8	0.31	ug/L		04/24/20 14:04	04/27/20 22:17	1
Butyl benzyl phthalate	ND		9.8	0.68	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Chloroaniline	**27**		9.8	3.3	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Chloro-3-methylphenol	ND		9.8	3.7	ug/L		04/24/20 14:04	04/27/20 22:17	1
2-Chloronaphthalene	ND		9.8	0.51	ug/L		04/24/20 14:04	04/27/20 22:17	1
2-Chlorophenol	ND		9.8	2.2	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Chlorophenyl phenyl ether	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 22:17	1
Dibenz[a,h]acridine	ND		9.8	2.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
Dibenzofuran	ND		9.8	0.51	ug/L		04/24/20 14:04	04/27/20 22:17	1
3,3'-Dichlorobenzidine	ND	*	9.8	2.5	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4-Dichlorophenol	ND		9.8	2.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
Diethyl phthalate	ND		9.8	0.69	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4-Dimethylphenol	**3.4**	**J**	9.8	3.4	ug/L		04/24/20 14:04	04/27/20 22:17	1
Dimethyl phthalate	ND		9.8	0.59	ug/L		04/24/20 14:04	04/27/20 22:17	1
Di-n-butyl phthalate	ND		9.8	2.6	ug/L		04/24/20 14:04	04/27/20 22:17	1
4,6-Dinitro-ortho-cresol	ND		9.8	2.0	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4-Dinitrophenol	ND		29	3.3	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4-Dinitrotoluene	ND		9.8	1.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,6-Dinitrotoluene	ND		9.8	1.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
Di-n-octyl phthalate	ND		9.8	0.43	ug/L		04/24/20 14:04	04/27/20 22:17	1
1,4-Dioxane	ND		9.8	0.98	ug/L		04/24/20 14:04	04/27/20 22:17	1
1,2-Diphenylhydrazine (as Azobenzene)	ND		9.8	0.98	ug/L		04/24/20 14:04	04/27/20 22:17	1
Hexachlorobenzene	ND	*	9.8	0.24	ug/L		04/24/20 14:04	04/27/20 22:17	1
Hexachlorocyclopentadiene	ND		20	2.5	ug/L		04/24/20 14:04	04/27/20 22:17	1
Hexachloroethane	ND		9.8	4.1	ug/L		04/24/20 14:04	04/27/20 22:17	1
Indene	**9.0**	**J**	9.8	0.98	ug/L		04/24/20 14:04	04/27/20 22:17	1
Isophorone	ND		9.8	0.56	ug/L		04/24/20 14:04	04/27/20 22:17	1
2-Methylphenol	ND		9.8	1.8	ug/L		04/24/20 14:04	04/27/20 22:17	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 22:17	1
2-Nitroaniline	ND		9.8	2.2	ug/L		04/24/20 14:04	04/27/20 22:17	1
3-Nitroaniline	ND		9.8	1.8	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Nitroaniline	ND		9.8	2.4	ug/L		04/24/20 14:04	04/27/20 22:17	1
Nitrobenzene	ND		9.8	0.54	ug/L		04/24/20 14:04	04/27/20 22:17	1
2-Nitrophenol	ND		9.8	0.64	ug/L		04/24/20 14:04	04/27/20 22:17	1
4-Nitrophenol	ND		9.8	2.1	ug/L		04/24/20 14:04	04/27/20 22:17	1
N-Nitrosodimethylamine	ND		9.8	3.4	ug/L		04/24/20 14:04	04/27/20 22:17	1

Client Sample ID: P59-ROX-042120
Date Collected: 04/21/20 12:10
Date Received: 04/22/20 08:40

Lab Sample ID: 400-187009-3
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		9.8	3.2	ug/L		04/24/20 14:04	04/27/20 22:17	1
N-Nitrosodiphenylamine	ND		9.8	0.46	ug/L		04/24/20 14:04	04/27/20 22:17	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 22:17	1
Phenol	**7.3**	**J**	9.8	2.5	ug/L		04/24/20 14:04	04/27/20 22:17	1
Pyridine	**3.5**	**J**	9.8	3.1	ug/L		04/24/20 14:04	04/27/20 22:17	1
Quinoline	ND		9.8	5.9	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4,5-Trichlorophenol	ND		9.8	3.6	ug/L		04/24/20 14:04	04/27/20 22:17	1
2,4,6-Trichlorophenol	ND		9.8	3.4	ug/L		04/24/20 14:04	04/27/20 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*34 - 120*	*04/24/20 14:04*	*04/27/20 22:17*	*1*
2-Fluorophenol	*23*		*10 - 120*	*04/24/20 14:04*	*04/27/20 22:17*	*1*
Nitrobenzene-d5	*56*		*27 - 120*	*04/24/20 14:04*	*04/27/20 22:17*	*1*
Phenol-d5	*48*		*10 - 120*	*04/24/20 14:04*	*04/27/20 22:17*	*1*
Terphenyl-d14	*38*	*X*	*53 - 125*	*04/24/20 14:04*	*04/27/20 22:17*	*1*
2,4,6-Tribromophenol	*65*		*15 - 135*	*04/24/20 14:04*	*04/27/20 22:17*	*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	*1 *	0.029	0.0054	ug/L		04/29/20 09:45	04/29/20 18:27	1
1,2-Dibromoethane	ND	*1 *	0.020	0.0049	ug/L		04/29/20 09:45	04/29/20 18:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*100*		*51 - 149*	*04/29/20 09:45*	*04/29/20 18:27*	*1*

Definitions/Glossary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance 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 or LCSD is outside acceptance 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.
X	Surrogate recovery exceeds control limits

GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*1	LCS/LCSD RPD exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

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	(78-118)	(81-121)	(80-120)
400-187009-2	TB-ROX-042120-8260-SS	95	98	101
400-187009-3	P59-ROX-042120	92	94	97
LCS 400-487817/1002	Lab Control Sample	92	91	93
MB 400-487817/4	Method Blank	92	98	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	(34-120)	(10-120)	(27-120)	(10-120)	(53-125)	(15-135)
400-187009-3	P59-ROX-042120	58	23	56	48	38 X	65
LCS 400-486957/2-A	Lab Control Sample	97	54	87	74	124	124
LCS 400-486957/4-A	Lab Control Sample	55	24	52	44	53	51
LCSD 400-486957/3-A	Lab Control Sample Dup	93	35	84	65	119	119
LCSD 400-486957/5-A	Lab Control Sample Dup	58	31	54	49	56	57
MB 400-486957/1-A	Method Blank	47	32	43	41	44 X	49

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)		
		TPHL	FBP	NBZ
Lab Sample ID	Client Sample ID	(33-138)	(15-122)	(19-130)
400-187009-3	P59-ROX-042120	68	82	49
LCS 400-486957/2-A	Lab Control Sample	117	91	67
LCSD 400-486957/3-A	Lab Control Sample Dup	113	88	66
MB 400-486957/1-A	Method Blank	101	73	64

Surrogate Legend

TPHL = Terphenyl-d14
FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5

Surrogate Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

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)**
400-187009-1	TB-ROX-042120-8011-SS	101
400-187009-3	P59-ROX-042120	100
LCS 400-487358/2-A	Lab Control Sample	121
LCSD 400-487358/3-A	Lab Control Sample Dup	109
MB 400-487358/1-A	Method Blank	109

Surrogate Legend

BFB = 4-Bromofluorobenzene

Method Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

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 TestAmerica, 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: 400-187009-1

Client Sample ID: TB-ROX-042120-8011-SS

Lab Sample ID: 400-187009-1

Date Collected: 04/21/20 00:00
Date Received: 04/22/20 08:40

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			33.4 mL	35 mL	487358	04/29/20 09:45	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487450	04/29/20 18:07	DS	TAL PEN

Client Sample ID: TB-ROX-042120-8260-SS

Lab Sample ID: 400-187009-2

Date Collected: 04/21/20 00:00
Date Received: 04/22/20 08:40

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	487817	05/03/20 09:19	WPD	TAL PEN

Client Sample ID: P59-ROX-042120

Lab Sample ID: 400-187009-3

Date Collected: 04/21/20 12:10
Date Received: 04/22/20 08:40

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		20	5 mL	5 mL	487817	05/03/20 10:52	WPD	TAL PEN
Total/NA	Prep	3520C			1021.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 22:17	S1B	TAL PEN
Total/NA	Prep	3520C			1021.2 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/28/20 00:04	PP1	TAL PEN
Total/NA	Prep	8011			35.8 mL	35 mL	487358	04/29/20 09:45	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487450	04/29/20 18:27	DS	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-486957/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 18:00	S1B	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		1			487148	04/27/20 21:59	PP1	TAL PEN

Client Sample ID: Method Blank

Lab Sample ID: MB 400-487358/1-A

Date Collected: N/A
Date Received: N/A

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			35 mL	35 mL	487358	04/29/20 09:45	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487450	04/29/20 16:08	DS	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 400-487817/4
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	487817	05/03/20 08:57	WPD	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486957/2-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:24	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:15	PP1	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-486957/4-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:17	S1B	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487358/2-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	487358	04/29/20 09:45	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487450	04/29/20 16:28	DS	TAL PEN

Client Sample ID: Lab Control Sample
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCS 400-487817/1002
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	487817	05/03/20 07:58	WPD	TAL PEN

Client Sample ID: Lab Control Sample Dup
Date Collected: N/A
Date Received: N/A

Lab Sample ID: LCSD 400-486957/3-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487260	04/28/20 18:45	VC1	TAL PEN
Total/NA	Prep	3520C			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D LL		5			487148	04/27/20 22:30	PP1	TAL PEN

Lab Chronicle

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-486957/5-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			1000 mL	1 mL	486957	04/24/20 14:04	NTH	TAL PEN
Total/NA	Analysis	8270D		1			487181	04/27/20 19:42	S1B	TAL PEN

Client Sample ID: Lab Control Sample Dup

Lab Sample ID: LCSD 400-487358/3-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	487358	04/29/20 09:45	DHJ	TAL PEN
Total/NA	Analysis	8011		1			487450	04/29/20 16:48	DS	TAL PEN

Laboratory References:

TAL PEN = Eurofins TestAmerica, Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

GC/MS VOA

Analysis Batch: 487817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-2	TB-ROX-042120-8260-SS	Total/NA	Water	8260B	
400-187009-3	P59-ROX-042120	Total/NA	Water	8260B	
MB 400-487817/4	Method Blank	Total/NA	Water	8260B	
LCS 400-487817/1002	Lab Control Sample	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 486957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-3	P59-ROX-042120	Total/NA	Water	3520C	
MB 400-486957/1-A	Method Blank	Total/NA	Water	3520C	
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	3520C	
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	3520C	
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	

Analysis Batch: 487148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-3	P59-ROX-042120	Total/NA	Water	8270D LL	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D LL	486957
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D LL	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D LL	486957

Analysis Batch: 487181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-3	P59-ROX-042120	Total/NA	Water	8270D	486957
MB 400-486957/1-A	Method Blank	Total/NA	Water	8270D	486957
LCS 400-486957/4-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/5-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

Analysis Batch: 487260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-486957/2-A	Lab Control Sample	Total/NA	Water	8270D	486957
LCSD 400-486957/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	486957

GC Semi VOA

Prep Batch: 487358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-1	TB-ROX-042120-8011-SS	Total/NA	Water	8011	
400-187009-3	P59-ROX-042120	Total/NA	Water	8011	
MB 400-487358/1-A	Method Blank	Total/NA	Water	8011	
LCS 400-487358/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 400-487358/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

Analysis Batch: 487450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-187009-1	TB-ROX-042120-8011-SS	Total/NA	Water	8011	487358
400-187009-3	P59-ROX-042120	Total/NA	Water	8011	487358
MB 400-487358/1-A	Method Blank	Total/NA	Water	8011	487358
LCS 400-487358/2-A	Lab Control Sample	Total/NA	Water	8011	487358
LCSD 400-487358/3-A	Lab Control Sample Dup	Total/NA	Water	8011	487358

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-487817/4
Matrix: Water
Analysis Batch: 487817

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			05/03/20 08:57	1
Acrolein	ND		20	10	ug/L			05/03/20 08:57	1
Acrylonitrile	ND		10	2.8	ug/L			05/03/20 08:57	1
Benzene	ND		1.0	0.38	ug/L			05/03/20 08:57	1
Bromobenzene	ND		1.0	0.54	ug/L			05/03/20 08:57	1
Bromochloromethane	ND		1.0	0.52	ug/L			05/03/20 08:57	1
Bromodichloromethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Bromoform	ND		5.0	0.71	ug/L			05/03/20 08:57	1
Bromomethane	ND		1.0	0.98	ug/L			05/03/20 08:57	1
2-Butanone (MEK)	ND		25	2.6	ug/L			05/03/20 08:57	1
Carbon disulfide	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Carbon tetrachloride	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Dibromochloromethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Chloroethane	ND		1.0	0.76	ug/L			05/03/20 08:57	1
2-Chloroethyl vinyl ether	ND		5.0	2.0	ug/L			05/03/20 08:57	1
Chloroform	ND		1.0	0.60	ug/L			05/03/20 08:57	1
1-Chlorohexane	ND		1.0	0.70	ug/L			05/03/20 08:57	1
Chloromethane	ND		1.0	0.83	ug/L			05/03/20 08:57	1
cis-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
cis-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/03/20 08:57	1
1,2-Dichlorobenzene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,3-Dichlorobenzene	ND		1.0	0.54	ug/L			05/03/20 08:57	1
1,4-Dichlorobenzene	ND		1.0	0.64	ug/L			05/03/20 08:57	1
Dichlorodifluoromethane	ND		1.0	0.85	ug/L			05/03/20 08:57	1
1,1-Dichloroethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,2-Dichloroethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,1-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,2-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,3-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
2,2-Dichloropropane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,1-Dichloropropene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Ethylbenzene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Ethyl methacrylate	ND		1.0	0.60	ug/L			05/03/20 08:57	1
Hexachlorobutadiene	ND		5.0	0.90	ug/L			05/03/20 08:57	1
2-Hexanone	ND		25	3.1	ug/L			05/03/20 08:57	1
Isopropylbenzene	ND		1.0	0.53	ug/L			05/03/20 08:57	1
Methylene bromide	ND		5.0	0.59	ug/L			05/03/20 08:57	1
Methylene Chloride	ND		5.0	3.0	ug/L			05/03/20 08:57	1
4-Methyl-2-pentanone (MIBK)	2.14	J	25	1.8	ug/L			05/03/20 08:57	1
Methyl tert-butyl ether	ND		1.0	0.74	ug/L			05/03/20 08:57	1
m-Xylene & p-Xylene	ND		5.0	1.6	ug/L			05/03/20 08:57	1
Naphthalene	ND		1.0	1.0	ug/L			05/03/20 08:57	1
n-Butylbenzene	ND		1.0	0.76	ug/L			05/03/20 08:57	1
N-Propylbenzene	ND		1.0	0.69	ug/L			05/03/20 08:57	1
o-Chlorotoluene	ND		1.0	0.57	ug/L			05/03/20 08:57	1
o-Xylene	ND		5.0	0.60	ug/L			05/03/20 08:57	1
p-Chlorotoluene	ND		1.0	0.56	ug/L			05/03/20 08:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-487817/4
Matrix: Water
Analysis Batch: 487817

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			05/03/20 08:57	1
sec-Butylbenzene	ND		1.0	0.70	ug/L			05/03/20 08:57	1
Styrene	ND		1.0	1.0	ug/L			05/03/20 08:57	1
tert-Butylbenzene	ND		1.0	0.63	ug/L			05/03/20 08:57	1
1,1,1,2-Tetrachloroethane	ND		1.0	0.52	ug/L			05/03/20 08:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Tetrachloroethene	ND		1.0	0.58	ug/L			05/03/20 08:57	1
Toluene	ND		1.0	0.41	ug/L			05/03/20 08:57	1
trans-1,2-Dichloroethene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
trans-1,3-Dichloropropene	ND		5.0	0.50	ug/L			05/03/20 08:57	1
1,2,3-Trichlorobenzene	ND		1.0	0.70	ug/L			05/03/20 08:57	1
1,2,4-Trichlorobenzene	ND		1.0	0.82	ug/L			05/03/20 08:57	1
1,1,1-Trichloroethane	ND		1.0	0.50	ug/L			05/03/20 08:57	1
1,1,2-Trichloroethane	ND		5.0	0.50	ug/L			05/03/20 08:57	1
Trichloroethene	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Trichlorofluoromethane	ND		1.0	0.52	ug/L			05/03/20 08:57	1
1,2,3-Trichloropropane	ND		5.0	0.84	ug/L			05/03/20 08:57	1
1,2,4-Trimethylbenzene	ND		1.0	0.82	ug/L			05/03/20 08:57	1
1,3,5-Trimethylbenzene	ND		1.0	0.56	ug/L			05/03/20 08:57	1
Vinyl acetate	ND		25	2.0	ug/L			05/03/20 08:57	1
Vinyl chloride	ND		1.0	0.50	ug/L			05/03/20 08:57	1
Xylenes, Total	ND		10	1.6	ug/L			05/03/20 08:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*92*		*78 - 118*		*05/03/20 08:57*	*1*
Dibromofluoromethane	*98*		*81 - 121*		*05/03/20 08:57*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/03/20 08:57*	*1*

Lab Sample ID: LCS 400-487817/1002
Matrix: Water
Analysis Batch: 487817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	200	264		ug/L		132	43 - 160
Acrolein	250	220		ug/L		88	38 - 160
Acrylonitrile	500	534		ug/L		107	64 - 142
Benzene	50.0	43.8		ug/L		88	70 - 130
Bromobenzene	50.0	45.8		ug/L		92	70 - 132
Bromochloromethane	50.0	52.8		ug/L		106	70 - 130
Bromodichloromethane	50.0	41.7		ug/L		83	67 - 133
Bromoform	50.0	48.6		ug/L		97	57 - 140
Bromomethane	25.0	41.4	*	ug/L		166	10 - 160
2-Butanone (MEK)	200	176		ug/L		88	61 - 145
Carbon disulfide	50.0	49.8		ug/L		100	61 - 137
Carbon tetrachloride	50.0	44.5		ug/L		89	61 - 137
Chlorobenzene	50.0	48.2		ug/L		96	70 - 130
Dibromochloromethane	50.0	46.6		ug/L		93	67 - 135
Chloroethane	25.0	33.8		ug/L		135	55 - 141

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-487817/1002
Matrix: Water
Analysis Batch: 487817

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	19.1		ug/L		76	10 - 160
Chloroform	50.0	41.2		ug/L		82	69 - 130
1-Chlorohexane	50.0	43.2		ug/L		86	69 - 130
Chloromethane	25.0	18.1		ug/L		72	58 - 137
cis-1,2-Dichloroethene	50.0	48.0		ug/L		96	68 - 130
cis-1,3-Dichloropropene	50.0	42.3		ug/L		85	69 - 132
1,2-Dichlorobenzene	50.0	50.0		ug/L		100	67 - 130
1,3-Dichlorobenzene	50.0	49.7		ug/L		99	70 - 130
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	70 - 130
Dichlorodifluoromethane	25.0	21.5		ug/L		86	41 - 146
1,1-Dichloroethane	50.0	53.4		ug/L		107	70 - 130
1,2-Dichloroethane	50.0	41.1		ug/L		82	69 - 130
1,1-Dichloroethene	50.0	57.5		ug/L		115	63 - 134
1,2-Dichloropropane	50.0	42.0		ug/L		84	70 - 130
1,3-Dichloropropane	50.0	40.1		ug/L		80	70 - 130
2,2-Dichloropropane	50.0	43.4		ug/L		87	52 - 135
1,1-Dichloropropene	50.0	46.5		ug/L		93	70 - 130
Ethylbenzene	50.0	51.2		ug/L		102	70 - 130
Ethyl methacrylate	50.0	41.9		ug/L		84	68 - 130
Hexachlorobutadiene	50.0	62.3		ug/L		125	53 - 140
2-Hexanone	200	172		ug/L		86	65 - 137
Isopropylbenzene	50.0	56.1		ug/L		112	70 - 130
Methylene bromide	50.0	39.7		ug/L		79	70 - 130
Methylene Chloride	50.0	51.9		ug/L		104	66 - 135
4-Methyl-2-pentanone (MIBK)	200	168		ug/L		84	69 - 138
Methyl tert-butyl ether	50.0	42.6		ug/L		85	66 - 130
m-Xylene & p-Xylene	50.0	55.9		ug/L		112	70 - 130
Naphthalene	50.0	42.3		ug/L		85	47 - 149
n-Butylbenzene	50.0	51.4		ug/L		103	67 - 130
N-Propylbenzene	50.0	48.1		ug/L		96	70 - 130
o-Chlorotoluene	50.0	47.1		ug/L		94	70 - 130
o-Xylene	50.0	54.9		ug/L		110	70 - 130
p-Chlorotoluene	50.0	49.5		ug/L		99	70 - 130
p-Isopropyltoluene	50.0	51.7		ug/L		103	65 - 130
sec-Butylbenzene	50.0	49.3		ug/L		99	66 - 130
Styrene	50.0	52.5		ug/L		105	70 - 130
tert-Butylbenzene	50.0	57.8		ug/L		116	64 - 139
1,1,1,2-Tetrachloroethane	50.0	47.1		ug/L		94	67 - 131
1,1,2,2-Tetrachloroethane	50.0	39.3		ug/L		79	70 - 131
Tetrachloroethene	50.0	43.9		ug/L		88	65 - 130
Toluene	50.0	45.7		ug/L		91	70 - 130
trans-1,2-Dichloroethene	50.0	44.0		ug/L		88	70 - 130
trans-1,3-Dichloropropene	50.0	46.0		ug/L		92	63 - 130
1,2,3-Trichlorobenzene	50.0	53.1		ug/L		106	60 - 138
1,2,4-Trichlorobenzene	50.0	54.1		ug/L		108	60 - 140
1,1,1-Trichloroethane	50.0	40.9		ug/L		82	68 - 130
1,1,2-Trichloroethane	50.0	40.1		ug/L		80	70 - 130
Trichloroethene	50.0	43.9		ug/L		88	70 - 130
Trichlorofluoromethane	25.0	28.2		ug/L		113	65 - 138

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-487817/1002
Matrix: Water
Analysis Batch: 487817

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	45.7		ug/L		91	70 - 130
1,2,4-Trimethylbenzene	50.0	51.7		ug/L		103	70 - 130
1,3,5-Trimethylbenzene	50.0	51.4		ug/L		103	69 - 130
Vinyl acetate	50.0	42.7		ug/L		85	26 - 160
Vinyl chloride	25.0	27.0		ug/L		108	59 - 136
Xylenes, Total	100	111		ug/L		111	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*92*		*78 - 118*
Dibromofluoromethane	*91*		*81 - 121*
Toluene-d8 (Surr)	*93*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aniline	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzenethiol	ND		10	1.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzoic acid	ND		30	7.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
Benzyl alcohol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethoxy)methane	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-chloroethyl)ether	ND		10	0.74	ug/L		04/24/20 14:04	04/27/20 18:00	1
bis (2-chloroisopropyl) ether	ND		10	0.81	ug/L		04/24/20 14:04	04/27/20 18:00	1
Bis(2-ethylhexyl) phthalate	ND		10	5.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Bromophenyl phenyl ether	ND		10	0.32	ug/L		04/24/20 14:04	04/27/20 18:00	1
Butyl benzyl phthalate	ND		10	0.69	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloroaniline	ND		10	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chloro-3-methylphenol	ND		10	3.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chloronaphthalene	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Chlorophenol	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Chlorophenyl phenyl ether	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dibenz[a,h]acridine	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dibenzofuran	ND		10	0.52	ug/L		04/24/20 14:04	04/27/20 18:00	1
3,3'-Dichlorobenzidine	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dichlorophenol	ND		10	3.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Diethyl phthalate	ND		10	0.70	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dimethylphenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Dimethyl phthalate	ND		10	0.60	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-butyl phthalate	ND		10	2.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
4,6-Dinitro-ortho-cresol	ND		10	2.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrophenol	ND		30	3.4	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,6-Dinitrotoluene	ND		10	1.9	ug/L		04/24/20 14:04	04/27/20 18:00	1
Di-n-octyl phthalate	ND		10	0.44	ug/L		04/24/20 14:04	04/27/20 18:00	1
1,4-Dioxane	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Diphenylhydrazine (as Azobenzene)	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorobenzene	ND		10	0.25	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachlorocyclopentadiene	ND		20	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Hexachloroethane	ND		10	4.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Indene	ND		10	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
Isophorone	ND		10	0.57	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Methylphenol	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
3 & 4 Methylphenol	ND		20	1.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitroaniline	ND		10	2.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
3-Nitroaniline	ND		10	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitroaniline	ND		10	2.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
Nitrobenzene	ND		10	0.55	ug/L		04/24/20 14:04	04/27/20 18:00	1
2-Nitrophenol	ND		10	0.65	ug/L		04/24/20 14:04	04/27/20 18:00	1
4-Nitrophenol	ND		10	2.1	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodimethylamine	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodi-n-propylamine	ND		10	3.3	ug/L		04/24/20 14:04	04/27/20 18:00	1
N-Nitrosodiphenylamine	ND		10	0.47	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pentachlorophenol	ND		20	1.8	ug/L		04/24/20 14:04	04/27/20 18:00	1
Phenol	ND		10	2.6	ug/L		04/24/20 14:04	04/27/20 18:00	1
Pyridine	ND		10	3.2	ug/L		04/24/20 14:04	04/27/20 18:00	1
Quinoline	ND		10	6.0	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,5-Trichlorophenol	ND		10	3.7	ug/L		04/24/20 14:04	04/27/20 18:00	1
2,4,6-Trichlorophenol	ND		10	3.5	ug/L		04/24/20 14:04	04/27/20 18:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*47*		*34 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2-Fluorophenol	*32*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Nitrobenzene-d5	*43*		*27 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Phenol-d5	*41*		*10 - 120*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
Terphenyl-d14	*44*	*X*	*53 - 125*	*04/24/20 14:04*	*04/27/20 18:00*	*1*
2,4,6-Tribromophenol	*49*		*15 - 135*	*04/24/20 14:04*	*04/27/20 18:00*	*1*

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aniline	30.0	23.5		ug/L		78	29 - 120
Benzoic acid	116	35.3		ug/L		30	10 - 150
Benzyl alcohol	30.0	25.0		ug/L		83	19 - 125
Bis(2-chloroethoxy)methane	30.0	23.9		ug/L		80	45 - 120
Bis(2-chloroethyl)ether	30.0	21.6		ug/L		72	48 - 120
bis (2-chloroisopropyl) ether	30.0	18.1		ug/L		60	30 - 125
Bis(2-ethylhexyl) phthalate	30.0	30.4		ug/L		101	48 - 150
4-Bromophenyl phenyl ether	30.0	40.0	*	ug/L		133	55 - 122
Butyl benzyl phthalate	30.0	29.7		ug/L		99	46 - 145
4-Chloroaniline	30.0	25.8		ug/L		86	30 - 120
4-Chloro-3-methylphenol	30.0	31.6		ug/L		105	39 - 140

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Chloronaphthalene	30.0	29.9		ug/L		100	52 - 120
2-Chlorophenol	30.0	26.1		ug/L		87	34 - 120
4-Chlorophenyl phenyl ether	30.0	34.6		ug/L		115	58 - 124
Dibenz[a,h]acridine	29.6	27.1		ug/L		91	46 - 149
Dibenzofuran	30.0	31.4		ug/L		105	58 - 123
3,3'-Dichlorobenzidine	40.0	66.0	*	ug/L		165	39 - 135
2,4-Dichlorophenol	30.0	31.9		ug/L		106	39 - 128
Diethyl phthalate	30.0	30.9		ug/L		103	44 - 146
2,4-Dimethylphenol	30.0	30.2		ug/L		101	44 - 120
Dimethyl phthalate	30.0	32.1		ug/L		107	50 - 131
Di-n-butyl phthalate	30.0	29.1		ug/L		97	55 - 131
4,6-Dinitro-ortho-cresol	60.0	59.5		ug/L		99	10 - 150
2,4-Dinitrophenol	60.0	63.0		ug/L		105	10 - 150
2,4-Dinitrotoluene	30.0	33.2		ug/L		111	58 - 140
2,6-Dinitrotoluene	30.0	34.3		ug/L		114	57 - 130
Di-n-octyl phthalate	30.0	32.1		ug/L		107	50 - 150
1,4-Dioxane	30.0	17.0		ug/L		57	25 - 120
1,2-Diphenylhydrazine (as Azobenzene)	30.0	25.0		ug/L		83	47 - 123
Hexachlorobenzene	30.0	39.8	*	ug/L		133	52 - 131
Hexachlorocyclopentadiene	30.0	14.0	J	ug/L		47	10 - 129
Hexachloroethane	30.0	20.5		ug/L		68	20 - 120
Indene	30.0	25.1		ug/L		84	47 - 120
Isophorone	30.0	25.0		ug/L		83	49 - 120
2-Methylphenol	30.0	26.6		ug/L		89	39 - 123
3 & 4 Methylphenol	30.0	25.4		ug/L		85	38 - 121
2-Nitroaniline	30.0	26.3		ug/L		88	47 - 150
3-Nitroaniline	30.0	24.5		ug/L		82	34 - 132
4-Nitroaniline	30.0	24.6		ug/L		82	41 - 135
Nitrobenzene	30.0	24.6		ug/L		82	47 - 120
2-Nitrophenol	30.0	27.4		ug/L		91	28 - 136
4-Nitrophenol	60.0	57.1		ug/L		95	10 - 150
N-Nitrosodimethylamine	30.0	24.1		ug/L		80	22 - 148
N-Nitrosodi-n-propylamine	30.0	24.1		ug/L		80	44 - 120
N-Nitrosodiphenylamine	29.8	32.8		ug/L		110	56 - 120
Pentachlorophenol	60.0	57.2		ug/L		95	15 - 141
Phenol	30.0	21.5		ug/L		72	33 - 120
Pyridine	60.0	35.1		ug/L		58	26 - 120
Quinoline	29.6	25.8		ug/L		87	51 - 129
2,4,5-Trichlorophenol	30.0	33.8		ug/L		113	38 - 147
2,4,6-Trichlorophenol	30.0	32.0		ug/L		107	36 - 139

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*97*		*34 - 120*
2-Fluorophenol	*54*		*10 - 120*
Nitrobenzene-d5	*87*		*27 - 120*
Phenol-d5	*74*		*10 - 120*
Terphenyl-d14	*124*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	124		15 - 135

Lab Sample ID: LCS 400-486957/4-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	55		34 - 120
2-Fluorophenol	24		10 - 120
Nitrobenzene-d5	52		27 - 120
Phenol-d5	44		10 - 120
Terphenyl-d14	53		53 - 125
2,4,6-Tribromophenol	51		15 - 135

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aniline	30.0	21.1		ug/L		70	29 - 120	11	30
Benzoic acid	116	47.6		ug/L		41	10 - 150	30	30
Benzyl alcohol	30.0	22.6		ug/L		75	19 - 125	10	30
Bis(2-chloroethoxy)methane	30.0	22.9		ug/L		76	45 - 120	4	30
Bis(2-chloroethyl)ether	30.0	22.0		ug/L		73	48 - 120	2	30
bis (2-chloroisopropyl) ether	30.0	18.0		ug/L		60	30 - 125	1	30
Bis(2-ethylhexyl) phthalate	30.0	30.2		ug/L		101	48 - 150	1	30
4-Bromophenyl phenyl ether	30.0	37.5	*	ug/L		125	55 - 122	7	30
Butyl benzyl phthalate	30.0	29.0		ug/L		97	46 - 145	2	30
4-Chloroaniline	30.0	22.8		ug/L		76	30 - 120	12	30
4-Chloro-3-methylphenol	30.0	29.0		ug/L		97	39 - 140	9	30
2-Chloronaphthalene	30.0	28.6		ug/L		95	52 - 120	4	30
2-Chlorophenol	30.0	22.3		ug/L		74	34 - 120	16	30
4-Chlorophenyl phenyl ether	30.0	33.2		ug/L		111	58 - 124	4	30
Dibenz[a,h]acridine	29.6	25.6		ug/L		86	46 - 149	6	30
Dibenzofuran	30.0	30.3		ug/L		101	58 - 123	4	30
3,3'-Dichlorobenzidine	40.0	61.5	*	ug/L		154	39 - 135	7	30
2,4-Dichlorophenol	30.0	29.8		ug/L		99	39 - 128	7	30
Diethyl phthalate	30.0	30.2		ug/L		101	44 - 146	2	30
2,4-Dimethylphenol	30.0	28.8		ug/L		96	44 - 120	5	30
Dimethyl phthalate	30.0	31.2		ug/L		104	50 - 131	3	30
Di-n-butyl phthalate	30.0	28.6		ug/L		95	55 - 131	2	30
4,6-Dinitro-ortho-cresol	60.0	54.5		ug/L		91	10 - 150	9	30
2,4-Dinitrophenol	60.0	58.2		ug/L		97	10 - 150	8	30
2,4-Dinitrotoluene	30.0	31.6		ug/L		105	58 - 140	5	30
2,6-Dinitrotoluene	30.0	32.6		ug/L		109	57 - 130	5	30

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487260

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Di-n-octyl phthalate	30.0	31.9		ug/L		106	50 - 150	1	30
1,4-Dioxane	30.0	16.4		ug/L		55	25 - 120	4	30
1,2-Diphenylhydrazine (as Azobenzene)	30.0	23.8		ug/L		79	47 - 123	5	30
Hexachlorobenzene	30.0	38.1		ug/L		127	52 - 131	5	30
Hexachlorocyclopentadiene	30.0	11.7	J	ug/L		39	10 - 129	18	30
Hexachloroethane	30.0	20.4		ug/L		68	20 - 120	1	30
Indene	30.0	24.4		ug/L		81	47 - 120	3	30
Isophorone	30.0	24.0		ug/L		80	49 - 120	4	30
2-Methylphenol	30.0	25.9		ug/L		86	39 - 123	3	30
3 & 4 Methylphenol	30.0	24.1		ug/L		80	38 - 121	5	30
2-Nitroaniline	30.0	24.8		ug/L		83	47 - 150	6	30
3-Nitroaniline	30.0	23.1		ug/L		77	34 - 132	6	30
4-Nitroaniline	30.0	22.1		ug/L		74	41 - 135	11	30
Nitrobenzene	30.0	23.7		ug/L		79	47 - 120	4	30
2-Nitrophenol	30.0	25.8		ug/L		86	28 - 136	6	30
4-Nitrophenol	60.0	53.2		ug/L		89	10 - 150	7	30
N-Nitrosodimethylamine	30.0	22.4		ug/L		75	22 - 148	7	30
N-Nitrosodi-n-propylamine	30.0	23.1		ug/L		77	44 - 120	4	30
N-Nitrosodiphenylamine	29.8	31.1		ug/L		105	56 - 120	5	30
Pentachlorophenol	60.0	53.2		ug/L		89	15 - 141	7	30
Phenol	30.0	22.5		ug/L		75	33 - 120	4	30
Pyridine	60.0	34.3		ug/L		57	26 - 120	2	30
Quinoline	29.6	24.0		ug/L		81	51 - 129	7	30
2,4,5-Trichlorophenol	30.0	32.5		ug/L		108	38 - 147	4	30
2,4,6-Trichlorophenol	30.0	30.6		ug/L		102	36 - 139	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*93*		*34 - 120*
2-Fluorophenol	*35*		*10 - 120*
Nitrobenzene-d5	*84*		*27 - 120*
Phenol-d5	*65*		*10 - 120*
Terphenyl-d14	*119*		*53 - 125*
2,4,6-Tribromophenol	*119*		*15 - 135*

Lab Sample ID: LCSD 400-486957/5-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzenethiol	30.0	ND	*	ug/L		2	10 - 120	15	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl	*58*		*34 - 120*
2-Fluorophenol	*31*		*10 - 120*
Nitrobenzene-d5	*54*		*27 - 120*
Phenol-d5	*49*		*10 - 120*
Terphenyl-d14	*56*		*53 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 400-486957/5-A
Matrix: Water
Analysis Batch: 487181

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
2,4,6-Tribromophenol	57		15 - 135

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Lab Sample ID: MB 400-486957/1-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 486957

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0375	J	0.20	0.032	ug/L		04/24/20 14:04	04/27/20 21:59	1
Acenaphthylene	ND		0.20	0.045	ug/L		04/24/20 14:04	04/27/20 21:59	1
Anthracene	ND		0.20	0.031	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[a]anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[a]pyrene	ND		0.20	0.042	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[b]fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[g,h,i]perylene	ND		0.20	0.13	ug/L		04/24/20 14:04	04/27/20 21:59	1
Benzo[k]fluoranthene	ND		0.20	0.10	ug/L		04/24/20 14:04	04/27/20 21:59	1
Chrysene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/27/20 21:59	1
Dibenz(a,h)anthracene	ND		0.20	0.046	ug/L		04/24/20 14:04	04/27/20 21:59	1
Fluoranthene	ND		0.20	0.068	ug/L		04/24/20 14:04	04/27/20 21:59	1
Fluorene	ND		0.20	0.11	ug/L		04/24/20 14:04	04/27/20 21:59	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.12	ug/L		04/24/20 14:04	04/27/20 21:59	1
Phenanthrene	ND		0.20	0.036	ug/L		04/24/20 14:04	04/27/20 21:59	1
Pyrene	ND		0.20	0.040	ug/L		04/24/20 14:04	04/27/20 21:59	1
1-Methylnaphthalene	ND		0.20	0.074	ug/L		04/24/20 14:04	04/27/20 21:59	1
2-Methylnaphthalene	ND		0.20	0.060	ug/L		04/24/20 14:04	04/27/20 21:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Terphenyl-d14	101		33 - 138	04/24/20 14:04	04/27/20 21:59	1
2-Fluorobiphenyl	73		15 - 122	04/24/20 14:04	04/27/20 21:59	1
Nitrobenzene-d5	64		19 - 130	04/24/20 14:04	04/27/20 21:59	1

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	30.0	28.4		ug/L		95	41 - 120
Acenaphthylene	30.0	29.2		ug/L		97	44 - 120
Anthracene	30.0	31.2		ug/L		104	49 - 120
Benzo[a]anthracene	30.0	28.7		ug/L		96	61 - 135
Benzo[a]pyrene	30.0	26.5		ug/L		88	52 - 120
Benzo[b]fluoranthene	30.0	27.5		ug/L		92	53 - 134
Benzo[g,h,i]perylene	30.0	27.5		ug/L		92	47 - 133
Benzo[k]fluoranthene	30.0	28.5		ug/L		95	57 - 134
Chrysene	30.0	29.2		ug/L		97	55 - 122
Dibenz(a,h)anthracene	30.0	29.0		ug/L		97	48 - 146
Fluoranthene	30.0	26.9		ug/L		90	54 - 128

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Lab Sample ID: LCS 400-486957/2-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	30.0	30.6		ug/L		102	45 - 125
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142
Phenanthrene	30.0	29.6		ug/L		99	48 - 120
Pyrene	30.0	31.5		ug/L		105	48 - 132
1-Methylnaphthalene	30.0	23.6		ug/L		79	41 - 120
2-Methylnaphthalene	30.0	24.1		ug/L		80	32 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14	*117*		*33 - 138*
2-Fluorobiphenyl	*91*		*15 - 122*
Nitrobenzene-d5	*67*		*19 - 130*

Lab Sample ID: LCSD 400-486957/3-A
Matrix: Water
Analysis Batch: 487148

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 486957

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	30.0	27.3		ug/L		91	41 - 120	4	56
Acenaphthylene	30.0	28.1		ug/L		94	44 - 120	4	56
Anthracene	30.0	30.3		ug/L		101	49 - 120	3	51
Benzo[a]anthracene	30.0	27.7		ug/L		92	61 - 135	4	49
Benzo[a]pyrene	30.0	26.3		ug/L		88	52 - 120	1	50
Benzo[b]fluoranthene	30.0	27.9		ug/L		93	53 - 134	1	54
Benzo[g,h,i]perylene	30.0	27.0		ug/L		90	47 - 133	2	50
Benzo[k]fluoranthene	30.0	27.8		ug/L		93	57 - 134	2	52
Chrysene	30.0	28.1		ug/L		94	55 - 122	4	50
Dibenz(a,h)anthracene	30.0	29.1		ug/L		97	48 - 146	0	50
Fluoranthene	30.0	26.7		ug/L		89	54 - 128	1	52
Fluorene	30.0	29.6		ug/L		99	45 - 125	3	56
Indeno[1,2,3-cd]pyrene	30.0	28.2		ug/L		94	43 - 142	0	51
Phenanthrene	30.0	28.8		ug/L		96	48 - 120	3	56
Pyrene	30.0	30.4		ug/L		101	48 - 132	3	52
1-Methylnaphthalene	30.0	23.5		ug/L		78	41 - 120	0	55
2-Methylnaphthalene	30.0	23.8		ug/L		79	32 - 124	1	57

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Terphenyl-d14	*113*		*33 - 138*
2-Fluorobiphenyl	*88*		*15 - 122*
Nitrobenzene-d5	*66*		*19 - 130*

Method: 8011 - EDB and DBCP in Water by Microextraction

Lab Sample ID: MB 400-487358/1-A
Matrix: Water
Analysis Batch: 487450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		0.030	0.0055	ug/L		04/29/20 09:45	04/29/20 16:08	1

Method: 8011 - EDB and DBCP in Water by Microextraction (Continued)

Lab Sample ID: MB 400-487358/1-A
Matrix: Water
Analysis Batch: 487450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 487358

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.020	0.0050	ug/L		04/29/20 09:45	04/29/20 16:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*109*		*51 - 149*	*04/29/20 09:45*	*04/29/20 16:08*	*1*

Lab Sample ID: LCS 400-487358/2-A
Matrix: Water
Analysis Batch: 487450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 487358

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	0.101	0.162	*	ug/L		161	60 - 140
1,2-Dibromoethane	0.101	0.142	*	ug/L		141	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*121*		*51 - 149*

Lab Sample ID: LCSD 400-487358/3-A
Matrix: Water
Analysis Batch: 487450

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 487358

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dibromo-3-Chloropropane	0.101	0.122	*1	ug/L		122	60 - 140	40	30
1,2-Dibromoethane	0.101	0.122	*1	ug/L		122	60 - 140	35	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene	*109*		*51 - 149*

LAB (LOCATION)

Shell Oil Products US Chain Of Custody Record

AECOM

☐ ACCUTEST (_____)
☐ CALSCIENCE (_____)
☑ TESTAMERICA (TestAmerica Pensacola; 3355 McLemore Dr. Pensacola, FL 32514 (850-474-1001))
☐ Other ~~Lab Vendor # 1964589 (TestAmerica)~~

Please Check Appropriate Box:

☐ SGW FDG	☐ PIPELINE	☐ RETAIL
☐ CHEMICALS	☐ CONSULTANT	☐ LUBES
☐ TRANSPORTATION	☑ OTHER _ENV. SERVICES	

Print Bill To Contact Name: Bob Billman

PlaNet Site or Project ID: 25278

PO #: 60619901 - 1.03.002 | 60619901 - 1.03.0022

GSAP Project ID: USPC/00114/R/02

☐ CHECK IF NO INCIDENT # APPLIES
DATE: 4/21/20
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 60619901 - 1.03.002 | 60619901 - 1.03.0022
ADDRESS: 100 N. Broadway, 20th Floor; ST. LOUIS, MO 63102, USA
EDF DELIVERABLE TO (Name, Company, Office Location): Elizabeth Kunkel, AECOM, St. Louis, MO; Melissa Remiger, Bob Billman
PHONE NO: 314-802-1172; 314-449-2913; 314-802-1122
E-MAIL: melissa.remiger@aecom.com, elizabeth.kunkel@aecom.com, bob.billman@aecom.com
AECOM Other ID:
PROJECT CONTACT (Hardcopy or PDF Report to): Elizabeth Kunkel, Bob Billman, Melissa Remiger
SAMPLER NAME(S) (Print): Tony Jones Joe Mayer
LAB USE ONLY
TELEPHONE: 314-429-0100
FAX: 314-429-0462
Bill To Contact E-MAIL: bob.billman@aecom.com; elizabeth.kunkel@aecom.com; melissa.remiger@aecom.com

TURNAROUND TIME (CALENDAR DAYS):
☑ STANDARD (14 DAY) ☐ 5 DAYS ☐ 3 DAYS ☐ 2 DAYS ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

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

Split Report

☑ SHELL CONTRACT RATE APPLIES
☐ STATE REIMBURSEMENT RATE APPLIES
☐ EDD NOT NEEDED
☑ RECEIPT VERIFICATION REQUESTED
☐ PROVIDE LEDD DISK

REQUESTED ANALYSIS

NON-UNIT COST 60619901 - 1.03.002: VOC 8260; SVOC 8270
UNIT COST 60619901 - 1.03.0022: VOC 8011; PAH 8270LL

400-187009 COC

FIELD NOTES:
TEMPERATURE ON RECEIPT C°:
Container PID Readings or Laboratory Notes

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	PRESERVATIVE HCL	HNO3	H2SO4	NONE	OTHER	NO. OF CONT.	VOC 8260	SVOC 8270	VOC 8011	PAH 8270LL	Container PID Readings or Laboratory Notes
	TB-ROX-042120-8011-SS	4/21/20	0000	Water	2								X		Split Sample
	TB-ROX-042120-8260-SS		0000		2						X				
	P59-ROX-042120		1210		6			2			X	X	X	X	

JM 4/21/20

Relinquished by (Signature)	Received by (Signature)	Date	Time
Joe Mayer	Fedex: 1728 5840 7792	4/21/20	1600
		4-22-20	8:40

Custody Seal #'s: 1319434
1319435

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5/7/2020

Login Sample Receipt Checklist

Client: AECOM Technical Services Inc.

Job Number: 400-187009-1

Login Number: 187009
List Number: 1
Creator: Abernathy, Eric

List Source: Eurofins TestAmerica, 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	131434, 1319435
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: AECOM Technical Services Inc.
Project/Site: ROXANA QUARTERLY GW

Job ID: 400-187009-1

Laboratory: Eurofins TestAmerica, 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	07-01-20
ANAB	ISO/IEC 17025	L2471	02-23-23
Arizona	State	AZ0710	01-13-21
Arkansas DEQ	State	88-0689	09-01-20
California	State	2510	07-01-20
Florida	NELAP	E81010	06-30-20
Georgia	State	E81010(FL)	06-30-20
Illinois	NELAP	004586	10-09-20
Iowa	State	367	08-01-20
Kansas	NELAP	E-10253	08-16-20
Kentucky (UST)	State	53	06-30-20
Kentucky (WW)	State	KY98030	12-31-20
Louisiana	NELAP	30976	06-30-20
Louisiana (DW)	State	LA017	12-31-20
Maryland	State	233	09-30-20
Massachusetts	State	M-FL094	06-30-20
Michigan	State	9912	05-06-20
Minnesota	NELAP	012-999-481	12-31-20
New Jersey	NELAP	FL006	06-30-20
New York	NELAP	12115	04-01-21
North Carolina (WW/SW)	State	314	12-31-20
Oklahoma	State	9810-186	08-31-20
Pennsylvania	NELAP	68-00467	01-31-21
Rhode Island	State	LAO00307	12-30-20
South Carolina	State	96026002	06-30-20
Tennessee	State	TN02907	06-30-20
Texas	NELAP	T104704286	09-30-20
US Fish & Wildlife	US Federal Programs	058448	07-31-20
USDA	US Federal Programs	P330-18-00148	05-17-21
Virginia	NELAP	460166	06-14-20
Washington	State	C915	05-15-20
West Virginia DEP	State	136	06-30-20

Appendix D

Charts – Benzene Concentrations Over Time – MW-7, MW-8, MW-22, MW-25, P-57, P-59, ROST-4-PZ(C), T-12

Table D1 - Historical Benzene Analytical Data for Select Groundwater Monitoring Wells

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-07	10/23/2009	684
	11/17/2010	876
	11/17/2010	928
	1/25/2011	1,150
	5/13/2011	1,030
	5/13/2011	922
	7/24/2011	1,840
	11/2/2011	774
	1/18/2012	1,330
	1/18/2012	1,110
	5/4/2012	738
	8/7/2012	591
	10/30/2012	863
	10/30/2012	833
	1/15/2013	1,320
	1/15/2013	1,230
	4/10/2013	499
	4/10/2013	475
	7/17/2013	1,000
	10/16/2013	553
	1/30/2014	1,490
	4/16/2014	1,390
	7/16/2014	1,270
	7/16/2014	1,370
	10/16/2014	1,130
	10/16/2014	984
	1/22/2015	799
	1/22/2015	821
	4/21/2015	1,110
	4/21/2015	1,160
	7/15/2015	1,370
	7/15/2015	1,300
	10/19/2015	1,000
	10/19/2015	990
	1/14/2016	740
	1/14/2016	700
	4/19/2016	1,100
	4/19/2016	1,100
	7/14/2016	670
	7/14/2016	680
	10/6/2016	910
	10/6/2016	840
	1/9/2017	950
	4/10/2017	1,000
	4/10/2017	1,100
	7/11/2017	870
	7/11/2017	810
	10/5/2017	1,400
	1/9/2018	1,500
	4/9/2018	770
	4/9/2018	780
	7/10/2018	1,900
	7/10/2018	1,700
	10/8/2018	650
	1/7/2019	650
	4/8/2019	1,000
	4/8/2019	1,000
	7/8/2019	1,300
	7/8/2019	1,400
	10/8/2019	1,700
	10/8/2019	1,600
	1/6/2020	800
	1/6/2020	750
	4/6/2020	700
	4/6/2020	700

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-08	10/22/2009	1,010
	10/22/2009	1,130
	11/17/2010	965
	1/25/2011	1,030
	1/25/2011	986
	5/13/2011	1,310
	5/13/2011	952
	7/24/2011	1,650
	7/24/2011	1,860
	11/2/2011	934
	1/18/2012	386
	5/4/2012	1,070
	5/4/2012	1,040
	8/7/2012	653
	8/7/2012	397
	10/30/2012	523
	1/15/2013	1,120
	4/10/2013	969
	7/17/2013	494
	7/17/2013	532
	10/16/2013	360
	10/16/2013	351
	1/30/2014	748
	1/30/2014	721
	4/16/2014	862
	4/16/2014	1,060
	7/16/2014	276
	10/16/2014	486
	1/22/2015	764
	4/21/2015	1,100
	7/15/2015	879
	10/19/2015	580
	1/14/2016	300
	4/19/2016	480
	7/14/2016	310
	10/6/2016	630
	1/9/2017	410
	4/10/2017	830
	7/10/2017	870
	10/5/2017	970
	10/5/2017	990
	1/9/2018	720
	4/9/2018	510
	7/10/2018	840
	10/8/2018	550
	10/8/2018	560
	1/7/2019	420
	1/7/2019	450
	4/8/2019	550
	7/8/2019	280
	10/8/2019	110
	1/6/2020	42
	4/6/2020	49

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-22	1/23/2013	2.12
	1/23/2013	2.09
	4/5/2013	1.5
	7/11/2013	1.11
	7/11/2013	1.19
	10/9/2013	1.33
	10/9/2013	1.39
	1/20/2014	1.47
	1/20/2014	1.58
	4/10/2014	1.56
	4/10/2014	1.7
	7/14/2014	1.74
	10/10/2014	1.62
	1/16/2015	1.51
	4/14/2015	1.62
	7/15/2015	2.92
	10/14/2015	0.8
	1/15/2016	1.1
	1/15/2016	1.2
	4/13/2016	1.2
	4/13/2016	1.2
	7/15/2016	0.062
	7/15/2016	0.061
	10/17/2016	0.31
	10/17/2016	0.31
	1/12/2017	0.036
	1/12/2017	0.039
	4/17/2017	0.14
	4/17/2017	0.13
	7/12/2017	0.0068
	7/12/2017	0.0079
	10/13/2017	0.0089
	10/13/2017	0.0086
	1/11/2018	0.32
	1/11/2018	0.32
	4/10/2018	0.43
	7/10/2018	0.79
	10/15/2018	0.056
	1/9/2019	0.1
	4/17/2019	0.22
	10/15/2019	0.0035
	10/15/2019	0.0039
	1/6/2020	ND (<0.001)
	4/15/2020	0.00092

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
MW-25	10/21/2014	501
	1/22/2015	62.8
	4/21/2015	78.7
	7/15/2015	71.9
	10/19/2015	11
	1/14/2016	2.2
	4/19/2016	0.99
	7/18/2016	1.2
	10/6/2016	0.37
	1/11/2017	0.28
	4/11/2017	0.19
	7/10/2017	0.056
	10/5/2017	0.065
	1/9/2018	0.028
	4/9/2018	0.02
	7/10/2018	0.005
	10/8/2018	0.0071
	1/7/2019	0.0023
	4/8/2019	0.017
	7/8/2019	0.016
	10/8/2019	0.044
	1/6/2020	0.028
	4/6/2020	0.019
P-57	3/3/2006	177
	6/11/2008	257
	11/8/2011	123
	2/13/2012	126
	5/7/2012	147
	8/6/2012	106
	8/6/2012	99.4
	11/5/2012	142
	1/29/2013	114
	4/11/2013	141
	7/16/2013	254
	10/14/2013	288
	2/3/2014	261
	4/15/2014	384
	7/8/2014	371
	7/8/2014	378
	10/14/2014	220
	10/14/2014	255
	1/23/2015	107
	4/20/2015	134
	7/13/2015	138
	10/15/2015	140
	1/12/2016	160
	4/18/2016	73
	7/13/2016	70
	10/18/2016	71
	1/16/2017	39
	4/7/2017	45
	7/13/2017	43
	10/16/2017	42
	1/18/2018	15
	1/18/2018	20
	4/10/2018	8.8
	7/11/2018	5
	7/11/2018	8.8
	10/16/2018	34
	10/16/2018	34
	1/14/2019	28
	1/14/2019	23
	4/17/2019	9.8
	4/17/2019	7.4
	7/15/2019	15
	7/15/2019	16
	10/15/2019	2.3
	10/15/2019	2.3
	1/9/2020	1.3
	4/17/2020	2.5
	4/17/2020	2.8

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
P-59	10/1/2010	10.1
	10/21/2010	8.637
	10/21/2010	9.201
	5/11/2011	6.2
	10/27/2011	6.01
	10/27/2011	6.7
	1/19/2012	7.04
	1/19/2012	6.61
	5/9/2012	8.1
	5/9/2012	7.86
	8/2/2012	11
	11/2/2012	9.8
	11/2/2012	8.3
	11/2/2012	10.3
	11/2/2012	10.5
	1/30/2013	12.1
	4/12/2013	20
	4/12/2013	13.4
	4/12/2013	15
	7/16/2013	10.2
	10/10/2013	11
	10/10/2013	14.7
	2/3/2014	15.9
	4/15/2014	14.8
	4/18/2014	9.8
	7/8/2014	12.2
	10/14/2014	12
	10/14/2014	12
	1/19/2015	13.5
	4/16/2015	9.8
	4/16/2015	9.43
	7/13/2015	3.08
	10/15/2015	7.2
	1/12/2016	5.4
	4/18/2016	4.9
	7/13/2016	4.2
	10/18/2016	8.7
	1/16/2017	7.6
	4/7/2017	7.6
	7/13/2017	7.7
	10/13/2017	2.7
	10/13/2017	2.6
	1/11/2018	4.7
	4/12/2018	3.2
	7/11/2018	3.7
	10/16/2018	2.3
	1/14/2019	3.0
	10/15/2019	2.1
	1/9/2020	1.6
	4/21/2020	2.3

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

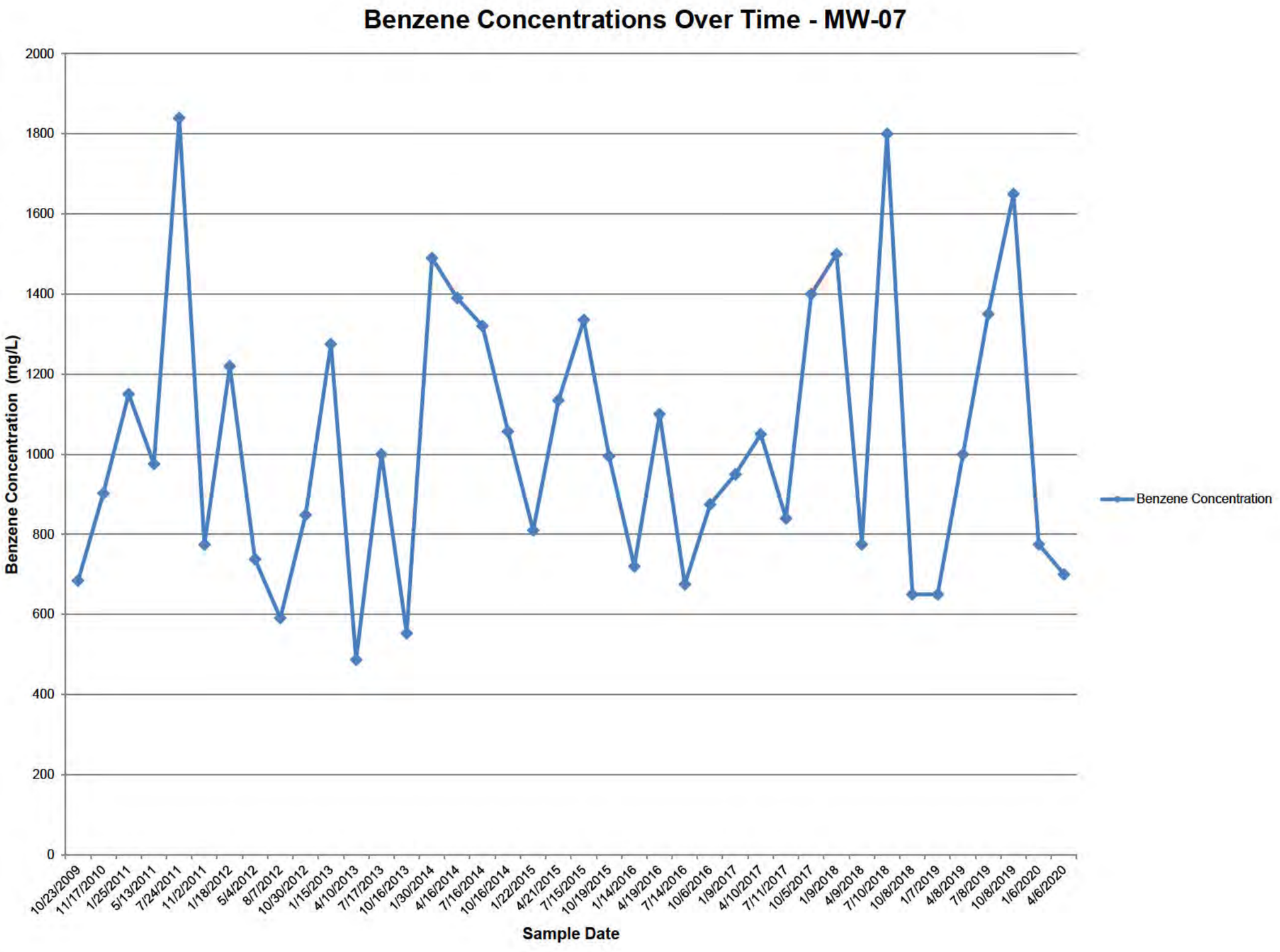
Location	Sample Date	Result (ug/L)
ROST-4-PZ(C)	5/3/2011	0.211
	5/14/2012	ND (<0.0005)
	7/25/2012	0.0849
	10/29/2012	0.0033
	1/11/2013	ND (<0.0005)
	4/10/2013	0.0153
	7/11/2013	0.0497
	10/9/2013	0.00066
	1/17/2014	0.0015
	4/10/2014	0.0019
	7/10/2014	0.0751
	10/9/2014	0.039
	1/15/2015	0.0013
	4/13/2015	0.0694
	7/13/2015	0.0683
	10/12/2015	0.071
	1/15/2016	0.059
	4/13/2016	0.05
	7/15/2016	0.044
	10/13/2016	0.025
	1/12/2017	0.021
	4/17/2017	0.025
	7/12/2017	0.017
	10/12/2017	0.01
	1/15/2018	0.00054
	4/9/2018	ND (<0.001)
	7/9/2018	0.0018
	10/12/2018	0.0085
	1/9/2019	0.006
	4/16/2019	0.006
	7/12/2019	0.0077
	10/14/2019	0.0047
	1/7/2020	0.0014
	4/15/2020	0.0047

SEE LAST PAGE OF TABLE FOR NOTES

TABLE D-1
HISTORICAL BENZENE ANALYTICAL DATA FOR SELECT GROUNDWATER MONITORING WELLS

Location	Sample Date	Result (ug/L)
T-12	10/1/2010	2.87
	10/22/2010	4.674
	5/11/2011	2
	10/27/2011	1.09
	10/27/2011	1.4
	1/19/2012	1.51
	5/9/2012	1.7
	5/9/2012	1.48
	8/2/2012	1.64
	11/5/2012	2
	11/5/2012	2
	11/5/2012	1.71
	1/18/2013	2.03
	4/15/2013	2.2
	4/15/2013	2.2
	4/15/2013	1.61
	7/16/2013	1.65
	10/15/2013	1.1
	10/15/2013	2.02
	1/24/2014	2.48
	4/15/2014	2.07
	4/18/2014	1.4
	7/8/2014	2.1
	10/17/2014	1.5
	10/17/2014	1.4
	10/17/2014	1.83
	1/19/2015	2.02
	4/15/2015	2
	4/15/2015	1.7
	4/15/2015	1.69
	7/10/2015	2.3
	10/15/2015	2.5
	1/12/2016	1.5
	4/15/2016	1.4
	7/12/2016	1.6
	10/17/2016	1.7
	10/17/2016	2.1
	1/12/2017	1.5
	4/6/2017	1.4
	7/13/2017	1.2
	10/13/2017	1.4
	1/10/2018	2
	4/12/2018	1.7
	7/11/2018	2.1
	10/16/2018	2.2
	1/10/2019	2
	4/17/2019	1.8
	7/15/2019	1.7
	10/15/2019	2.6
	1/9/2020	1.7
	1/9/2020	1.8
	4/17/2020	1.6

Notes:
mg/L = milligrams per liter
ND = non-detect
Dates specific to available data.

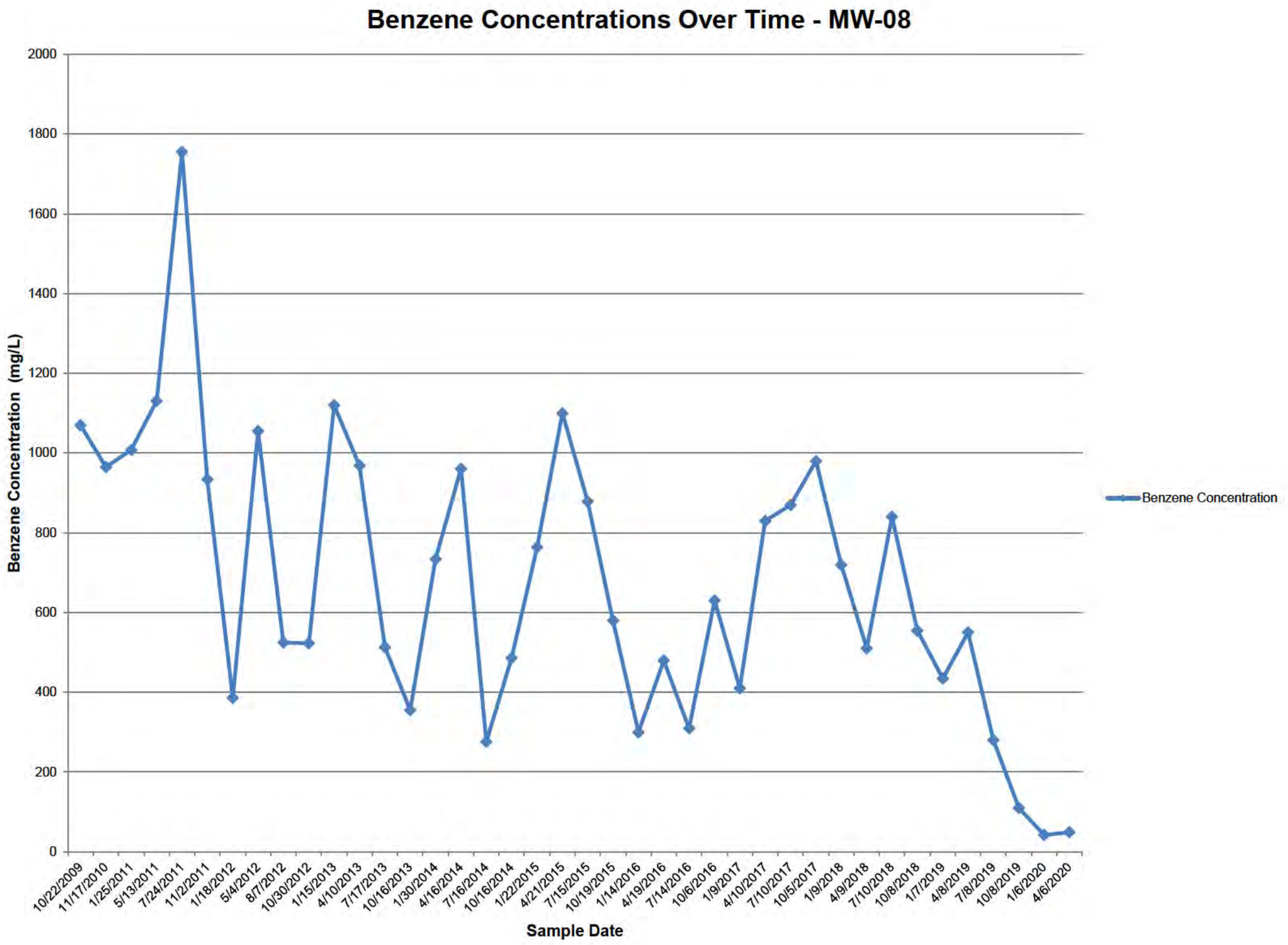


Notes:

mg/L = milligrams per liter

Duplicate values were averaged.

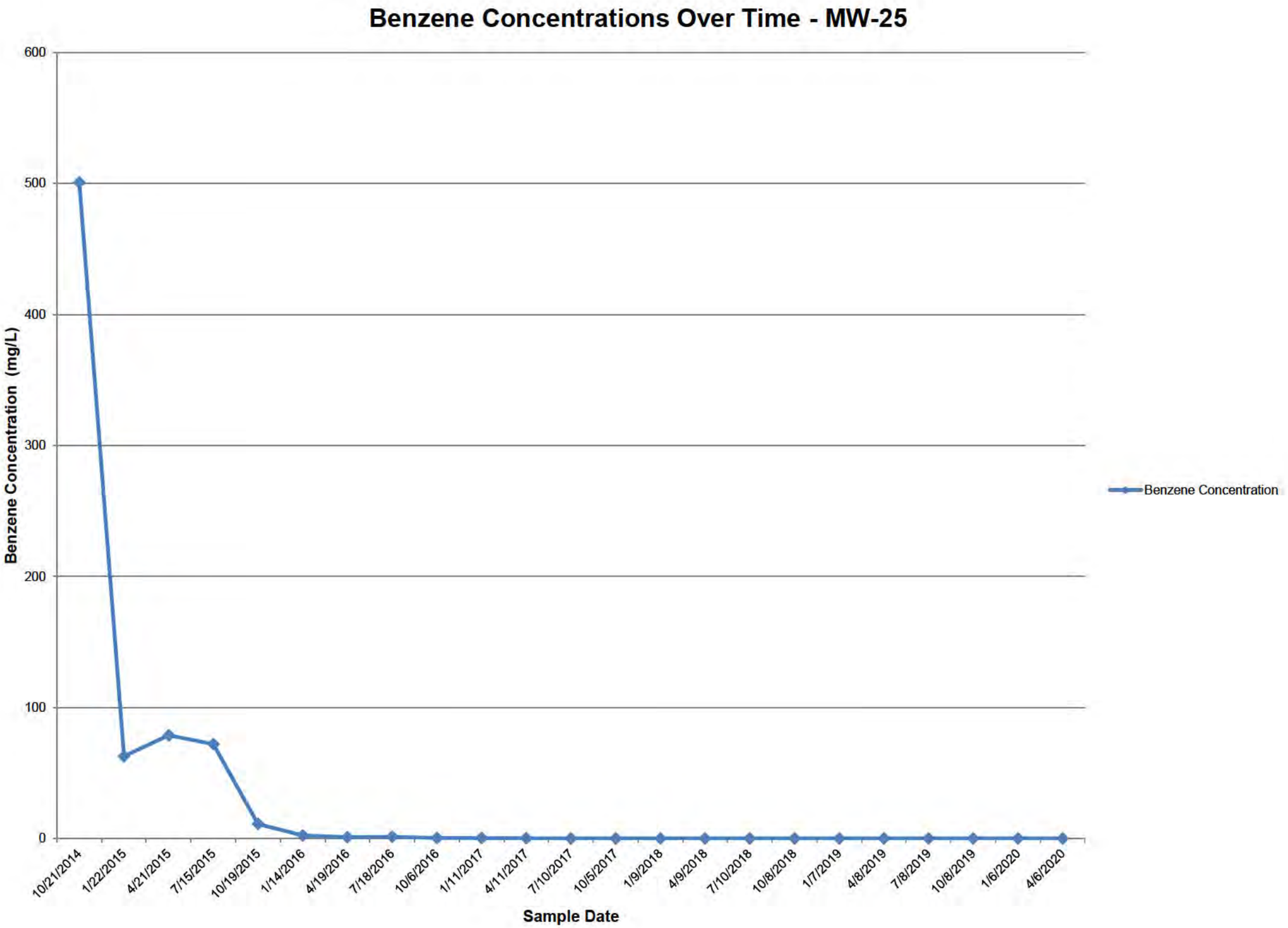
Timeframe specific to available data.



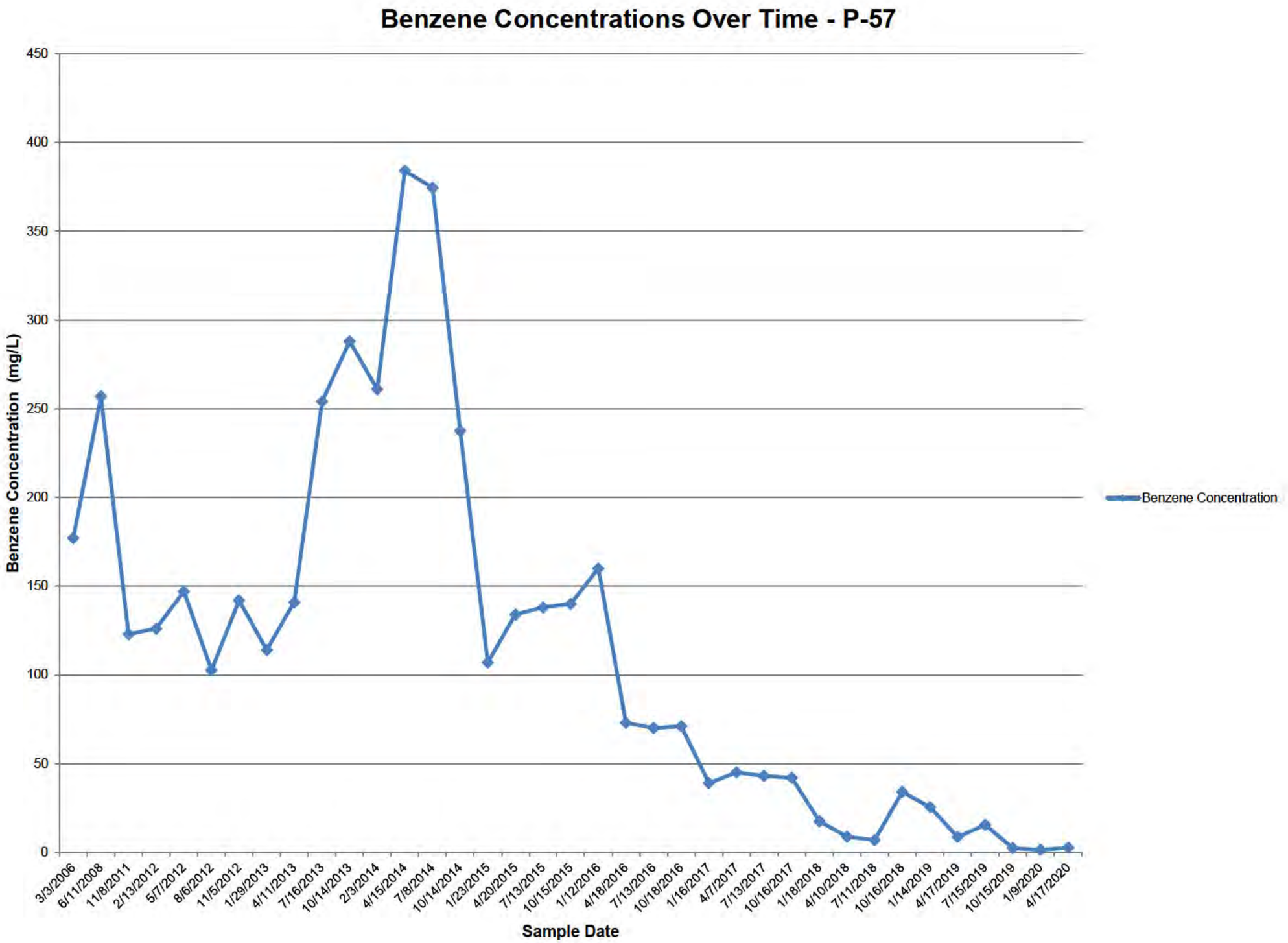
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



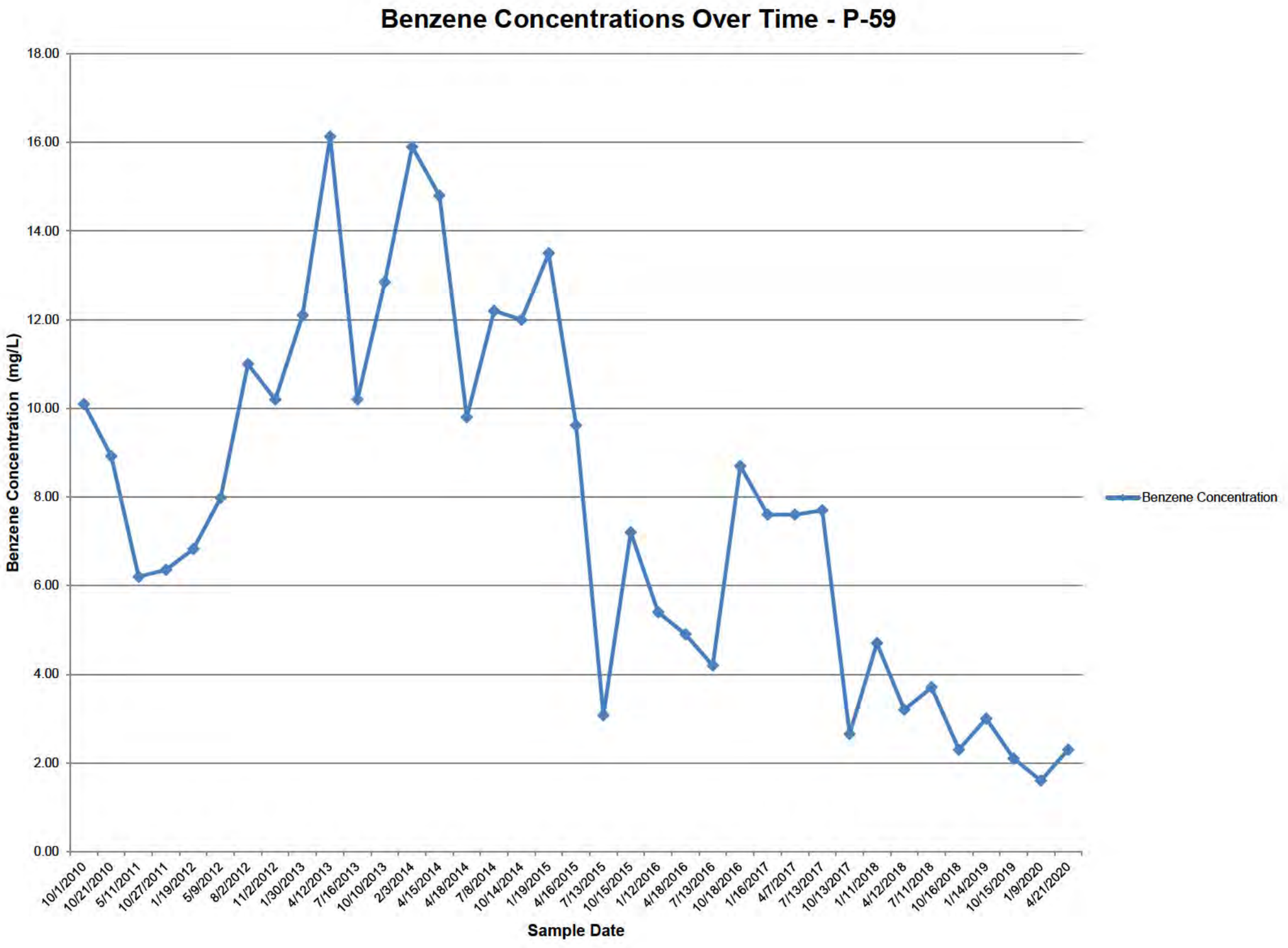
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.
Non-detect values are shown at half the reporting limit.



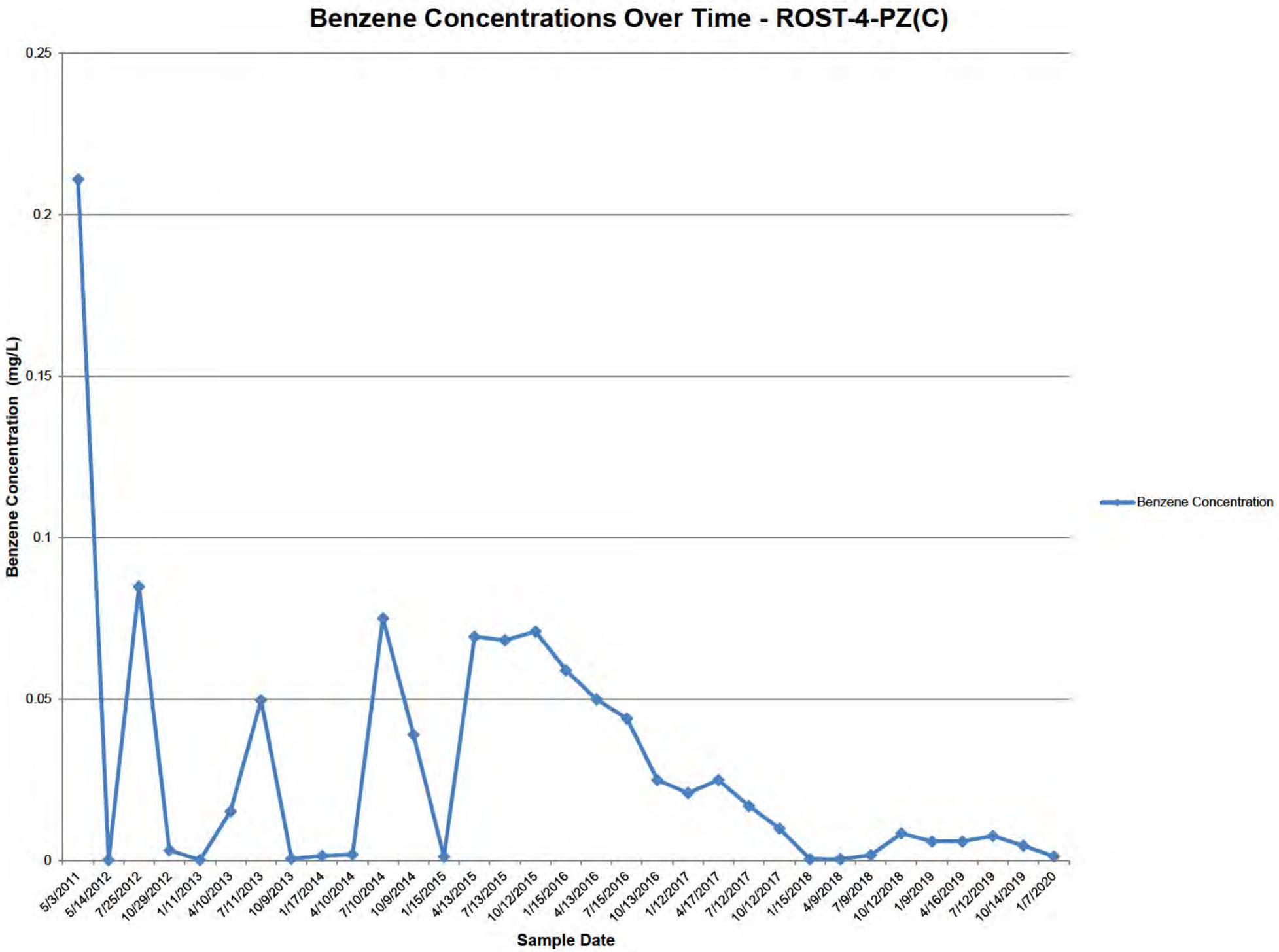
Notes:
mg/L = milligrams per liter
Timeframe specific to available data.



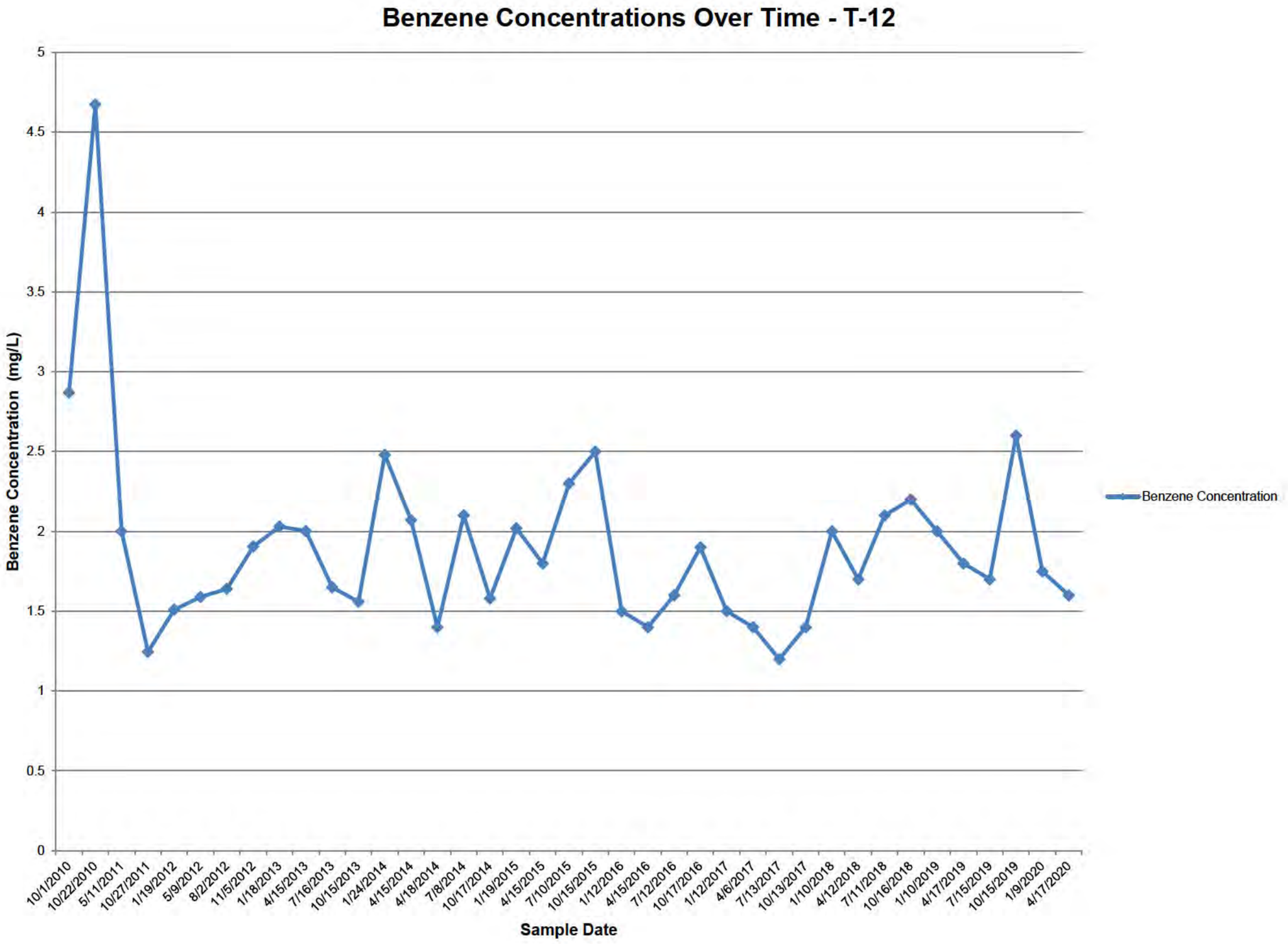
Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



Notes:
mg/L = milligrams per liter
Duplicate values were averaged.
Timeframe specific to available data.



Notes:
mg/L = milligrams per liter
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.

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